Making Talk Work: Exploring the Teaching of Collaborative Talk

Ruth Malka Charlotte Newman

Submitted for the degree of Doctor of Philosophy in Education

February 2014

Making Talk Work: Exploring the Teaching of Collaborative Talk

Submitted by Ruth Malka Charlotte Newman, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Education, February 2014.

This thesis is available for Library use on the understanding that it is copyright material and that no quotation from this thesis may be published without proper acknowledgement.

I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other University.

(Signature).....

Abstract

This thesis is the outcome of a PhD CASE Studentship funded by the ESRC and British Telecom. It presents an exploration into the teaching of collaborative talk.

The study was conducted in three phases: exploratory, development and implementation. During the exploratory phase, observations and interviews were conducted in authentic workplace settings to gain an understanding of workplace collaboration and collaborative talk. During the development phase, a teaching unit for the teaching of collaborative talk at GCSE was devised, informed by understandings gleaned during the preceding phase. During the implementation phase, the teaching unit was taught by two teachers in their secondary English classrooms.

Both participating classes were arranged into groups of 4: 8 groups in School 1 and 7 in School 2. For the duration of the 3 week teaching unit, groups were recorded via camera and audio recorder, and the data later synchronised. Both teachers wore an audio recorder to capture interactions with groups and the whole class. To complement the core data set, students were interviewed for their views on their learning. Student booklets provided a means of collecting both group and individual reflections and evaluative comments. The data was analysed to explore the development of students' collaborative talk. The role of the teacher in implementing the teaching unit and supporting students' development was also examined.

The findings provide an insight into the realities of implementing successful collaborative talk in the 'real' secondary classroom. It contributes to conceptualisations of collaborative talk and its development. It makes links between the role of emotional engagement and dialogic interactions in supporting that development. It proposes teaching strategies which challenge perceived notions of 'good' talk and encourages the development of meta-language to support self-evaluation and the development of collaborative talk.

Acknowledgements and Dedications

This study was supported by the Economic and Social Research Council and British Telecom.

I would like to thank the workplace participants for their input. My thanks also go to Andrew Bailey of *Dialogics Ltd* for his help and kindness.

It was a privilege to work alongside the participating teachers and students, who welcomed me into their classrooms. I am particularly grateful to the teachers, who made a significant contribution to this study.

I would like to thank Judith Kleine Staarman for her comments.

The guidance and support of my main supervisor, Debra Myhill, has been invaluable. I would like to thank her for her endless patience and enthusiasm, and for the opportunities that the PhD has presented.

I am grateful to my wonderful parents, Verity and Tony Newman, for their support. And for the industrial scale babysitting which helped me complete this thesis.

Finally, I would like to thank my husband, Tom Thatcher, for his interest and encouragement. I dedicate this thesis to him, and to our lovely daughter, Eve.

Contents

1.	Introduct	tion	
	1.1 Backg	round of the study	17
	1.2The a	ims and outcomes of the study	27
2.	Literatur	e Review	29
	2.1 Aims		29
	2.2 Searc	h terms	29
	2.3Theor	etical perspectives	31
	2.3.1	Early language acquisition	31
	2.3.2	Perspectives on social learning: Piaget and Vygotsky	33
	2.3.3	The Zone of Proximal Development	36
	2.3.4	Scaffolding within the ZPD	38
	2.3.5	The role of the learner in the ZPD and Scaffolding	40
	2.3.6	Peers' interactions	42
	2.3.7	The achievement of intersubjectivity	43
	2.3.8	Supporting intersubjectivity in a dialogic space	47
	2.3.9	Dialogic interactions for learning	49
	2.3.10	Ontological considerations: Synthesis and difference	51
	2.3.11	Conclusion	53
	2.4 Conce	eptualising peers' productive collaborative talk	53
	2.4.1	Discourse features	56
	2.4.2	Workplace talk	59
	2.4.3	Defining collaborative talk	61
	2.5Can w	e organise groups to promote collaborative talk?	61
	2.6Teach	ing collaborative talk	63
	2.6.1	Teachers' expectations and conceptions of learning	63
	2.6.2	Teachers' modelling and promotion of collaborative talk	65
	2.6.3	Lesson structure and task design	69
	2.7 Interve	entions	75
	2.7.1	A relational approach	75
	2.7.2	Collaborative talk as reading intervention	79
	2.7.3	Ground rules	83

	2.7.4 Teaching for the workplace	90
	2.8 Conclusion	95
3.	Methodology	96
	3.1 Aims	96
	3.2 The origins of the PhD Case studentship	97
	3.3 Research questions	101
	3.3.1 Ontological and epistemological position	101
	3.4 Research design	105
	3.4.1 Multiple methods and reliability	105
	3.4.2 Data analysis	106
	3.4.3 Collaborative research	107
	3.4.4 Participant observation and critical reflection	109
	3.5 Three phases of research	109
	3.5.1 Exploratory phase	110
	3.5.2 Development phase	111
	3.5.3 Implementation phase	111
	3.6 Access and participants	115
	3.6.1 Workplace	115
	3.6.2 Teachers and schools	116
	3.6.3 Students	116
	3.6.4 Students' informed consent	118
	3.7 Methods of data collection	120
	3.7.1 Phase 1: Exploratory	120
	3.7.2 Phase 2: Development	121
	3.7.3 Phase 3: Implementation	122
	3.8 Implementation phase: Data collection procedure	127
	3.9 Data analysis	128
	3.9.1 A 3-phase data analysis	128
	3.9.2 Preparatory phase	129
	3.9.3 Macro-analysis phase	130
	3.9.4 Micro-analysis phase	131
	3.10 Trustworthiness	132
	3.11 Ethical issues	135

	3.1	11.1 Responsibilities to participants	135
	3.	11.2Voluntary informed consent and right to withdraw	136
	3.	11.3 Privacy	137
	3.	11.4 Incentives	138
	3.	11.5Responsibility to sponsors	138
	3.	11.6 Further ethical considerations	139
	3.12 Dif	ficulties and limitations	140
	3.	12.1 Workplace collaboration	140
	3.	12.2 Teaching collaborative talk	141
	3.	12.3 Methodological limitations	142
	3.	12.4 Collaborating with participants	142
	3.1	12.5 Policy	143
4.	Exploring	g Workplace Collaboration and Collaborative Talk	145
	to Inform	n the Development of a Teaching Unit	
	4.1 Positio	oning the exploratory phase in the wider research	145
	4.2The e	xploratory process	146
	4.3 Orga	nising the data	150
	4.4 Scena	arios for collaboration	151
	4.4.1	Physical	151
	4.4.2	Problem	153
	4.4.3	Brief	155
	4.5 Skills	for collaboration and collaborative talk	156
	4.5.1	Group dynamics	151
	4.5.2	Talk skills	159
	4.6 Structure		164
	4.7 Devel	oping the teaching unit	166
	4.7.1	Framework for collaborative talk	166
	4.7.2	Lesson tasks and structure	167
	4.8Concl	usion	170
5.	Case Des	scriptions of Schools, Teachers and Students	171
	5.1 Schoo	bl 1: Bayside College	171

172

5.1.1 Description of project classroom

	5.1.2	Teacher 1: Abigail	173
	5.1.3	School 1's English department	174
	5.1.4	Project class 1	174
	5.1.5	Researcher's first impressions of project class	174
	5.1.6	School 1: Groups	175
	5.1.7	Implementation	171
	5.2 Schoo	ol 2: Spring Lane College	179
	5.2.1	Description of project classroom	181
	5.2.2	Teacher 2: Vicky	181
	5.2.3	School 2's English department	182
	5.2.4	Project class 2	183
	5.2.5	Researcher's first impressions of project class 2	183
	5.2.6	School 2: Groups	183
	5.2.7	Implementation	186
	5.2.8	Researcher's connection to school 2	187
6.	The Mac	ro-Analysis of the Teacher's Role and Student	189
	Groups (Collaborative Talk and Talk Awareness	
	6.1 The c	ollaborative talk teaching unit	190
	6.1.1	A summary of the implementation, data collection and	
		analysis	192
	6.1.2	Stages of data analysis	192
	6.1.3	Preparatory analysis	186
	6.1.4	Macro-analysis: Teacher audio	193
	6.1.5	Macro-analysis: Group video	195
	6.1.6	Presenting the findings of the macro-analysis	197
	6.2 Analy	sing teacher audio	198
	6.2	2.1 How do teachers use lesson time during the	
	im	plementation of the teaching unit?	198
	6.2	2.2 How do teachers talk during task-setting?	199
	6.2	2.3 How do teachers talk in their interactions with	
	stu	Idents during independent work?	201
	6.2	2.4 How do teachers support students in reflecting	
			202

6.2.5 What expectations do teachers make explicit?	204
6.2.6 How do teachers emotionally engage students?	205
6.2.7 The implications of teachers' talk for students'	
perceptions of collaborative talk and its development	207
6.3 Analysing group video	210
6.3.1 How does the teacher interact with the 5 groups	
selected for coding and support talk awareness?	210
6.3.2 How do students demonstrate talk awareness	
and how does their awareness relate to the	
collaborative talk framework?	212
6.3.3 Analysing collaborative talk: How can students'	
collaborative talk and its development be conceptualised?	214
6.3.4 How do groups in School 1 and School 2 participate,	
understand and manage in collaborative talk?	216
6.3.5 What other features of students' collaborative talk	
emerged in coding?	219
6.4 Groups	220
6.4.1 How do groups in School 1 interact with the teacher	
and engage in collaborative talk?	220
6.4.2 How do groups in School 2 interact with the teacher	
and engage in collaborative talk?	228
6.5 Group narratives	233
6.5.1 School 1	233
6.5.2 Conclusion	242
6.5.3 School 2	244
6.5.4 Conclusion	244
6.6 Assessment data: School 1 & 2	252
6.6.1 Individual scores	252
6.6.2 Group scores	253
The Micro-Analysis of Emergent Themes and Transcribed	

7.	The Micro-Analysis of Emergent Themes and Transcribed	
	Episodes of Talk	255
	7.1 Conceptualising collaborative talk	255

7.1.1 Participating, understanding and managing in

collaborative talk	256
7.1.2 Divergent, connected and developed talk	261
7.1.3 Collaborative talk: What is it and how is it achieved?	266
7.2 The role of analytical and self-evaluative tasks in supporting	266
the development of talk awareness and collaborative talk	
7.3The development of collaborative talk awareness over a	
series of lessons	277
7.4 The role of the teacher and emotional engagement in the	
development of talk awareness and collaborative talk	283
7.4.1 Embedding expectations	283
7.5 Modelling dialogic and collaborative forms of talk	285
7.5.1 Appropriating the teacher's talk	289
7.6 What is the relationship between dialogic and	
collaborative forms of talk and emotional engagement?	
And what are the implications for students' perceptions	
of the validity of talk?	293
7.7 Participation which undermines the purpose of collaborative tal	k295
7.8 Case group: The development of The Better Group	304
7.8.1 Assessment data and teacher comments	304
7.8.2 The macro-analysis of The Better Group	205
7.8.3 Lesson 1	306
7.8.4 Lesson 3	315
7.8.5 Lesson 6	322
7.8.6 Lesson 9	332
7.8.7 The Better Group: Final evaluations	336
7.9 The development of collaborative talk: Familiarisation,	
orientation and collaboration	338

8.	Discussi	on	340
	8.1 Introd	uction	340
	8.1.1	Summary of the findings	340
	8.1.2	Summary of points for discussion	341

8.2 Do teaching strategies informed by workplace collaborative

scenar	ios support the development of collaborative talk?	342
8.2.1	Grounding the framework for collaborative talk in the	
	workplace and utilising it as a teaching tool	343
8.2.2	The effectiveness of tasks and their sequence in	
	supporting the development of collaborative talk	345
8.3The tea	acher's role: How does the teacher support and	
influen	ce the development of students' collaborative talk?	349
8.3.1	The teachers' use of talk during implementation of	
	the teaching unit	349
8.3.2	The expectations made explicit (and implicit) by	
	teachers through their talk	351
8.3.	.3 Teachers' talk and emotional engagement	353
8.3	.4 Concluding remarks	353
8.4 How d	o students develop in their talk awareness and	
collaborati	ve talk?	354
8.4.	.1 The development of students' talk awareness	354
8.4	.2 The notable difference between the collaborative	
talk	of each class	356
8.4	.3 The development of collaborative talk	358
8.4	.4 Concluding remarks	360
8.5 The ar	nalysis of talk	361
8.5	.1 Analysing collaborative talk	361
8.5	.2 Challenging approaches to communication training	362
8.5	.3 Self-evaluation of collaborative talk	363
8.5	.4 Concluding remarks	363
8.6 The te	acher's role	364
8.6	.1 Dialogic pedagogy and the teaching of collaborative ta	alk365
	8.6.1.1. The value of a dialogic pedagogy	365
	8.6.1.2 Stance and expectations	365
8.6.1.3 Th	e value of dialogic instruction for teaching	
coll	aborative talk	367
8.6	2 Dialogic instruction and emotional engagement	368
	8.6.2.1 The notion of engagement	368
	8.6.2.2 Emotional engagement as it emerged in this	

	study	369
	8.6.2.3 Dialogic instruction and emotional	
	engagement	370
	8.6.2.4 Students' appropriation of emotional	
	engagement for dialogue	372
	8.6.2.5 Other forms of engagement	372
	8.6.2.6 Concluding remarks	373
	8.7 Conceptualisations of collaborative talk and its development	373
	8.7.1 Frameworks and schemes	373
	8.7.1.1 Participating, understanding and managing in	
	collaborative talk	374
	8.7.1.2 Divergent, connected and developed talk	374
	8.7.1.3 Familiarisation, orientation and collaboration	374
	8.7.2 Expanding the socio-cultural paradigm	376
	8.8 Final remarks	378
9.	Conclusions	380
	9.1 Introduction	380
	9.2 Confronting the changes and challenges	381
	9.3 Planning for collaborative talk	383
	9.4 The teacher's role	385
	9.5 Theorising about collaborative talk	386
	9.6 Implications for research and teacher education	387
	9.7 Final remarks: The place of collaborative talk in the	
	National Curriculum	390
	Glossary References	393 395

List of Tables

Chapter 3:	
Table 3.1 Research design timescale	115
Table 3.2 Participants	118
Table 3.3 Data collection and instruments	119
Table 3.4 Core data set	122
Table 3.5 Additional data set	123
Table 3.6 Narrowing focus on the data	129
Chapter 4:	
Table 4.1 Summary of workplace visits, observations and intervie	ws 150
Table 4.2 Talk skills and group dynamics codes	157
Table 4.3 Structural features noted during observation	164

Table 4.5 A develo	pping framework for collaborative talk	170

167

Table 4.4 Framework for collaborative talk

Chapter 6:

Table 6.1 Overview of the collaborative talk teaching unit	
Table 6.2 Collaborative talk framework	
Table 6.3 Participants	
Table 6.4 Stages of data analysis	192
Table 6.5 Preparatory analysis table	193
Table 6.6 Descriptions of code groups for teacher audio analysis	194
Table 6.7 Table devised to map and code the teacher audio	194
Table 6.8 Description of code groups for student group analysis	195
Table 6.9 Table devised to map and code group video	
Table 6.10 Temporal data	
Table 6.11 Teachers' talk during task-setting	
Table 6.12 Teachers' talk during independent work	201
Table 6.13 Teacher-led feedback during reflection	202
Table 6.14 Teachers' expectations	204
Table 6.15 Emotional engagement	205
Table 6.16 Teachers' interactions with groups	
Table 6.17 Talk awareness	212

Table 6.18 Collaborative talk codes, sub-codes and numbers	
Table 6.19 Collaborative talk frequencies	
Table 6.20 Total frequency of participating, understanding and	
managing codes converted to percentages	217
Table 6.21 Percentage value of students' challenge turns	
and whether they were divergent, connected or developed	217
Table 6.22 Frequency of managing sub-codes converted to	
percentages	218
Table 6.23 Additional features of students' talk	219
Table 6.24 Group names	221
Table 6.25 School 1 groups' talk	222
Table 6.26 School 2 groups' talk	228
Table 6.27 Team Batman	233
Table 6.28 Team Gossip	234
Table 6.29 The Talkers	236
Table 6.30 The Dream Team	238
Table 6.31 The Shoppers	240
Table 6.32 The Superheroes	244
Table 6.33 The Business	246
Table 6.34 The Lead Team	248
Table 6.35 The Mean Team	249
Table 6.36 Mean GCSE scores for School 1 & 2	
Table 6.37 Post-implementation group scores presented in	
rank order	253

Chapter 7:

Table 7.1: The Better Group assessments	304
Table 7.2 Pre-implementation teacher comments	305
Table 7.3 Students' self-evaluation Lesson 1	311
Table 7.4 Students' self-evaluation Lesson 3	321
Table 7.5 Students' self-evaluation Lesson 6	331
Table 7.6 Students' self-evaluation Lesson 9	335
Table 7.7 Final evaluations	336

List of Charts

Chart 2.1 Structure of the literature review	29
Chart 3.1 Three phase research design	114
Chart 6.1 Presenting findings of the macro-analysis	197
Chart 6.2 Minute totals converted to percentage value	198

List of Appendices

Appendix A: Literature Review Search	415
Appendix B: Workplace E-Mail	417
Appendix C: Consent form for workplace interviews	418
Appendix D: School briefing letter	419
Appendix E: Memorandum of Understanding	420
Appendix F: Teacher consent form	421
Appendix G: Student Presentation	422
Appendix H: Student letter and consent form	424
Appendix I: Parent/ guardian letter and consent form	427
Appendix J: Consent form for use of data	429
Appendix K: Letter of appreciation and certificate	430
Appendix L: Semi-structured workplace observation schedule	432
Appendix M: Workplace interview schedule	433
Appendix N: Teacher presentation	434
Appendix O: Student evaluations for development phase	438
Appendix P: Group interview schedule	439
Appendix Q: Teacher handbook and student booklet	440

Chapter 1: Introduction

1.1 Background of the Study

The Chair of British Telecom (BT) and then Chair of the Commission for Employment and Skills, Sir Michael Rake, has demonstrated a commitment through BT's work with schools, to helping young people develop the skills required by the 21st century workplace. Whilst many foreground technology in thinking about education for the future, BT maintain that young people are often more technologically competent than adults in the workplace; what is missing are the human skills that make effective collaboration possible, independent of the technology.

The cooperative and collaborative efforts of humans working together are evident in the objects which surround us (Hutchins, 1997). Although technology increasingly facilitates collaborative efforts, it remains that humans need communicative skills which allow them to work together effectively, whether face to face in the workplace, or via extended modes of communication, made possible by advances in electronic networks and virtual meeting services. As Dawes stresses, 'if...global interaction is to be of educational benefit, teachers must ensure that children are able to talk constructively to those around them, as well as to the physically disembodied contacts throughout the world' (2001, p. 126). Effective communication enables humans to work together to overcome difference, to share, understand and reconcile perspectives. Language may therefore be the most important cultural tool that a child appropriates: 'central to both intellectual development and to becoming an effective member of society' (Mercer & Littleton, 2007, p. 13).

The emergence of language in our evolutionary pre-history was important not simply because it allowed individuals to coordinate their work activities, but because people became able to combine their mental capacities.

(Mercer, 2000, p. 105)

Webb and Palincsar (1996) point out that advocating group collaboration signals a move away from individualistic forms of education and assessment. However, as Dewey framed it years ago, schools may continue to undermine the social nature of community and its achievements by promoting competition and individualism (1900, 1956). It remains that individual talent is celebrated above that of collective effort, despite significant achievement almost always depending on the collaborative, communicative efforts of groups (Mercer, 2000). In contrast to competitive, individualistic approaches, group work requires cooperation and a commitment to reconcile differences and achieve shared understanding: 'The socialization and developmental benefits of collaboration are clear; in a competitive situation others are hoping that you will fail, whereas in a collaborative situation they are hoping that you will succeed' (Lloyd & Beard, 1995, p. 10). Education, therefore, 'should strive to have students acquire a profound sense of belonging to social groups, without losing their individuality, rather than fostering disconnected individualism' (Sharan & Sharan, 1992, p. 5).

Dewey (1900, 1956) argued that the key to maintaining democracy is 'understanding and fidelity to the laws of human nature in group settings.' He argued further that children's experiences in school should have a high degree of continuity with life in the adult world. Resnick (1987) made a similar point, arguing that the way in which schools gear learning at the individual contrasts to life outside of school where problems are often solved with others, particularly in the workplace. Resnick argued that, 'there is a broadly enabling role that schooling can play with respect to the economy – a role of preparing people to be adaptive to the various settings they may

encounter over the course of their working lives' (1987, p. 18). Cazden highlights the urgent need to address students' collaborative skills for this purpose: 'two of the abilities necessary to get good jobs in the changing economy are also necessary of participation in a changing society; effective oral and written communication and the ability to work in groups with persons from various backgrounds' (2001, p. 5). And Lloyd and Beard echo this point: 'The process of education must be centred on the development of each individual and part of that development must include the experiences of working collaboratively with as wide a range of peers as possible' (1995, p. 9).

Fawcett and Garton describe collaboration as involving 'working together to complete a single, unified task that represents the shared meaning and conclusions of that group as a unit' (2005, p. 158). It 'acknowledges the collaborative production of dialogue and the centrality of context to its meaning' (Maybin 1991:49), and its goal is 'the collaborative construction of meaning, with negotiation, to ensure that meanings are mutually understood' (Wells, 1986, p. 101). Collaborative talk therefore demands reciprocity, mutuality and the continual (re)negotiation of meaning (Mercer & Littleton, 2007). During students' collaborative talk, 'children bring together a range of perspectives or knowledge bases arising from the diversity of individual histories, experiences and personalities... to achieve a shared common learning goal' (Vass & Littleton, 2010, p. 106). Furthermore, in emphasising the role of collaborative talk in the joint meaning making process, we recognise that, 'when children learn language, they are not simply engaging in one kind of learning among many; rather, they are learning the foundation of learning itself' (Halliday, 1993, p. 93).

Studies continue to argue the learning potential of collaborative group interaction (Barnes & Todd, 1977; Rogoff, 1990; Mercer, 1995; Mercer & Littleton, 2007). Gillies

argues that 'when children work cooperatively together, they learn to give and receive help, share their ideas and listen to other students' perspectives, seek new ways of clarifying differences, resolving problems, and constructing new understandings and knowledge' (2003, p.35). Peers' collaborative talk can help students to generalise and transfer ideas, build a foundation for communication, increase students' capacity for deeper understanding, self-regulation, self-determination, problem-solving, motivation and reasoning (Nystrand, 1997). Barnes, Britton and Rosen (1969), capture the benefit of talking together for shared goals:

The leap-frogging of listening and speaking may in fact be characteristic of a joint exploration in talk and account for its value: each may give what he could not have given had it not been for the 'taking,' and in turn what he gives may provide somebody else's starting point. If it works that way, talk would indeed be a cooperative effort yielding a communal harvest (p. 110)

Interest in dialogic talk has reaffirmed the learning potential of reciprocal, supportive dialogue (Wells, 1999; Wegerif, 2007; Alexander, 2004; Hardman & Abd-Kadir, 2010; Freire, 2008). Collaborative talk is 'a means by which dialogic engagement between learners can become a tool for meaning making' (Lyle, 2001). Underpinning dialogic talk is the Bakhtinian concept of 'addressivity' (Bakhtin 1986), which emphasizes the responsiveness of the listener in shaping the speaker's utterance within a chain of communication. This resembles Claxton's (2004) argument for the role of reciprocity in developing the capacity to learn with others and is central to collaborative engagement.

Achieving genuine group consensus is dependent upon the achievement of shared understanding, and achieving genuine understanding is dependent upon reciprocal conversation, during which speakers strive to appreciate alternative views (Gadamer, 1989). Barnes (1969) argues that group work allows students to move

towards understandings through means not present in the teacher-directed classroom. Students need to be provided with opportunities to engage in discussion with their peers, discussion which is not overly influenced by their teachers' expectations and perceptions of their roles. While peers' talk may not always, at least appear, to be economic, it is the only way that genuine collaboration can occur in the classroom (Barnes, 1977, 1995). Teachers must avoid 'putting words in students' mouths' and allow them to explore language and find a means of expressing understanding.

Despite the evident learning potential of collaborative talk, the theoretical and pedagogical principles underpinning it fail to be realised in practice. The first recognition of the importance of classroom talk appears in the 1921 Newbolt Report; although, at the time the vernacular of the poorest classes was also considered corrupting (Keiner, 1992). Barnes, Britton and Rosen's (1969) seminal study revealed the striking effect that the talk between teachers and learners, and between peers, can have on learning. With the development of the tape recorder and an increased number of teachers returning to university to pursue professional development in the 60's (such as the teachers involved in Barnes et al's study) emerged a stronger interest in sociolinguistics, prompting further understanding of the role of talk. The later Bullock Report welcomed an interest in language: 'we cannot emphasize too strongly our conviction of its (oral language's) importance in the education of the child' (1975, p.156) Over the past few decades, concerns about the benefits of peer interaction have increased as educational theorising has shifted to recognise the child as an active, social learner. However, Edwards and Mercer (1987) blame the earlier Plowden Report's (1967) over-emphasis on teachers' responsibilities to cater to the learning of individuals, for making it difficult for

teachers to move away from notions of the child as 'lone scientist' to 'social being'. Although guidance promotes effective classroom talk (DfES, 2003; QCA, 2003), little appears to have changed in practice.

Research has shown that classroom discourse remains teacher fronted, monological and traditional and few opportunities are provided for peer talk (Alexander, 2000; Cazden, 2001; Nystrand, 1997). Classroom talk continues to be dominated by the teacher and focused on correct answers (Myhill, 2006), reinforcing an image of the student as passive recipient of teachers' knowledge, instead of an active constructor of knowledge. Students' perceptions of whether they are 'good' appear to be bound to perceptions of what is desirable in their talk – a correct answer (Pratt, 2006: Black & Varley, 2008). Even teachers' perceptions of a 'good' talker appear to be of those who offer 'correct' answers or speak in a manner perceived as appropriate (Fisher & Larkin, 2008). The ways teachers use talk in their classrooms shapes students' perceptions of what is desirable in their own talk. While common classroom discourse patterns may reinforce students' passivity, collaboration promotes egalitarian participation and emphasises the student role in the construction of knowledge.

Mercer argues that 'while the experience of everyday life supports the value of collaborative learning, educational practice has implicitly fought against it' (Mercer, 1995, p. 90). When Nystrand (1997) explored the classroom talk experience of 2400 students in 60 different classrooms, he found that typically, the classroom teacher spends under 3 minutes an hour letting students talk and that this reduced with students in low socio-economic schools. Research which has surveyed classroom activity has revealed that while students may often be arranged in groups, they rarely work as a group (Galton, Simon & Croll, 1980, 1999; Norman, 1992; Blatchford &

Kutnick, 2003; Alexander, 2004, 2005: Dawes & Sams, 2004; Bennett & Dunne, 1992). It has long been reported that when group work does occur, students often work as individuals and not together (Galton, Simon & Croll, 1980, 1999; Bennett, 1994). Revealing a continuing trend, Alexander (2000) found that seating arrangements in primary schools in England, Michigan and France, disguised the fact that pupils worked individually or as a whole class by arranging tables in groups. Exploring the grouping practices of 672 schools in the UK, Baines, Blatchford and Kutnick (2003) revealed that although secondary students were more likely to experience whole class ability based sets and formal row or pair seating arrangements, they were more likely to engage in peer interaction than at primary school. However, it appeared that secondary teachers coordinated group work in response to reduced adult guidance and a need to maintain control and on-task attention. When group work does appear, it is often at the computer (ibid), possibly because funding isn't available for students to use a computer on a one-to-one basis (Littleton & Howe, 2010). This reinforces the suggestion that group work is driven by practical necessity as opposed for pedagogic purposes. There is clearly a gap between the theoretically apparent value of peer interaction in small groups and how it is used in the everyday classroom.

Significantly, it appears that students are uncertain how to engage collaboratively in discussion and teachers presume their ability to do so (Mercer & Littleton, 2007). As a result, students' collaborative talk may become uncooperative and unproductive, fostering teachers' perceptions of student-student talk as subversive and disruptive (Mercer, 1995), reinforcing concerns about control. Consequently, students may perceive getting along in the social sense as the purpose of collaborative activity, rather than as a means of building intellectual understanding (Krechevsky & Stork,

2000). For children's learning and understanding, classroom talk 'must move beyond the acting out of cognitively restrictive rituals and provide linguistic opportunities for students to think for themselves' (Alexander, 2004, p. 14).

In exploring the teaching of collaborative talk, the linguistic challenges that face students in mainstream classrooms cannot be neglected. The Bercow Report (2008) has drawn particular attention to the importance of language, arguing that to be able to communicate is a special commodity: 'a fundamental human right...not simply a personal statement of value' (p. 17). Far more students in mainstream classrooms have a speech, language and communication need (SLCN) than we realise, a barrier to learning and certainly to participation in collaborative talk. In a report to The Communication Trust, Ayre and Roulstone (2009) cite figures revealing that 23% of primary children with a special educational need (SEN) have an SLCN. At secondary school, this drops dramatically to 7%, but the number of children with social, emotional and behavioural difficulties rises sharply from 18.4% to 30%. While a lack of longitudinal data makes it difficult to interpret this difference, several theories have been suggested: students' needs may be misinterpreted, or what starts as an SLCN may turn in to something else, manifesting itself differently. The new discourses and rules of secondary school may prove particularly difficult for students with an SLCN. This is relevant when considering teachers' expectations of classroom talk. In presuming students' linguistic competency, their ability to participate in different discourses and follow 'the rules', we may fail to recognise when an SLCN underlies what we interpret as poor behaviour.

The Communication Trust's publication, *Sentence Trouble*, presents scenarios in which a young offender faces significant linguistic challenges (2009). The young offender has to recount an event in chronological order, to read a statement and

agree with its version of events, and is expected to understand the words 'magistrate,' 'custody,' 'remorse,' 'liable.' If we imagine the scenarios that students find themselves in during Speaking & Listening tasks in the English classroom, we may hear a teacher say: 'go and debate,' 'persuade someone else of your view,' 'argue your point.' This draws attention to the fact that not only do we need to address all students' capacity to engage in these demanding tasks, we need to deal with the vocabulary of the classroom explicitly, addressing understanding at a meta-linguistic level.

The findings and theories discussed above reflect my own experience and observations as a secondary English teacher. The pressure to convey control in the classroom discourages teachers from incorporating group work in lessons. Teachers often provide inadequate instructions that fail to explore talk skills explicitly. I would argue that teachers underestimate the challenge of collaborative activity and overestimate students' capacity to engage in it. A lack of preparation can result in poorly organized group tasks which fail to support collaboration or students' appreciation of the potential of learning together.

Furthermore, the Speaking & Listening component of the English GCSE (QCA, 2007; Edexcel, 2010) may be perceived as the 'easy bit' by students because it does not involve writing, and by teachers because the marking takes less time. Students' perceptions of what is 'difficult' in English may have undermined the need to recognise the importance of developing Speaking & Listening skills. The tasks often set also reveal a cultural bias – fox hunting: agree or disagree? Capital punishment: right or wrong? And, in continuing to assess the individual's contribution to a collaborative task, we undermine the purpose of collaboration.

The challenges facing group work continue from the classroom into the workplace. Although the fields of education and business may be regarded as two distinct areas, research in both places value upon collaborative talk in complementary ways. Increasingly, 'teamwork' is emphasized as 'the way business operates today...from our first tottering steps into the education system, it's team talk all the way' (Moore, 2007, p. 38). And as 'workplace collaboration becomes increasingly common the need to develop effective teamwork strategies grows' (Fredrick, 2008, p. 439). Managers claim that the most effective team approaches produce higher productivity, while employees benefit from a greater sense of autonomy and job satisfaction (Donnellon, 1996). But in reality, teamwork creates frustration and disappointment (ibid), perhaps because it is somewhat paradoxical: it requires differentiation among members and the integration of those members' views into a single working unit. This paradox may mirror that of teaching, that learning is at once social and individual (Barnes, 2008). While educational perspectives promote the learning benefit of working together, the business world clearly values its potential for productivity and progress (Galton & Hargreaves, 2009).

It must be acknowledged that while effective collaborative talk can be beneficial for learning, it is not easily achieved and is not a universal remedy (Barnes, 2008; Brierley et al, 1992). Research into collaborative talk has been diverse and multidisciplinary, resulting in a long list of group and classroom features providing a means of possible ways to enhance its quality (Webb & Palincsar, 1996). However, if we are to address young people's collaborative abilities, we need to address their talk, exploiting the language resources that young people use so frequently in their personal and social lives, and involve students in determining how we should do this. Students need to be taught to interrogate language and the purpose of a

collaborative task in order to create a shared foundation of linguistic understanding. Upon this foundation, solutions, decisions and agreements can be jointly achieved and understood, expanding the space of dialogue and ensuring students' engagement in talk which supports learning (Wegerif, 2007; Rojas-Drummond & Mercer, 2003). Theories of collaborative talk need to be developed which are grounded in the realities of classroom life, providing teachers with the understandings and the means to facilitate it.

1.2 The Aims and Outcomes of the Study

This research contributes to theoretical understanding of collaborative talk and provides practical guidance on how it can be taught in the secondary English classroom. The research began by exploring how collaborative talk occurs in authentic workplace settings, recognising that there may be much to learn by examining 'the informal pedagogy of everyday life' (Tharp & Gallimore, 1998, p. 93). Understanding how collaborative activities occur in different spaces may help 'bridge the gap' between these different contexts (Maybin, 2009), highlighting the relevance and application of in and out-of-school learning.

The collaborative talk observed in these settings served as a stimulus, informing the development of teaching materials for collaborative talk in the classroom. By drawing upon talk which occurs amongst older people, the teaching materials aim to lead ahead of students' development and broaden the purpose of the collaborative tasks with which they engage. In doing so, the aim is to develop students' capacity for adapting talk to a variety of workplace settings, for a variety of purposes, in a variety of contexts. The aim is not to transfer and impose an alien workplace discourse upon young people, but to support the development of transferable and relevant skills.

The teaching materials were developed with teachers and students and implemented in two classes, making use of the opportunities provided by the (then) English GCSE requirements for Speaking & Listening. The 2010 Edexcel GCSE Specification made explicit the skills required for the 'interacting and responding' task: students must be able to, 'shape direction and content of talk, responding with flexibility to develop ideas and challenge assumptions; initiate, develop and sustain discussion through encouraging participation and interaction, resolving differences and achieving positive outcomes' (Edexcel, 2010).

This study enabled a fresh approach to the study of collaborative talk by grounding teaching materials in workplace contexts and drawing understandings from the talk observed in these settings. The thesis examines the development of students' collaborative talk, as well as the role of the teacher in this development. How students developed in their understandings of collaborative talk processes is also a key consideration. The resulting teaching materials provide a practical means for teachers to realize the pedagogical principles underpinning effective collaborative talk in the classroom. The research hopes to empower students and ensure their participation, promoting and supporting independent learners willing to question and challenge knowledge in an uncertain world.

Chapter 2: Literature Review

2.1 Aims

The review of the relevant literature aims to explore the theoretical benefits of social learning, and more specifically, of collaborative talk. It will examine the features identified in peers' naturally occurring collaborative talk and in workplace 'team' talk. The teaching strategies and interventions which have been devised to support the development of peers' collaborative talk will be explored. The teacher's role will also be considered for its potential to support this development.

2.2 Search Terms

Several variations of the term 'collaborative talk' were used in order to yield relevant literature using a range of search strategies (appendix A). Phrases used included, 'group talk,' 'group work,' 'peers' talk,' 'peer work,' 'talking together'. An overlap in definitions of 'collaborative' and 'cooperative' talk required that both terms were also used, taking consideration of the fact that research into collaborative talk is located within socio-cultural theory, cognitive psychology and sociolinguistics. Searches were also conducted within business literature. Drawing from these different sources, a description of collaborative talk is formed for the purpose of this research.

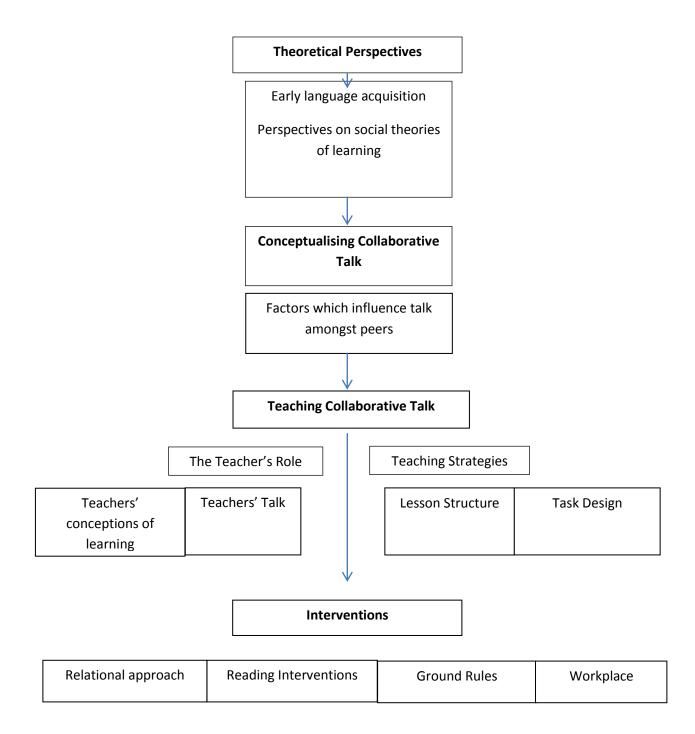


Chart 2.1: Structure of the literature review

2.3 Theoretical Perspectives

2.3.1 Early Language Acquisition

There have long been arguments surrounding the origin and development of language in the infant. Chomsky's linguistic nativism theory argues that humans have a biological foundation, or an innate capacity, for language (1968). From a socio-cognitive perspective however, it is odd to consider that the interaction made possible by language should not be required for the development of language itself. Tomasello asserts that 'language is not an instinct' (1995, p.2) and argues that social and cognitive skills underlie language development (ibid; 1999). Vygotsky argued that language develops as a result of the infant's interactions with those around her, as though the infant partakes in an 'apprenticeship' in language. From this position, Chomsky's view is undermining of the important role of the adult or *significant other* (Vygotsky, 1978) in the development of the child.

Positioned within a broadly Vygotskian socio-cultural framework, Tomasello (1999) and Hobson (2002) argue that early interactions between infant and caregiver are fundamental to the development of language. Tomasello (1999) treats language not as a biological adaptation but rather a form of cognition that children develop through regular interaction with adult speakers. By recognizing others as intentional beings, the infant comes to understand the symbols or tools which point to the problems they are meant to solve, or to the cultural situation in which they apply. Influenced by Jerome Bruner, Tomasello argues that acquiring language is dependent upon entering into a 'joint attentional frame' which allows infant and caregiver to develop and share this symbolic meaning. Therefore, while 'the child begins to master his own surroundings with the help of speech' (Vygotsky, 1978, p. 25) it is the

agreement between adult and child on symbolic referents which provides an 'entry point' for social interactions.

Hobson (2002) however, points at the emotional, interpersonal and instinctive connection between infant and caregiver as enabling an 'entry point' to the possibility of shared referents. Hobson (ibid) argues that infants, from soon after birth, seek human faces, mimic and respond to gesture and sound, supporting the achievement of interpersonal engagement. As implied by Tomasello's joint attentional frames, Hobson (2002) argues that symbolic thought is dependent upon intersubjectivity. He argues that an *emotional* connection is crucial between infant and caregiver to start the process of intersubjective learning, *preparing* the way for language. For both Hobson and Tomasello therefore, human minds and language are the outcome of successful interactions between infant and caregivers.

Both Hobson (2002) and Tomasello (1999) have studied Autism in children as a means of highlighting what it means to have mutual engagement with someone else. Hobson argues that development is harmed when certain interactions fail to occur. There are negative implications for the child with Autism, for example, if language development is dependent upon an infant's emotional identification with a caregiver. However, the fact that the child with Autism can learn to talk regardless of this engagement, points at a flaw in the argument, possibly strengthening arguments for language as innate.

Nevertheless, in contrast to nativist theories, Tomasello's and Hobson's research emphasizes the important role of 'the other' in development. Both point at the ontological need for humans to identify with other humans, and that it is this identification, and the interactions which occur, which support the development of

language. While the individual who does not benefit from engagement or empathy, such as the child with Autism, may still learn to talk, social engagement and interaction may accelerate linguistic development and learning. Having considered the important role of interaction in early child development, the section which follows will expand discussion of socio-cultural theories and the role of interaction in *teaching* and *learning* by further reference to Vygotsky and Piaget.

2.3.2 Perspectives on Social Learning: Piaget and Vygotsky

Piaget's view that learning is self-directed and guided by internal structures gave rise to the metaphor of child as, 'lone scientist,' while Vygotsky regarded cognitive change as essentially social in genesis, leading to the notion of child as, 'social learner.' Both perspectives are often contrasted instead of reconciled, neglecting the value that Piaget also placed on the role of social interaction in development. Some argue that a combination and appreciation of both positions may be valuable (Brown & Palincsar, 1989). Although Vygotsky argued that Piaget, 'did not see the child as part of a social whole' (1986, p. 45), Piaget did recognise that human intelligence develops in the individual as a function of social interaction (Piaget, 1967). In fact, he argued that the way in which human intelligence develops as a function of social interaction, 'is too often disregarded' (ibid).

Piaget argued the need for children to come into contact with different perspectives, recognizing the value of interaction for cognitive development (1932). When children are exposed to conflicting perspectives, the resulting 'disequilibrium' reveals 'gaps' in understanding and leads to the restructuring of previous assumptions. Supporting the benefits of socio-cognitive conflict, Doise and colleagues revealed that the presence of conflict in peers' interaction, regardless of ability, prompted children to

re-examine their perspectives, leading to the development of higher mental functions (Doise & Mugny, 1984; Perret-Clermont, 1980). However, cognitive change is unlikely if interaction is sparse, if the social structure allows for passive compliance. For cognitive growth to occur, it has been shown that conflicting perspectives need to be reconciled and resolved (Howe, 2010; Light & Littleton, 1999). This suggests that while conflict may trigger conceptual change, the process of co-elaboration and co-construction may be more important: 'change is not the automatic outcome of group problem-solving...it is the result of certain social settings that force the elaboration and justifications of certain positions' (Brown & Palincsar, 1989, p. 408).

The observed benefits of socio-cognitive conflict involving resolution through dialogue, has shifted focus to the social and dynamic processes through which learners construct knowledge together. Vygotsky regarded social interaction as the 'beginning' stage in individual development. For Vygotsky, individual thinking is the re-enactment or internalization of cognitive processes which are experienced first 'externally' in the social interactions of society. Vygotsky's general genetic law of cultural development proclaims the primacy of social influences on development (Daniels, 2007): 'Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (*interpsychological*), and then inside the child (*intrapsychological*)...all the higher functions originate as actual relations between human individuals' (1978, p. 57). Therefore, 'learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers' (Vygotsky, 1978, p. 90).

Developing higher mental functions, including voluntary attention, concept formation, logical reasoning and logical memory involves the internalization of external social

activity into inner activity (Vygotksy, 1978). Conscious use of such higher concepts appears in the later stages of development after being used unconsciously first; conscious control is gradually gained of cognitive processes. Although questions have been raised about whether internalisation is a process of appropriation or imitation (Littleton & Howe, 2010), internalisation involves the individual 'taking over' higher functions. This 'consciousness,' or 'higher level' functioning allows the individual to view what was previously known, to turn thoughts on thoughts, achieving an awareness of cognition itself (Wertsch & Stone, 1985).

Language is the semiotic tool which *mediates* internalization, connecting external with internal and social with individual. As discussed, the acquisition of language may be regarded as a cultural process (Tomasello, 1999; Hobson, 2002) through which 'the child begins to master his own surroundings with the help of speech' (Vygotsky, 1978, p. 25). In fact, Vygotsky describes the acquisition of language as a, 'paradigm for the entire problem of the relation between learning and development' (1978, p. 89). In early childhood, the agreement between adult and child on referents provides an 'entry point' for social interactions. The child is able to begin the process of mastering words, gradually recognising their potential significance for meaning. Speech is first used externally, then egocentrically, and upon conversion to inner speech, comes to organize thought, becoming an internal mental function. Discussion and argument become the basis for logical reasoning, inner speech retaining the functions of social interactions. As Vygotsky put it, 'individual functioning in essence represents a unique form of internal collaboration with oneself'. The mechanism of internalization, therefore, involves the mastery of social activity through coming to appreciate the significance of the signs used in interaction (Wertsch & Stone, 1985).

2.3.3 The Zone of Proximal Development

In light of previous discussions, and in advance of exploring different conceptualisations of the ZPD, it is necessary to consider the ambiguous terms: *development, learning* and *instruction*. Though sometimes used synonymously, 'learning' and 'development' describe different processes. *Development* describes that which *may* occur 'naturally' in the child; while, *learning* describes that which accelerates development. The role of the teacher or adult, in providing *instruction*, is to support this acceleration. However, these terms and definitions are problematic, particularly when considering the origin of language in the infant according to Tomasello (1999) and Hobson (2002): the process of language development *relies* on the support of a 'significant other' and does not occur spontaneously, suggesting that learning and instruction are far less distinct than some definitions suggest. The role of the learner and 'instructor' in development and learning is a central issue when examining different conceptualisations of Vygotsky's zones of proximal development.

Vygotsky's 'zone of proximal development' outlines a way of evaluating and fostering development in accordance with his general genetic law of cultural development, as described in the previous section. It represents cognitive change as a process of learning and instruction (Mercer & Fisher, 1998) and opens up the notion of development to diverse trajectories (del Rio & Alvarez, 2007). The ZPD describes the, '*distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1978, p. 86). Therefore, 'what a child can do with assistance today she will be able to do by herself tomorrow' (Vygotsky, 1978, p. 87). The ZPD propounds,*

therefore, that, 'the only good kind of instruction is that which marches ahead of development and leads it' (Vygotsky, 1986, p. 188). The ZPD defines functions that have not yet been mastered and characterizes mental development prospectively. The concept provides a means for assessing what a child can do alone and with guidance, and for examining the realm of learning and the role of instruction within it.

The ZPD alters the view that once an operation is mastered, developmental processes are complete. Drawing on Wertsch (1979), Bruner (1985) suggests that in the later stages of development, once a child has mastered linguistic devices, speakers are able to take for granted what is known and shared, and in achieving intersubjectivity are able to jointly go beyond and comment on what is shared. This form of discourse is described as the 'given-new' structure; the desire to know the 'new,' a means of luring the learner into the ZPD (Bruner, 1985). This reveals the continuous and cyclical process of learning according to Vygotsky, that what is mastered does not conclude the final stages of development but becomes the starting point for the next, that 'developmental processes...have only just begun' (Vygotsky, 1978, p. 90).

However, Bruner (1985) points at a contradiction in Vygotsky's assertion that 'good learning' must be in advance of what is conscious: how can it be bound to that which is unconscious? Bruner hypothesises that within the ZPD the adult or more capable peer acts as 'consciousness,' 'scaffolding' the internalization of external knowledge and converting it into a tool for conscious control. The ZPD therefore 'leads' learners toward consciousness, or 'higher ground', enabling reflection on what was previously known and is newly understood.

2.3.4 Scaffolding within the ZPD

Although Vygotsky (1978) argued that instruction must foster conscious awareness of conceptual forms, avoiding direct instruction which leads to the memorizing of words, he was not explicit about the form instruction should take. The mediating role of language is integral to Vygotsky's theories; however, it is less clear what Vygotsky thought this process of learning and instruction, or interactional exchanges between speakers might 'look like' (Wells, 1999). The process of internalization may require some skill on the part of the facilitating guide, to 'lead learners to higher ground.' More recent discussion of 'scaffolding' has drawn attention to this mediating process and to the role of instruction within the ZPD. The term 'scaffolding' has become synonymous with the zone of proximal development; Cazden (1979) first connected the term 'scaffolding' to the ZPD, a term used first by Bruner (1975) and developed in Wood, Bruner and Ross (1976).

A correspondence is clear between the ZPD and Wood, Bruner and Ross's description of scaffolding:

Scaffolding consists essentially of the adult "controlling" those elements beyond the learner's capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence...it may result, eventually, in development of task competence by the learner at a pace that would far outstrip unassisted efforts' (Wood, Bruner & Ross, 1976, p. 80).

Similarly, Tharp and Gallimore (1993, 1998) argue that interactions between adult and child should provide assisted performance, and that in order to do so, the assistor must be in close touch with the learner's relationship to the task. Drawing on Wood, Bruner and Ross, Stone (1998) outlines four features of scaffolding in an attempt to boundary the term:

- That the adult involves the child in a meaningful activity beyond the child's understanding and control
- That the child's understanding and skill level is diagnosed and the amount of support required assessed
- That the support may vary gesture, prompt and extensive dialogue as needed
- That support is gradually withdrawn

However, these asymmetrical illustrations of scaffolding and the ZPD, where the learner is led by the more capable adult or peer, may be limited in their practical applicability to the everyday classroom (Littleton & Howe, 2010). According to Littleton and Howe, Vygotsky's theorizing may be regarded as 'utopian when applied to educational contexts' (2010, p. 9). Pupil-teacher ratios are such that there is no time to assess each child's ZPD and it is highly unlikely that each child in a class shares the same 'zone'.

However, the term 'scaffolding' is a metaphor, not method, and as a result has been used in many different ways to illustrate views on the arrangement of instruction within the ZPD (Wells, 1999). Because the ZPD which describes the interaction between teacher and learner is commonly envisaged as an asymmetrical one, it can be accused of neglecting the role of the learner. It is important to recall, therefore, the context in which Bruner (1975) first used the term 'scaffolding'. In this frequently-cited paper, Bruner explores how joint activity and attention between mother and infant supports the development of the formal structures of language, examining the transition from pre-linguistic to linguistic communication. In referring to the playful exchange of a mother and infant, Bruner describes how 'mothers often see their role as supporting the child in achieving an intended outcome, entering only to assist or

reciprocate or "scaffold" the action (1975, p. 12). This image of 'scaffolding' shows how the intention originated with the child; the mother acts upon the desire of the infant. Not only does this suggest a more 'symmetrical' version of scaffolding than the one commonly envisaged within the ZPD, it reinforces the desire of the infant to communicate, as suggested in section 2.3.1. This also shows that, infants and children don't necessarily need 'luring' into the ZPD, but may in fact initiate their formation.

2.3.5 The Role of the Learner in the ZPD and Scaffolding

It is apparent that the 'supports' or 'scaffolds' within the ZPD can be negotiated between speakers (Moll, 1990; Newman, Griffin & Cole, 1989). While the ZPD may be conceptualized as facilitating the transmission of skills from the more capable adult or peer to the learner, the learner may play a more significant role in the coconstruction of meaning.

Moll (1990) argues that the focus of change within the ZPD should be on the creation, enhancement and communication of meaning through collaborative use of mediational means, rather than on the transfer of skills. Adults or more capable peers should, therefore, be mediators and allow children control (Moll & Whitmore, 1998). Daniels (2007) argues that learning and instruction should be socially negotiated, involving active participation in collaboration, ensuring the transfer of control to the learner. Mercer and Fisher (1998) emphasise the link between the pursuit of curriculum-related goals and the use of teachers' discourse strategies for effectively organizing and supporting learning without didactic instruction. Shifting the focus from individuals to groups may encourage the creation of communities of enquiry within which this support can be negotiated (Mercer & Fisher, 1998).

Blatchford, Kutnick, Baines and Galton (2003) recognise that peer relations in the ZPD have been regarded as inferior, but argue there is a need to examine the qualities of these interactions in order to utilise them. Tudge and Rogoff (1989) similarly argue that the focus on adults within scaffolding may be a serious omission when considering the effectiveness of peer interaction for supporting learning. They argue that effective interaction is the achievement of intersubjectivity, regardless of whether adults or children are involved and irrespective of whether the situation involves either cognitive conflict or joint problem solving.

Fernandez, Wegerif, Mercer and Rojas-Drummond (2001) argue that exploratory talk promoted by the application of ground rules serves to expand a ZPD and enables students to scaffold each other's learning. Similar to the effects described of asymmetrical scaffolding, exploratory talk enables students to share perspectives, to negotiate strategies, to share responsibility, and to highlight differences, enabling students to share frustration and risk. Therefore, it is argued, that a group version of the ZPD may be better understood as a symmetrical version of what Mercer (2000) terms the IDZ – Intramental Development Zone – in which language is used in dynamic and dialogical ways to maintain a space of shared understanding and reflection (Wegerif, 2007).

Wood, Bruner and Ross, remark that, 'what distinguishes man as a species is not only his capacity for learning, but for teaching as well' (1976, p. 89). The process of teaching and learning are perhaps far closer together than perceived; as Howe (2010) claims, the social and cognitive are interactive. We continuously engage in dialogues where we seek to explain or to understand, with the role of 'teacher' and 'learner' frequently interchangeable amongst peers and adults. As Blatchford, Kutnick, Baines and Galton put it:

In the future, the distinction between teacher and pupil, or expert and novice, may well become blurred...The classroom of the future, and the pedagogy relevant to it, may be more about co-learners, that is, pupils learning from and with each other, and making sense of the information available to them. (2003, p. 169)

Competing interpretations of the ZPD exist, which position the teacher and student differently in the construction of understanding. In moving away from the dominant image of scaffolding and the ZPD as an asymmetrical structure, we have 'a picture of a fluid interpersonal process in which the participants' communicative exchanges serve to build a continually evolving mutual perspective on how to conceive the situation at hand' (Stone, 1998, p. 165).

2.3.6 Peers' Interactions

Children's naturally occurring interactions reveal how talk amongst friends and siblings can support language development and knowledge construction (Rogoff, 2003; Maybin, 1991, 2009), and that children can create and sustain language cultures which often exclude adults (Blum-Kulka & Snow, 2004). When students bring their knowledge to the shared construction of a solution or answer, 'they will be able to add to and...modify their internal model of the world' (Wells, 1986, p. 59). Not only can peers support each other's learning through talk, engaging in interaction with others regardless of status or knowledge may mediate the internalization of intellectual functions (Rogoff, 1990; Forman & Cazden, 1985, 1998; Rojas-Drummond & Mercer, 2003).

Forman and Cazden (1985, 1998) argue that while the processes of interaction are taken over by the child and internalized, speech does not create intellectual functioning but is acquired through its use. In contrast to the rigid dialogues common

amongst adults and children, peers in interaction can try out different roles and ways with words, giving instructions or asking questions which support learning, enabling them to internalise different means of reasoning and argumentation (Forman, 1981; Rogoff, 1990). As mentioned, Mercer (2000) argues that peers' exploratory talk can 'scaffold' learning because peers share perspectives, negotiate strategies, highlight different things, share risk and responsibility. According to Brown and Palincsar, peer groups which encourage questioning and evaluating, foster conceptual change because, 'striving for explanation often makes a learner integrate and elaborate knowledge in new ways' (1989, p. 395). During peers' collaborative talk, social support is offered which can ease anxiety, responsibility for thinking is distributed, cognitive processes are modelled and observed by others and participants benefit from a range of expertise (Brown & Palincsar, 1989).

Piaget valued children's interactions with each other above those with adults. In Piaget's view, unlike interactions with adults whose 'omniscience' children may perceive, interactions with equal status peers support egalitarian social dynamics, enabling the effective negotiation and resolution of ideas: 'Criticism is born of discussion and discussion is only possible amongst equals' (Piaget, 1932, p. 409). Cooperative relationships between peers may ensure that, 'authentic forms of intellectual exchange become possible, since each partner has the freedom to project their own thoughts, consider the positions of others, and defend their own point of view' (Psaltis, Duveen & Perret-Clermont, 2009).

2.3.7 The Achievement of Intersubjectivity

Collaborative talk is 'a coordinated, synchronous activity that is the result of the continued attempt to construct and maintain a shared conception of a problem'

(Roschelle & Teasley, 1994, p.94). Shared problem-solving may underlie the benefits of peer interaction because the process of constructing understanding comes from the achievement of intersubjectivity (ibid). Intersubjectivity describes the achievement of agreement or understanding, emphasizing language as a shared commodity. For movement from intra and inter-psychological functioning, intersubjectivity is needed in communication, and peer groups may in fact provide a better context for achieving this (Blatchford, Kutnick, Baines & Galton, 2003).

For reconciliation to occur, or for an agreement on understanding to be reached, participants in interaction must be committed to appreciating the perspectives of others and consequently to reflecting upon and restructuring their own. Roschelle and Teasley (1995) revealed that peers' talk can support the problem-solving process when utterances are coordinated and jointly constructed and speakers commit to repairing divergent meanings. Similar to Tomasello's joint attentional frames (1999), Roschelle and Teasley describe this supportive dialogue as creating and sustaining a JPS – joint problem space. This JPS supports the gradual accumulation of shared concepts to allow for convergence of meaning – 'the crux of collaboration' (Roschelle, 1992).

Mercer's reconceptualisation of the ZPD, the 'intramental developmental zone' describes a similar space within which interactive processes of learning rest on the maintenance of shared knowledge. The IDZ creates a dynamic, contextual basis for knowledge and understanding which supports joint, goal-orientated tasks. This shared contextual basis is generated and dependent upon participants' language and the success with which they communicate to combine intellectual resources (Fernandez et al, 2001). In achieving shared contextual foundations, 'conversation is...the achievement of some, new, joint common knowledge' (Mercer, 2000, p. 8).

For Habermas (1979), the goal of understanding is the bringing about of agreement, while for Gadamer (1989) it is the 'fusion of horizons.' Finding common ground depends on the willingness of speakers to lend themselves to the emergence of something new: 'the more genuine a conversation is, the less its conduct lies within the will of either partner' (Gadamer, 1989, p 389). When we truly listen to each other, we discover validity in what is said, revealing the limits of our own understanding. Gadamer stresses a 'three-way' relation to understanding: one person coming to an understanding with another something which they both understand. However, agreement is not a normal state of communication: 'coming to an understanding is the process of bringing about an agreement on the presupposed basis of validity claims that can be mutually recognized' (Habermas, 1979, p. 3). These validity claims provide a contextual framework to support the construction of agreement through language. As James (1962) said, it is with truths that we trade, and language is that trade. In a similar vein, Gadamer describes a conversation as having, 'a spirit of its own...the language in which it is conducted bears its own truth within it...it allows something to emerge which henceforth exists' (1989, p. 383).

There are of course theoretical issues with the notion that humans can share meaning: how can idiosyncratic bases of knowledge be shared? Roschelle argues that, 'in a true social constructivist account, convergence must work without assuming literal readings of either individual speech acts or the world' (1992, p. 269). Roschelle accepts that convergence of meaning can be achieved through utterances' placement in the situation of activity; the situation of social activity gives language its meaning. This reminds us of Vygotsky's theory of language acquisition, and is in keeping with Rommetveit's (1985) description of states of intersubjectivity. Drawing on Vygotsky and echoed by Hobson (2002), Rommetveit describes the

'primary' state of intersubjectivity as achieved during the adult and child's agreement on referents. An adherence to these 'semantic rules' or 'codes for communication' allows the *possibility* of shared understanding between speakers. In later stages of intersubjectivity, speakers may engage in more symmetrical dialogue where speakers are committed to taking on the perspectives of others and where shared understanding is reciprocal and conscious (Rommetveit, 1985; Rogoff, 1990). In this more symmetrical dialogue, roles might be interchangeable, reminding us of the ways in which children can try out different ways with language that asymmetrical relationships might restrict (Forman & Cazden, 1985, 1998). Habermas (1970) argues that for 'pure intersubjectivity' to be achieved, speakers' dialogue roles must be unlimitedly interchangeable. However, though Rommetveit describes 'pure' intersubjectivity as a 'convenient fiction' he argues that we must 'naively and unreflectively, take the possibility of perfect intersubjectivity for granted in order to achieve partial intersubjectivity in real life discourse with our fellow men' (1979, p. 161). He argues that vagueness and ambiguity, negotiability and flexibility are inherent and theoretical characteristics of language. Through language, we can achieve different states of intersubjectivity, attending to joint problem solving or achieving 'a perfectly shared reality' (Rommetveit, 1985, p. 187).

Communication is an interpretive, collaborative endeavour because of the different meanings we ascribe to words (Mercer, 2000). Words can carry meanings beyond their intended use because of the perspectives the listener brings. Speakers use several strategies to create a shared contextual framework in order to achieve intersubjectivity; for instance, exophoric referencing allows speakers to make use of contextual resources, allowing the construction of future plans (Mercer, 2000). Rommetveit argues that the advancement of intersubjectivity requires exchanges

which feature prolepsis in situations of mutual trust. While Rommetveit argues that words cannot be separated from the context of use, Mercer (2000, 2008) goes further to take account of speakers' dialogue histories and futures.

2.3.8 Supporting Intersubjectivity in a Dialogic Space

Wells describes making meaning as intrinsically dialogic, 'constructed over time as one voice answers another in the search for common understanding' (2009, p. 269). Wells argued an alternative to Vygotsky's focus on the relationship between thought and word, as a focus on 'knowing as both situated and dialogic' (1999, p. 105). It was Bakhtin who emphasised the dialogic nature of interaction: 'any utterance is a link in a very complexly organised chain of other utterances'; no one can, therefore, disturb, 'the eternal silence of the universe' (Bakhtin 1986, p. 69). Bakhtin argued that utterances do not occur as isolated acts but are contextualised by the goals and conditions of the activity and by the utterances that precede and follow (Wells, 1999).

The notion that experiences beyond present time and space influence the meanings we make in physical situations is one expressed by Wegerif (2007). The dialogic space described by Wegerif (2007) is a space within which different perspectives are held in tension, where participants can view these perspectives through each other's eyes. The concept of a dialogic space expands the notion of situated meaning further to take account of experiences and meanings beyond the physical time and space present. Dialogic discussion is therefore more than shared enquiry but a space within which intersubjectivity is achieved in the commitment to deal with perspectives reciprocally and in a commitment to understanding them. Dialogue might be treated as an end in itself if we consider the learning potential of engaging within 'dialogic space.' Meaning never remains static and voice not monologic; by

changing and appropriating the perspectives and words of others: 'discourse is able to reveal new ways to mean' (Bakhtin, 1981, p. 343).

The role of reciprocity is therefore at the heart of Bakhtin's logic (Nystrand, 1997). Because utterances constitute the germ of a response, understanding another person's utterance is to orient oneself with respect to it (Volosinov, 1973). This reciprocity represents circularity, what Rommetveit (1992) calls, 'atunement to the atunement of others.' In order to define the parameters of meaning and communication, what is taken for granted by one speaker must be taken for granted by the other, as 'transcendent social fact' (Schutz, 1976). Utterances are understood 'against the background of other concrete utterances on the same theme, a background made up of contradictory opinions, points of view and value judgements' (Bakhtin, 1981, p. 281). Even though the voice may give the impression of unity, our language is constituted by pre-existing meanings, the otherness of intentions (Bakhtin, 1981).

In its emphasis on 'immense plurality', dialogism holds that there is no monologue; there is never one single voice (Bakhtin, 1981). Novels, for instance, are an orchestration of competing voices, demonstrating what Bakhtin termed, 'heteroglossia' (1981). A dialogic epistemology holds that knowledge emerges through these competing voices, understandings evolving in interaction, meanings drawn from personal interpretations and experiences. The meaning which emerges through dialogue is, 'the effect of interaction between speaker and listener...like an electric spark that occurs only when two different terminals are hooked together...Only the current of verbal intercourse endows a word with the light of meaning' (Volosinov, 1973, p. 102-103). Therefore, 'any true understanding is dialogic in nature' (Volosinov, 1972, p. 102).

2.3.9 Dialogic Interactions for Learning

From both Bakhtinian and Vygotskian perspectives, development may be seen as the gradual appropriation of discourses that are capable of mediating one's intentions (Holquist, 1981). However, instead of learning as characterised by the socialisation of novices into shared values and beliefs, dialogism is dynamic, stresses conflict and the unfolding meaning between speakers (Nystrand et al, 1997).

Sociocultural theory argues that in order to grasp what it means to understand or know, there needs to be a focus on intra-personal models, rather than inter-personal or individualistic models, in which knowing and understanding are hermeneutic, transactional, social and intersubjective accomplishments (Jupp, 2006). According to Nystrand (1997), Vygotsky conceptualised learning and cognitive development as a *dialogic* play between teachers and learners. He argues that sequences of well 'scaffolded' interactions between adults and children are based on the reciprocity of roles rooted in some common activity. As the adult withdraws support, she does so in response to what the child can do alone. Development is therefore the expansion of the student's role, and the adult's receding role in joint activity.

From a Bakhtinian perspective, dialogically organised instruction involves the transformation of understandings through discussion, not the transmission of knowledge. Interaction, amongst peers of different ages, gender, race and abilities enables the conflict and struggle of different voices, shaping the consciousness of speakers and listeners. Talk needs to be interpretive, teachers structuring group activity and seeding alternatives into conversation to promote reasoned discussion. Depth of understanding requires the elaboration of the learner's interpretive

framework. In prompting critical thinking, teachers must relate learning to students' experiences, weaving learning into chains of utterances emanating from their lives (Freire, 2008).

The issues for learning, therefore, concern the dialogic potential of different kinds of instructional discourse for promoting and exposing conflicting perspectives. In 'uptake' moves, speakers can carry forward the words of others, negotiating and jointly determining the direction of discussion. Authentic questions can provide epistemological space and validate students' contributions. By 'carrying' a student's response further, the teacher can validate that contribution in such a way that affects the course of the subsequent discussion. Nevertheless, effective discourse cannot be defined only by identifying particular linguistic features but also depends upon the quality of interactions between persons (Nystrand, 1997). And while the teacher's voice is critical, it should be one amongst many (Nystrand, 1997).

Classroom discourse is often treated as though it is monologic, the teacher speaking with one language of truth, suppressing competing voices (Nystrand, 1997). Teachers may neglect the knowledge and experience students bring to the classroom, making learning irrelevant and ineffective because meaning, 'is realised only in the process of active, responsive understanding' (Volosinov, 1973, p. 102). In failing to engage students in dialogic discussion, teachers want, 'in effect, to turn a light bulb on after having switched off the current' (ibid, p. 103). However, authoritative voices may inevitably fail to suppress multi-voicedness, instead disengaging students who resort to assert their voices through forms of behaviour deemed inappropriate by the teacher.

2.3.10 Ontological Considerations: Synthesis and Difference

In relating how we *know* to how we interact, Bakhtin goes beyond epistemology into the realm of ontology. How we interact is fundamental to how we exist (Searle, 2010). The world of meaning is dialogic, the basis of human *being*, the opening of dialogue (Wegerif, 2008). And if *being* is the opening of dialogue amongst competing voices, human identity emerges through this difference (Wegerif, 2008).

However, it is because of this 'difference' that Wegerif (2008) objects to the conflation of Bakhtin's dialogism and neo-Vygotksian socio-cultural theory (Wertsch, 1991; Wells, 1999; Mortimor & Scott, 2004; Nystrand, 1997) on ontological grounds. Wegerif (2008) argues that dialogism holds that there can only ever be difference, that voices cannot be synthesised. He argues that Bakhtin's and Vygotsky's theories are ontologically incompatible because the latter emphasises synthesis, the overcoming of difference. Wegerif argues that the notion of difference implies post-modernism, while synthesis implies a modernist view. These differing perspectives have implications for how we conceive of identity, and importantly, understanding. However, sociocultural ontology also holds that identity emerges through conflict and struggle, in dialogue through human relationships, in striving for recognition (Packer & Goicoechea, 2000). Bakhtin makes clear that meaning making is not a tidy, passive, perfectly egalitarian process but one in which we compete and conflict.

While dialogic discussion and collaborative talk emphasise consensus and reconciliation (Mercer, 1995; Alexander, 2004), very little research considers the role of divergence and dissonance in the construction of shared understanding, or how *'difference'* shapes talk. Discussion does, of course, occur where speakers' views are divergent and dissonant. But it is this 'difference' which can make for very

productive and creative collaborative talk. The very fact that there are dissenting perspectives has the potential to challenge group thinking to see things differently. Potentially a group might discuss irreconcilable views, such as fundamental religious or political differences, where achieving consensus might be an impossible goal. In these circumstances, collaborative talk might support mutual understanding and an ability to empathise, or at least recognize, alternative perspectives. Cameron (2011) undertakes a detailed analysis of the discourse of an IRA bomber and the daughter of one of his bombing victims. Cameron describes the discourse dynamics of empathy by illustrating how they come to an understanding of each other. However, this is not explored from the theoretical perspectives of dialogic talk. Given the principles of dialogic talk as outlined by Alexander (2004), one might say that in order to handle divergent, conflictual or irreconciliable positions, talk participants have to share a consensus that mutual understanding is the goal and recognize that ultimately consensus may well include a respectful agreement to disagree.

It is in this mutual understanding, this *understanding* of *difference*, where consensus is also achieved: it is the process of striving for understanding, in which a space for dialogue is maintained, that the potential of dialogic discussion is realised. As discussed in section 2.3.6, a synthesis of human understanding might be inconceivable: 'a convenient fiction' (Rommetveit, 1979, p.161). However, the priority may be the maintenance of a space for dialogue, a space for difference, recognising that erasing the division between voices closes down the potential for meaning (Bakhtin, 1986). Perfectly shared understanding may in fact preclude the need for authentic discourse (Nystrand et al, 1997). While remaining 'different,' the contextual background of our discussions and the meanings we bring, create a space within which we interact and share meaning.

2.3.11 Conclusion

It may be the case that humans participate in and contribute to social practices from the outset (Hobson, 2002), that the individual already functions in shared understanding, circumventing the need for the internalization described by Vygotsky (Rogoff, 1998). But a focus on interaction has coincided with new conceptions of language and learning, especially the view that language is not a vehicle for transmission but a dynamic, epistemic process of constructing and negotiating knowledge. Regarding learning as a social process propounds an intersubjective attitude and avoids privileging the individual. Considering the cultural and relational character of school can inform our understanding of the way children transform into adults who will live and work in a complex modern society (Packer & Goicoechea, 2000). What dialogism holds valuable in discourse for learning provides a useful 'model' (Wegerif, 2001).

2.4 Conceptualising Peers' Productive Collaborative Talk

Collaborative learning has been described broadly as, 'a situation in which two or more people learn or attempt to learn something new together' (Dillenbourg, 1999, p. 2). This broad statement can be interpreted in many ways, particularly given the diversity in what is conceived as learning or as the learning outcome of collaborative talk. Collaboration in the classroom may involve asymmetrical peer-tutoring, collaborative reading or writing, or teacher structured methods like the 'jigsaw' (Webb & Palincsar, 1996). Individual outcome may be prioritised, rather than the joint construction of something new and integrated. Talk may also take many different forms: preparatory, retrospective, transactional, expressive, and so on (Barnes, Britton & Rosen, 1969). It is also important to note the distinction between

'cooperation' and 'collaboration.' Lloyd and Beard (1995) argue that although both are close on a developmental continuum, collaboration is of the higher order, suggesting that it is the quality of the interaction and participation which distinguishes one from the other:

It requires thoughts or ideas that challenge or supplement and improve upon one another, being able to compromise and to reach group consensus. Collaboration implies active participation and contribution, whereas cooperation does not (Lloyd & Beard, 1995, p. 9).

Identifying peers' productive collaborative talk as 'exploratory,' Barnes and Todd's (1977, 1995) seminal study made a distinction between presentational talk which is self-conscious and presents well-shaped ideas, and talk which is exploratory, allowing peers to explore new ideas in small groups (Barnes, 1992). Peers in exploratory talk work together without the risk of failure to explore different perspectives and consolidate ideas. Exploratory talk 'is hesitant and incomplete because it enables the speaker to try out ideas, to hear how they sound, to see what others make of them, to arrange information and ideas in to different patterns' (Barnes, 2008, p. 5). Mercer and Dawes argue the rich benefits of exploratory talk because of the way the mind can 'draw on previously unconnected reserves to come up with something new, creative, or well-reasoned' (2008, p. 66).

Drawing from the findings of the extensive SLANT project – Spoken Language and New Technology Project – Mercer (1995, 1996), extending Barnes and Todd's (1977) identification of exploratory talk, distinguished three discourse types predominant in children' collaborative talk: disputational, cumulative and exploratory. Disputational talk is characterised by disagreement and individualised decision making, where exchanges consist of assertions and counter-assertions. Cumulative

talk, on the contrary, contains exchanges that build positively but uncritically on each other, including repetitions, confirmations and elaborations.

Exploratory talk occurs when partners engage critically but constructively with each other's ideas...Statements and suggestions are offered for joint consideration. These may be challenged and counter-challenged, but challenges are justified and alternative hypotheses are offered...in exploratory talk knowledge is made more publicly accountable and reasoning is more visible in the talk. Progress then emerges from the eventual joint agreement reached. (Mercer, 1996, p. 369)

According to Mercer, exploratory talk typifies language which embodies principles valued in many societies and social institutions. Exploratory talk represents reasonable talk, and as such is described as an empirically grounded version of Habermas' 'communicative rationality' (Wegerif, Mercer & Dawes, 1999). The exploratory talk found and promoted in the classroom situation is a version of a type of language use, 'given central importance in contemporary cultural activities such as science, law...and negotiation in business' (Wegerif, Mercer and Dawes, 1999, p. 497). Mercer argues, therefore, that learning how to engage in exploratory talk teaches children the skills to engage in other educated discourses (Mercer, 1996).

A similar characterisation of productive collaborative talk can be seen in the identification of and development of 'Collaborative Reasoning' (Resnitskaya et al, 2009; Dong, Anderson, Lin & Wu, 2009; Ting, Anderson, Hee & Yuan, 2008). As an instructional method designed to engage groups in discussion about controversial issues, students' talk develops argumentation and group management skills. Students' talk is reasoned and involves asserting, justifying and challenging ideas; students are prepared to seriously consider alternative perspectives in the construction of a joint decision. Like exploratory talk, participants are expected to

think critically about ideas and not people, working together to construct joint understanding. Closely resembling collaborative reasoning is Resnick's conceptualisation of 'accountable talk' (Michaels, O'Connor & Resnick, 2008; Huss, 2007; Cazden, 2001). Accountable talk is also intended to promote students' critical thinking; it requires that speakers justify their opinions with reference to evidence, listen to and build on the perspectives of others and adhere to standards of reasoning that emphasise logical connections (Michaels, O'Connor & Resnick, 2008). These forms of discourse discourage students' passivity as learners and promote their participation in reasoned argumentation in which ideas and opinions are justified. Also emphasising the joint construction of understanding, Brown and Palincsar (1989) in an approach termed 'reciprocal teaching,' promote talk in which students support each other during group reading. Talk during reciprocal teaching involves explicit questions, identifying and clarifying misunderstandings, summarising and paraphrasing, predicting and hypothesising in order to construct a shared understanding of a text. In a similar vein, Azmitia (1998) conceptualises transactive talk in which peers elaborate and negotiate perspectives, leading to the integration of a mutually shared view, where peers operate on the reasoning of others and create a joint understanding of a problem.

2.4.1 Discourse Features

Barnes and Todd (1977, 1995) detailed the specifics of 13 year old students' talk in the absence of teachers. Effective collaborative talk featured close links between utterances and points which were explicitly inter-related. More recent studies have supported these findings: reciprocity (Nystrand, 1997; Alexander, 2004), authentic questions, elaborated explanations (Webb, Farivar and Mastergeorge, 2002), and language for reasoning have all been pinpointed as key features of students'

effective discussion (Barnes & Todd, 1977; Mercer, 1995). Exploring these discourse features, Soter, Wilkinson, Murphy, Rudge, Reninger and Edwards (1999) reinforced authentic questions, uptake, the density of reasoning words and elaborated explanations as useful measures of effective discussion.

The inter-relatedness of peers' talk can be seen in Roschelle and Teasley's (1994) analysis of a 15 year old male dyad working on a computer based problem. They found that conversational turns which built on previous ones led to better solutions. The IF-THEN turn-taking sequence was identified as significant, involving both partners in the completion of compound sentences. This mirrors Maybin's (1991) assertion that we must look at the utterances of many to understand the whole of their meaning. Lindfors (1999) argues that what participants understand themselves to be doing, should resonate in their utterances, emphasising that to listen, perceive and understand is to take an active role in dialogue. The features described here are achieved when participants commit to sustaining the discussion, repairing misunderstandings and building relationships (Barnes & Todd, 1977; Roschelle & Teasley, 1995). It may also be important for participants to act on reasoning for cognitive growth to occur (Azmitia & Montgomery, 1993). This is in keeping with Hardy et al's (1998) argument that collaboration is successful in the workplace when it leads to action.

The talk described here is reasoned, accountable, and reciprocal. Opinions are justified and participants revise their views having listened to others'. All embody the principles of dialogic talk: talk which holds different perspectives in tension, in which speakers build upon the contributions of others to construct a new understanding which features the 'voices' of many. Advocates of a dialogic pedagogy argue that classroom talk should encourage students to engage in dialogues where they can

assume control, initiate ideas and contribute to shaping the verbal agenda (Hardman & Abd-Kadir, 2010; Wegerif, 2006), that talk should be challenging and provocative (Alexander, 2004). The talk described may also support the creation of shared contextual foundations for the construction of understanding (Mercer, 2000). Mercer argues that 'cohesive ties' create continuity in discussion, allowing speakers to connect old experiences to new, to create a shared history and context, and make sense jointly. In its emphasis on consensus and reconciliation, collaborative talk is here conceptualised as the achievement of intersubjectivity, as a foundation upon which something new is explored.

A child's linguistic competence has implications for his or her capacity to engage in collaborative talk. Not only do students need the language skills to challenge, question and explore, they also need to be able to infer meanings from others' utterances in order to build understanding and a dialogue history on which knowledge can be constructed. There may be an argument for developing students' meta-linguistic skills, which involve the amplified and logical understanding of the rules used to govern language (Cappelen & Lepore, 2007). This may provide a means of improving students' capacity for social learning which avoids imposing restrictive linguistic structures.

However, it must be emphasised that learning communication skills, such as the linguistic structures described, will not lead automatically to effective participation in collaborative talk. Other factors, such as the interpersonal engagement of speakers (Hobson, 2002) and the communicative context will shape and significantly influence interactions.

2.4.2 Workplace Talk

The way in which the communicative context shapes and influences participation in collaborative talk is evident in the workplace. An increased interest in interactions in the field of business organization and management has seen a rise in the use of conversation analysis (Asmu & Svenneig, 2009; Grant, Hardy, Oswick & Putnam, 2004; Cooren, 2007; Boden, 1994, Stokoe, 2013). Discourse has been shown to align or misalign understanding in meetings (Kangasharju, 2002), while interactions may be restricted by the turn-taking patterns shaped by agendas and chair persons, while informal meetings may be very helpful for decision-making (Asmu & Svenneig, 2009). Inductive reasoning through analogies and metaphor has also been shown as central to how entrepreneurs communicate or propose a venture to make it legitimate and acceptable (Cornelissen & Clarke, 2010).

BT argues that employers look for effective communication and an ability to operate in diverse teams, and that at the heart of these, is collaboration. According to BT, collaboration involves the ability to compromise, generate ideas and form good relationships. Collaboration should be mutually beneficial, the process of collaboration defined by the needs of the people involved.

Collaborative events in the workplace may consist of meetings: 'a communicative event involving three or more people who agree to assemble for a purpose ostensibly related to the functioning of an organization or a group...to exchange ideas or opinions, to solve a problem, to make a decision or negotiate an agreement' (Schwartzman, 1989, p. 7). Collaborative groups in the workplace may be more frequently referred to as 'teams.' Donnellon describes 'teams' as a, 'group of people who are necessary to accomplish a task that requires the continuous integration of

the expertise distributed among them' (1996, p. 10). A high-performing team may be regarded as one which has a clear, unifying goal; without unified goals, teams may operate with higher stress levels, be more error-prone and uncooperative (NZ Business, July 2007, 21 (6), p. 46-49).

According to Donnellon (1996) success factors for teams include: clear, engaging direction, specific goals, appropriate membership, agreement on work procedures, team accountability, adequate resources, appropriate information, education and rewards. Effective team members exploit their differences through collaborative negotiation. Conflicts are common, confronted openly and are resolved by the teams as they integrate their range of knowledge, expertise and opinion in the interest of the team task. Working in teams requires advocating a particular claim, supporting or opposing suggestions, engaging in consensus and compromise (Fredrick, 2008). Hardy, Lawrence and Phillips (1998) emphasise the need for productive talk to lead to productive action; the decisions which are made must form firm foundations on which action can be made, paralleling the notion of achieving intersubjectivity for the construction of new understandings.

Though the work of most teams is to construct new meanings, a 'linguistic phenomenon' (Donnellon, 1996, p. 6), ineffective communication between people in the workplace can be problematic (Moore, 2007). In both school and the workplace, it is apparent that talk amongst people may be shaped by institutional structures (Fredrick, 2008; Donnellon, 1996). While these structures may differ between workplace and school, individuals within these institutions may nevertheless experience similar challenges to their full participation in collaborative activity.

2.4.3 Defining Collaborative Talk for the Purposes of the Research

Drawing on the literature, effective and productive collaborative talk describes:

Talk where speakers engage reciprocally to share and understand different perspectives, with a goal of decision-making or problem-solving. Talk between speakers is inter-related, featuring joint sentence construction and reformulations. Participants work together to achieve intersubjectivity through which joint decisions can be constructed and understandings shared. Speakers share cognitive responsibility but draw upon the expertise of individuals, weighing the validity of contributions. While individual cognitive advancement may be a product of engagement in collaborative talk, its main goal is the negotiation of perspectives and the construction of something new, featuring the contributions of many. The 'togetherness' of the process is as important as its outcome. Collaborative talk is egalitarian participation; it is listening as well as speaking and results in an outcome, whether an idea, agreement or decision, which represents the reconciliation and convergence of speakers' contributions.

2.5 Can we organize groups to promote collaborative talk?

Findings suggest that the advantages which can theoretically be gained from collaborative talk, can actually only be obtained under certain circumstances (Cohen, 1994a). Studies have revealed that students' gender and group composition influence not only the outcomes of collaborative talk, but also the quality and form of interactions.

Gender may influence the form of student interactions (Swann, 1992). Girls' talk may be more supportive, while boys' talk may feature more conflict, be more grounded in

action and less collaborative (Bennett & Dunne, 1992). In fact, cumulative talk may feature rarely in all-boy groups (Bullen, Moore & Trollope, 2002). Girls' talk may reduce in quality and quantity when working in groups dominated by boys (Harskamp, Ding and Suhre, 2008), while girls may provide more assistance to boys in girl dominated groups (Gillies, 2003).

Different levels of ability within groups may result in more able students adopting leading or dominant roles, with positive or negative effects (Cohen, 1994b). Low ability students may benefit from working with high ability students in mixed ability groups (Fawcett & Garton, 2003; Schmitz & Winskel, 2008; Arvaja, Hakkinen, Etelapelto & Rasku-Puttonen, 2000). However, high ability students may benefit regardless of the ability of the group, particularly from the process of explaining ideas to their peers; in fact, benefit may be had for all when low ability students outnumber high (Bennett & Cass, 1998). Working with a wide range of peers may provide different learning opportunities: working with more able students may facilitate the internalisation of interactive processes (Vygotsky, 1978), while mixed ability students may bring different perspectives and understandings to a group (Piaget, 1932; Kneser & Ploetzner, 2001).

However, due to differing methodological approaches, research into group composition remains inconsistent. Furthermore, research in this area is based on the simplistic assumption that learning is best achieved in specific working arrangements, regardless of the wider learning context. Categorising students into homogeneous groups reinforces stereotypes and neglects the complex nature of humans. As well as the influence of task design, (Dillenbourg et al, 1995; Littleton, 1999) research has shown talk as the key to collaborative success (Azmitia & Montgomery, 1993; Barbieri & Light, 1992; Underwood & Underwood, 1999).

Although, it is important to provide opportunities for students to interact in different situations and for different educational goals (Alexander, 2004), it may remain that the challenge faced by us to improve classroom talk is a generic one and not specific to organizational factors, that it is the quality of the discourse which matters (Alexander, 2004), as is students' ability to adapt their discourse accordingly.

2.6 Teaching Collaborative Talk

2.6.1 Teachers' Expectations and Conceptions of Learning

Interpreting and appropriating teachers' talk is a crucial part of adjusting to secondary school (Barnes, Britton & Rosen, 1969), but students' perceptions of their teachers' expectations highlights the challenges involved in creating an environment which fosters effective collaborative talk. Students' conceptions and expectations of learning are influenced by teachers' talk, shaping how they interpret their roles as learners (Black & Varley, 2008). Students' educational experience is affected by the extent to which their dialogue with the teacher enables them to appreciate the purpose of the activities they do (Tartas, Baucal & Perret-Clermont, 2010; Mercer & Littleton, 2007).

If teachers encourage the belief that talk is for finding correct answers 'already in the teacher's head', the ways in which peers use talk to explore understanding may be adversely affected (Fisher & Larkin, 2008; Black & Varley, 2008; Pratt, 2006). While peers in exploratory discussion may achieve more principled understanding, teachers' dominant talk, particularly a tendency to demonstrations and the IRF – initiation, response, feedback – discourse pattern, may result in procedural learning (Webb et al, 2009).

Encouraging the student role as passive in the learning process may serve to inhibit collaborative discussion (Edwards & Mercer, 1987; Barnes & Todd, 1977, 1996; Mercer, 2000); and further, may even determine, 'whether pupils see themselves as capable of shaping understanding for themselves' (Barnes & Todd, 1977, p. 80). Students' attempts to interpret their roles may be complicated further by the language used in the classroom. Gulfs may exist between the words teachers use and the meanings and experiences students ascribe to them (Barnes, Britton & Rosen, 1969). Language needs to be used and utilised for learning, students' experiences and given understandings connected to new ones, and words used meaningfully according to context.

The increasing emphasis on social processes and contextual learning presupposes, 'a change in the teacher's role from a passive organizer of groups to a reflective supervisor and activator of group working and learning' (Aravja, Hakkinen, Etelapelto & Rasku-Puttonen, 2002, p. 177). Deliberately shifting and varying discourse patterns which reinforce students' passive roles may change students' perceptions of the teacher as 'expert' and encourage their independence; talk may become more exploratory and students' may appreciate more the purpose of collaborative talk (Corden 2001, 2000; Sutherland, 2006; Cohen, 1994a). Introducing new patterns of interaction into the classroom may, however, undermine teachers' control of the discourse and be ineffective if teachers, like students, don't grasp its purpose (Mercer, 1995; Seymour & Osana, 2003). Teachers need encouragement to regard learning as a social, communicative process in order to develop a collaborative climate in the classroom (Mercer, 2000). Training teachers early in their careers, or through CPD (career and professional development), to promote exploratory forms of talk may ensure their theoretical understanding, and enable them to model and

consequently promote productive forms of discourse (Sutherland, 2006). This may determine whether teachers perceive their own roles as creators, 'of a "community of enquiry" in which individual students can take a shared, active role in the development of their own understanding' (Mercer, 2000, p. 161; Wells, 1999).

2.6.2 Teachers' Modelling and Promotion of Collaborative Talk

Effective teachers are known to use elicitations, recapitulations, reformulations and repetitions to connect previous learning to new. This serves to utilise a collective memory and shared history, a shared contextual foundation for discussion which can be sustained and carried forward, creating continuity in students' shared understanding (Mercer, 1995). As Mercer puts it, 'it is through teachers' effective use of language that a history of classroom experience can be transformed into a future of educational progress' (2000, p. 55).

Barnes and Todd's (1977, 1995) study revealed that students take linguistic structures modelled by their teachers and apply them. In modelling effective question and answer sequences, students are taught procedures for problem-solving and making sense of experience; teachers can encourage students to make knowledge accountable and use reasoned argumentation. Barnes and Todd regard extending and qualifying responses as the 'staples of collaborative dialogue' (1977, p. 33). By using questions which probe students' thinking, and requesting answers which are reasoned and elaborated, teachers guide and extend the understanding of the speaker and whole class (Barnes, Britton & Todd, 1969; Mercer, 1995; Myhill, Jones & Hopper, 2006; Nystrand et al, 1997; Webb, 2009). Teachers' modelling of feedback or requests for extended, elaborated explanations is also a means of connecting the means and ends, in order to benefit from the, 'knowledge of results'

(Wood, Bruner & Ross, 1976, p. 80). Furthermore, Nystrand (1997) found that high incidence of authentic questions and uptake moves provide an epistemological space for students to construct knowledge.

Training teachers to use cognitive and metacognitive questioning techniques may result in mediating behaviours which also promote students' reasoned discourse in groups (Gillies and Khan, 2003). Students may become sensitised to the importance of elaborated responses and how they might help their peers. The importance of probing students' explanations has also been highlighted by Webb and colleagues (Webb, 2009; Webb, Farivar & Mastergeorge, 2002; Webb, Franke, De, Chan, Freund, Shein & Melkonian, 2009) who found that during group work, teachers most effective interventional practice was reminding students to give reasons which uncover their problem-solving strategies. This was even more effective when teachers built on the reasoning initially put forward by the student. Building on students' remarks has also been shown as a means of sustaining dialogues, making connections between utterances and consolidating ideas (Mercer, 1995).

Webb et al (2009) revealed that teachers' probing during group work was positively associated with students' thinking and explanations. The process of explaining enabled students to identify gaps in their own and each other's understanding. If a student is pressurised by a peer to be more explicit and justify an answer, that student may be forced to reach a higher level of explicitness which benefits both speakers and listeners (Barnes, 1976). Intervening in group work to remind students of these strategies may be particularly important given the finding that once these discourse forms emerge in a group, they tend to 'snowball,' spreading to other participants (Anderson et al, 2001). Monitoring group work very closely is clearly important to ensure students sustain productive discourse. However, it must be

noted that monitoring and intervention may also be counter-productive given students' group talk may be more effective in the absence of a teacher or adult (Barnes & Todd, 1977, 1995; Sutherland, 2003). It is also inevitable that students' talk will be influenced by researchers' observational methods, and particularly whether a group is being observed within the wider class or in a separate room. How students talk in the absence of teachers and recording equipment is likely to be different from their talk in a classroom context. Nevertheless, understanding these contextual influences and the potential of the teacher to foster effective dialogues is valuable.

Alexander (2004) argues that to support the development of collaborative talk, teachers must engage with students in a 'dialogic' way where:

- Questions are structured to provoke thoughtful answers
- Answers provoke further questions and are seen as building blocks of dialogue
- Teacher-pupil and pupil-pupil exchanges are chained into coherent lines of enquiry

Alexander's description shares similarities with Nystrand's 'dialogic spells' (2003), Wells' 'dialogic enquiry' (1999) and Brown and Palincsar's 'reciprocal teaching' (1989). By engaging in dialogic interactions, teachers simultaneously extend students' thinking and encourage them to become active thinkers, but also model ways of using language to explore and challenge ideas.

It is important to conceive of a teacher not simply as "instructor" or the "facilitator" of the learning of a large and disparate set of individuals, but rather as someone who can use dialogue to orchestrate and foster the development of a community of enquiry in a classroom in which individual students can take a shared, active and reflective role in building their own understanding...the teacher is the discourse guide

(Mercer & Littleton, 2007, p.74)

As well as effective use of questions and elaborated answers during group work, Phillips (1992) argues that students must ask *why* they are doing an activity in order to understand how best to go about it. Phillips argues that students' exploration of the purpose of a task will lead to the collaborative establishment of the principles for making informed decisions. He argues that this interrogation involves an inspection of the meta-language of talk-mediated tasks: 'helping pupils differentiate the often subtle nuances in meaning carried by words like, 'explain,' 'discuss,' 'persuade' can increase learning autonomy' (Phillips, 1992, p. 150). Explicitly grappling with the purpose of a collaborative task has been recommended elsewhere (Webb, Farivar & Mastergeorge, 2002; Mercer, 2000), and this approach, particularly with older students, may serve in itself a means of creating contextual foundations on which collaborative talk can be constructed. In fact, involving students in analysing their own talk may enable them to identify positive and negative elements of their collaborations (Corden, 2000; Fredrick, 2007). Engaging students in a form of metadiscussion may extend their awareness of why collaborative talk should be used for a task, but also of the discourse structures which will support its satisfactory completion; this may allow students and teachers to engage in language study itself.

Because, 'effective interaction in groups depends partly on the extent to which students have mastered discussion skills,' students need support in their group talk and the success of teachers' development of productive talk may depend on their establishment of a classroom climate in which collaborative talk is the norm (Sharan & Sharan, 1992, p. 22). Approaches which teach the discourse of collaborative talk more explicitly may support students' engagement in collaborative talk (Fuchs, Fuchs, Bentz & Hamlett, 1994). However, it is important to consider whether the explicit teaching of communication skills results in understanding or in an imitative,

restrictive and procedural use of language (Alexander, 2004). Methods are needed which perhaps elicit students' metalinguistic understanding, against which their collaborative talk can be examined, allowing an exploration of whether students' 'knowledge' of communication strategies transfers or adapts to various communicative contexts.

2.6.3 Lesson Structure and Task Design

The National Oracy Project (Norman, 1992) and other authors (Corden, 2000; Fredrick, 2007; Lloyd & Beard; Cohen, 1994; Sharan & Sharan, 1992) have recommended frameworks for planning and organising lessons to effectively implement and facilitate collaborative talk. Forrestal's (1992) model framework for planning small group discussion emphasises the need for students to have access to shared information and understand the purpose of a collaborative task early in a lesson. Although not necessarily linear, the lesson sequence begins by 'setting the scene,' during which students develop a secure sense of what they will explore. This is followed by an 'exploration' stage where students explore together anything new which has been presented, providing an opportunity for students to clarify their initial thoughts. Students then engage in a carefully planned group activity, before presenting their conclusions to another group. The final stage involves reflecting on the learning which has taken place.

This structure may ensure students' shared contextual understanding of purpose, allow the exploration of new ideas in a secure setting and encourage the process of collaborative talk as opposed to a goal of winning outcomes (Johnson, 1992). Achieving a shared conception of what's relevant to the task and discussion, and a shared conception of what's to be achieved is necessary (Bennett & Dunne, 1992;

Galton & Williamson, 2007; Mercer & Littleton, 2007). Presenting conclusions to other groups requires students make their ideas accountable and, as advocated by Phillips (1992), this stage of reflection involves students in a form of metadiscussion. Sharing conclusions between groups may also lead to the discussion of conflicting conclusions which may push students into providing more advanced reasoning (Des-Fountain & Howe, 1992). By grappling with new ideas and solutions in groups, students may be able to accommodate teachers' following explanations more effectively, connecting what is presented to what they themselves have already found.

If conceptual learning requires the mutual exchange of ideas to achieve a joint goal, the task designed by the teacher must demand that students collaborate to stimulate quality discussion (Mercer, 1996; Barnes & Todd, 1977; Dunne & Bennett, 1990; Cohen, 1994a; Light & Littleton, 1999; Arvaja, 2005; Underwood & Underwood, 1999; Sharan & Sharan, 1992). Similarly, team tasks in the workplace must require the continuous integration of knowledge, experience and perspective that cannot be found in one person but distributed amongst many (Donnellon, 1996).

When the teacher assigns an appropriately structured task, he or she provides the means of working cooperatively. These tasks should ensure that every group member can participate, the task provides all with an opportunity to talk, and group members have to make joint choices and decisions (Sharan & Sharan, 1992). Gillies and Khan's (2009) exemplar pro-forma for collaborative tasks provides a structure which can be adapted, serving to remind teacher and student of the phases of collaboration and to discourage students' tendency to want to arrive quickly at a winning answer. The exemplar pro-forma requires students to share different perspectives, weigh them together, and agree upon a decision. Gillies and Khan also

advocate the use of complex and discovery-based cards to prompt different questions and enhance exchanges to promote higher-level thinking.

Also using card sorts, Lyle (2001) argues that binary opposites as a cultural tool can mediate students' collaborative talk. Lyle suggests using card sorts which set up these binary opposites; groups are then asked to arrange the cards into classifications or categorisations. The cards create a tension between what students know and what they don't, requiring them to draw together their experiences to make sense of the new information or ideas presented to them. For example, students may be given a list of things found in the rainforest. Students then have to decide how these things might be used by people who live in the rainforest and how they might be used by people who don't. By working through the cards in collaborative groups, students have the opportunity to negotiate meanings, bring their ideas to the fore and use what they already know to make connections and hypotheses in order to construct new understandings together. As with teachers' probing questions and the ways in which they connect old with new, this simple task sets up binary opposites, provoking students' thinking but allowing them to collectively make connections, learn from each other and construct ideas independent of the teacher. Being able to collaborate constructively during this activity will be necessary for sensible conclusions to be drawn.

Cohen (1994) recommends teaching social and discussion skills through a series of exercises and games called 'skill-builders'. Stressing the need for students to develop responsiveness to the needs of the group, Cohen recommends an activity developed by Graves and Graves (1990a), 'broken circles.' Students are presented with a puzzle that cannot be solved until group members become aware of problems experienced by others and are willing to give away their pieces of the puzzle in order

to attain the group goal. This task is done in silence so stresses responsiveness rather than talk; however, it may serve to improve students' engagement in activities designed to improve discussion skills. Cohen suggests a task called 'Rainbow logic' to help students communicate deductive thinking and reasoning. In this exercise, a student, out of sight of the rest of the group, draws a pattern of colours on a grid. The group must then ask questions to deduce the pattern; the goal is for the students to give the location of the colours, explaining their thinking throughout. Cohen argues that this exercise, instead of teaching specific words, encourages students to learn to put their thought processes into words.

Activities for developing collaborative talking skills recommended by Sharan and Sharan (1992) include the 'Four-stage rocket' which teaches children to be concise, to listen, reflect and contribute. Each skill is taught separately and then practised by students in groups who engage in discussion. To teach conciseness, a group might be asked to conduct a discussion for five minutes while one person times each person's contributions to make sure they stick to 15 seconds. For listening, each person must wait 3 seconds after the person has spoken before taking a turn. To learn reflection, each person must begin by summarising what the previous person said. Another activity includes 'The Untitled Story' which involves students reading a dramatic story after which they have to rank characters by responsibility; students have to agree upon a rank order for the characters as a group. The 'Mystery Game' involves students being given a card with a clue to help solve a murder. If all the clues are put together, students will be able to solve the mystery. By devoting time after these tasks to reflecting on the interpersonal process, students will increase their sensitivity to the process of cooperative interaction. Graves and Graves (1990) suggest identifying what happened during the activity that helped or hindered,

analyzing why things happened the way they did, and generalizing how skills learned can be applied in new situations.

Barnes (1976) explored whether four groups of 12-13 year old students would engage more or less successfully during three different tasks. The first task required students to find a solution to a Science experiment. Recordings revealed that students were reluctant to be critical of their own explanations. Students' priorities appeared to be 'social smoothness,' preventing them from engaging in more exploratory forms of talk. The second activity required students to discuss a poem, requiring imaginative sympathy, connecting their own experiences to their interpretations of the poem. The task may have been challenging; it required students to empathise with the lady in the poem's childish urges while also recognising that her age prevented her from indulging in them. Students offered brief ideas but failed to utilise each others' responses as a basis for further thinking, prioritising consensus over discussing conflicting ideas. The third task was the most successful, where students were required to decide what the Saxons would need to do to settle when they reached England. This task clearly requires a level of imagination and the question set encouraged an open, hypothetical discussion in which students ventured and expanded upon different ideas.

Computers are increasingly used to resource collaborative learning (Kleine Staarman, 2009), offering a 'half way stage' between talk and texts, and a platform for observation (Mercer & Littleton, 2007). Mercer's (1996) software provides a variety of tasks, representing different domains of knowledge, designed to stimulate conversation between students, but Mercer rejects that the software plays the most significant role in the collaborative process. While Mercer and colleagues argue that computers are a means of supporting collaborative discussion, software has been

designed to lead and structure collaborative talk (Uliksak, 2004). Based on the Developing and Supporting Groups Skills model, Uliksak tested the effects of software designed to support students' collaboration in the absence of adults. The software 'scaffolds' rules and group skills and provides feedback depending on students' self-assessment of the time spent working on each group skill; the feedback provided is supposed to generate further discussion. Uliksak argues that by reminding students to reflect, the software prompts more interaction. However, this may encourage students to passively accept software instructions, instead of learning principled skills which allow them to construct knowledge for themselves. By providing feedback based on the volume of students' contributions, the software emphasises a misconception of the nature of group work and neglects the content of interactions. This approach to facilitating group work may undermine the social nature of learning; the computer is not a participant in the construction of knowledge but dictator of it.

Many studies measure the success of collaborative talk against students' ability to problem-solve, finding correct solutions to maths or science questions (Mercer & Sams, 2006). There may be a difference in the abstract talk prompted during maths and English tasks, with English tasks more effectively reinforcing the process of discussion as important (Bennett and Dunne, 1992). Perhaps the problem with the scientific nature of the task, as seen by Barnes (1976), is that in trying to find a single, correct answer, students may fail to conceive of debate, negotiation and critical reflection as part of the collaborative process. Arvaja et al (2002) found that the tritical reflection only takes place when answering complex or ambiguous questions that prompt reasoning. Cohen (1994a) also argues that the total amount of

interaction should be far more critical for achievement gains when there is an illstructured, as opposed to straight forward problem.

However, though suggested tasks and sequences, such as those described above, are of practical value to the teacher seeking to support the development of collaborative talk, less insight is gained into the role of the teacher in implementing these resources. The classroom environment, the way in which the teacher uses talk, and the relationships between students will all have implications for the success of such lessons.

2.7 Interventions

2.7.1 A Relational Approach

Relationships between peers have been found to make a significant difference to the quality of interactions (Jones, 2002; van Oers & Hanikkainnen, 2001) and consequent individual learning (Azmitia and Montgomery, 1993). The relationships between students may change the quality of their talk, leading to the resolution of more or fewer problems (Jones, 2002; Arvaja et al, 2000). As relationships develop, students may be able to pre-empt the need for assistance, becoming more 'tuned' in to each other's needs (Gillies & Ashman, 1998). Instructional language may feature more amongst non-friends, while friends may negotiate more effectively (Jones, 2002). Drawing on Piagetian theory, Jones posits that 'conflict and resolution cycles characteristic of complementary relationships promotes cognitive development' (2002, p. 64). Hardy et al (1998) draw particular attention to how the relationships, identity and emotion of workplace participants are bound in their contributions to collaborative activity in the workplace. Hardy et al showed how being 'thrown together by external bodies' affected adults' sense of membership and collective

identity. This may be strikingly similar to the emotional experience of students who are 'thrown together' by their teacher with little regard for individuals' relationships. It may be that relationships built on trust create a foundation of common ground on which to construct effective conversations (Arvaja et al, 2000; Stone, 1998; Rogoff, 1990).

As well as careful coordination of group organization, task design and teachers' involvement, the SPRinG project emphasises the need to take a relational approach to the development of students' group-working skills (Baines, Blatchford, Kutnick, Chowne, Ota & Berdondini, 2009). Blatchford, Kutnick, Baines, Galton, and colleagues' developed the SPRinG Project – Social Pedagogic Research into Group Work – to promote relationships amongst students as a foundation for effective group work in primary and secondary classrooms (2003; Kutnick & Berdondini, 2009; Baines, Rubie-Davies & Blatchford, 2009; Galton, Hargreaves & Pell, 2009; Christie, Tolmie, Thurston, Howe & Topping, 2009; Blatchford & Baines, 2010).

Appreciating the importance of peers' relationships may be to recognise an ontological need to identify with and be recognised by others. Recalling Hobson's argument (2002), as discussed in section 3.2.1, an emotional engagement between individuals may support the achievement of intersubjectivity, enabling the development of language. However, the notion that an emotional connection should precede 'effective' talk is not unproblematic, as it is arguable that 'effective' communication skills may facilitate the development of relationships. Crucially however, these 'one-directional' assumptions may neglect an intricate relationship between relationships and talk and how this is shaped by different communicative contexts which change over time.

The notion that participants need to secure positive relationships or 'bond' is one echoed by 'team-building' programmes for the workforce. Over the duration of the SPRinG's large-scale study, 162 primary and secondary classrooms were involved, with 4,259 students aged 5-14. The programme was found to improve relations between students who learnt to co-regulate their interactions; students were more engaged and on-task, negative behaviour reduced and explicit reasoning increased. Following proper training, students' interactions improved, featuring more reasoning and problem-solving (see Blatchford, Baines, Rubie-Davies, Bassett & Chowne, 2006). However, these findings point at a problem in distinguishing talk and relationship - talk here signifies the relationship amongst speakers. It also highlights the methodological challenge in establishing relationships or understanding emotional dimensions through observations.

The SPRinG project involves primary group-training sessions (see Baines et al, 2009) which are structured into a developmental sequence. They begin with an emphasis on developing social skills and secure relationships, are followed by a focus on communication skills and then more advanced group-working skills. Activities include partnered discussions and joint problem-solving activities like joint drawing. The approach emphasises the development of relationships, allowing students 'to develop social skills which facilitate the development of children's responsive communication skills and allow them to engage with new problems, confident in their ability to work with others' (Baines et al, 2009, p. 20). Each group training session consists of three phases: briefing to discuss a skill such as listening, and anticipating how this will be done, then students' engagement in group work with careful monitoring by the teacher, then followed, crucially, by reflection and evaluations of the group work, during which students may discuss how they feel.

The strand of the project implemented in secondary schools showed that following group-training, students could work better in groups than within a whole class. However, it is likely that, although supported by group-training, the development of communication skills will be influenced by the facilitating teacher and the communicative context of each particular classroom. Furthermore, the lengthy period over which Baines et al's (ibid) intervention was implemented may also be an important factor because it allows students to time to develop their shared communication skills and understanding (Mercer, 2008). And the opportunity to evaluate group work may expose or challenge students' assumptions about their communication skills, encouraging 'responsible' participation, regardless of their relationships with the group.

'Group work' is a term used by the SPRinG project broadly; what constitutes improved interactions like reasoning are relevant to collaborative talk, but collaborative activity is not its sole focus. In its amalgamation of several considerations for group work, it is unlikely to be the development of relationships alone which improves interactions amongst students. In fact, it has been shown that talk amongst friends may be more cumulative and less exploratory, as friends may be less willing to criticise each other (Mercer, 1995). The sequence of activities advocated by the SPRinG project resemble the planning framework developed by others (Forrestal, 1992; Corden, 2001; Bennett & Dunne, 1992). All scaffold students' collaborative skills until support is withdrawn and students take control of the discussions themselves; positive relationships may be a 'side effect' of effective classroom communication and careful planning and consideration.

Conversley, Hardy et al (1998) found that teaching employees skills for collaboration improved individuals' sense of belonging; participants' understanding of the skills

enabled better working relationships amongst members of the groups. Like Hardy et al, many would argue that in addressing young people's communicative skills, we also equip them with the skills to forge relationships. As in the early stages of language development, learning to communicate, to share a common framework for reference enables children to find common ground, to enter into communities and develop relationships, to enter into discourse (Vygotsky, 1986). On the other hand, emotional engagement may prepare the way for this language development (Hobson, 2002). As discussed however, it is important to maintain a focus on the communicative context in which talk occurs and in which relationships develop, rather than assuming that supporting one will result in the other. Managing the content of teaching and social relations in the classroom may nevertheless be central to the skill of teaching (Barnes, 2008).

2.7.2 Collaborative Talk as Reading Intervention

Brown and Palincsar's (1989) development of Reciprocal Teaching and Resntitskaya's et al's (2009) Collaborative Reasoning (CR) approach have been shown to promote reasoning and argumentation amongst groups. Both approaches involve the reading and comprehension of text, highly relevant to English lesson activities. In both reciprocal teaching and collaborative reasoning approaches, dialogic interaction is meant to promote the internalisation of reasoning and argumentation, promoting the process of collaboration as a process of meaning making and reflection.

Reciprocal teaching was designed as an intervention for students who demonstrate discrepancies between their ability to decode and comprehend texts (Palincsar & Horrenkohl, 2002). The value of reciprocal teaching for poor comprehension has

been documented, as has its potential for fostering collaborative talk because of its dialogic nature (Brown & Palincsar, 1989). Reciprocal teaching makes explicit its goal of making sense of the text in question and provides an intersubjective context for interaction. During reciprocal teaching, the teacher and learner assemble together in groups and read a paragraph together in silence. After this has been done, one student assumes the role of 'teacher' and asks a question he or she has formulated from the paragraph read. The group addresses the question and the student 'teacher' advances a summary or attempts to clarify any misunderstandings. The teacher then makes a prediction about the next section of text which represents an agreement between all members of the group. The role of 'teacher' then rotates and the sequence starts again. The approach means that the student responsible for the discourse has to summarize, paraphrase, question, clarify, discern when there has been a breakdown in communication, predict and hypothesise. These strategies help learners anticipate information, integrate what is presented, reconstruct and monitor understanding. During this approach, the students work with the teacher's understanding, who provides support as necessary, without direct instruction. The teacher can gradually withdraw support as students become more confident in their dialogue.

While this approach enables students to try out different ways with words and allows them to develop an intersubjective context for making meaning together, the allocation of roles may inhibit the flow of ideas that might be associated with collaborative talk. Nevertheless, allocating roles early when developing collaborative skills may be effective for facilitating cooperation (Bennett & Dunne, 1992), preventing students from 'free-riding' or avoiding responsibility (Corden, 2001). It may provide a means of scaffolding students' contributions or allowing them to

monitor more closely what has been contributed or what needs to be done to draw conclusions. It may also be the case that these roles naturally emerge in students' group discussion even if they haven't been allocated (Resnitskaya et al, 2009). Students may be better equipped to adjust to different group contexts if they share their expertise or strengths and utilise others', accepting that 'symmetrical' groups rarely in fact are 'equal' (Hatano & Inagaki, 1991).

Collaborative reasoning (CR) is also an approach which involves students reading and comprehension of text but emphasises the use of reasoned discourse to explore 'big' questions. Collaborative reasoning, which is grounded in argument schema theory, has been shown to have positive effects on students' reasoning ability and group management skills in America (Resnitskaya, Kuo, Clark, Miller, Jadallah, Anderson & Ngyuen-Jahiel, 2009) and Asia (Dong, Anderson, lin & Wu, 2009; Ting, Anderson, Hee & Yuang, 2008). According to argument scheme theory – AST – dialogic interaction promotes the development of an abstract internal representation of argumentative knowledge, enabling its application in new situations and prompting individuals to rely on the process of rational argument. It has been found that students who engage in CR, exhibit greater engagement, use productive cognitive processes by using evidence, expressing and considering alternative perspectives.

During collaborative reasoning, students read a story in which characters have to make a decision about a dilemma. After reading the story, groups assemble and students take a position on a 'big question' regarding the dilemma. Prior to the collaborative reasoning discussion, students engage in a training session where expectations and ground rules are made clear. Students must take up a position, support their positions with reasons using evidence from the story, challenge others and change positions when warranted. Students should talk freely, avoid

interruptions, encourage participation, respect ideas, consider all sides, thinking critically about ideas and not people. There is no winning or losing side; students should work cooperatively to find the best solution.

Dong et al (2009) examined the effects of teaching CR in a large Chinese 5th grade class of 52 students divided into 7 groups, while Resnitskaya et al (2009) taught CR to small groups of students in grades 4 and 5 in America. Without adult moderators, students negotiated their turns to speak, a leader emerging who facilitated progress, as though replacing the absent adult. The logical integrity of students' discussions, although often incoherent and elliptical, was apparent when examining the whole of the dialogue. Although perhaps not an adequate claim to transfer, in post-tests students were asked to write a reflective essay on one of the stories featured in the discussions; each featured greater numbers of argumentative features, appearing to be dialogic in quality. Initial difficulties during CR included trouble determining who would go first, although this lessened over the two weeks. Students' challenges to each other increased over two weeks but at the same time, so did their collaboration, as they invited others to contribute their views and come to a decision. Disagreement and agreement increased, like the divergent forces pointed out by Lefstein: 'on the one hand, dialogue is forever aimed at creating agreement between interlocutors; on the other hand, its continuation is dependent on the persistence of difference' (2010, p. 177).

The nature of the stories used during collaborative reasoning tasks prompted lively discussion (Dong at al, 2009; Resnitskaya et al, 2009). The CR stories prompt discussion about moral or social issues to which groups can only agree a best solution; there is no 'correct' answer. Resnitskaya et al (2009) argue that this may represent a departure from absolutist, right or wrong views of knowledge. By

engaging in tasks which did not require a final solution, students in the collaborative reasoning studies were able to gain an appreciation of the relevance of different perspectives. Because nobody knew the answer, the activity may have promoted 'the establishment of a truly egalitarian classroom community' (Resnitskaya et al, 2009, p. 34), which is surely a goal of collaboration.

2.7.3 Ground Rules

Mercer and colleagues (Mercer, Wegerif & Dawes, 1999; Wegerif, Mercer & Dawes, 1999; Rojas-Drummond & Mercer, 2003; Mercer & Sams, 2006; Dawes & Sams, 2004; Dawes, Mercer & Wegerif, 2004; Fernandez, Wegerif, Mercer & Rojas-Drummond, 2001; Wegerif, Perez-Linares, Rojas-Drummond, Mercer & Velez, 2005) argue that interventions designed to 'scaffold' students' use of exploratory talk by implementing the ground rules which support its generation, could improve students' joint reasoning skills and consequent individual reasoning ability.

As discussed, Mercer (2000) emphasises the need for speakers to create common knowledge, to create a shared frame of reference which provides a contextual foundation for discussion. In achieving a shared frame of reference, speakers may create and sustain intersubjectivity, the 'tracks' on which effective discussion must run. Understanding the ground rules which underpin exploratory talk is a means for students to create a shared contextual foundation for discussion. The ground rules approach is based on the premise that students are rarely aware of the ground rules which underpin group talk and these are rarely made explicit (Edwards & Mercer, 1987). Students' conflicting notions of the 'rules' governing talk can lead to misunderstandings, different goals and ultimately a failure in achieving intersubjectivity. As Mercer and Littleton describe, 'all kinds of dialogue, in all kinds

of settings, depend on participants having some shared understanding of how to make an interaction happen...all participants must have compatible conceptions of what is appropriate to say and do' (2007, p.34).

Mercer and colleagues have produced compelling evidence to support their claim that an increase in students' exploratory talk as a result of the implementation of ground rules can improve individual reasoning ability. In a pre and post test experimental study, an increase in exploratory talk was found to increase target students' individual reasoning ability as measured in Raven's Matrices tests (Wegerif, Mercer & Dawes, 1999; Mercer, Wegerif & Dawes, 1999). The Thinking Together programme, developed by Mercer and colleagues (see Mercer & Sams, 2006; Rojas-Drummond & Mercer, 2003, Wegerif, Perez-Linares, Rojas-Drummond, Mercer, Velez, 2005; Mercer & Littleton, 2007, Dawes, Mercer & Wegerif, 2004), consisting of a series of lessons designed to introduce the ground rules and increase students' use of exploratory talk have yielded further supportive results. Rojas-Drummond and Mercer (2003) found that an increase in exploratory talk improved students' Maths and Science attainment, even making the radical claim that students may have internalised the ground rules of exploratory talk, enabling them to engage in 'silent dialogue.'

Beyond the Thinking Together group but often influenced by Mercer and colleagues, ground rules have been advocated. Armstrong (2004) found that ground rules are an effective means of framing adult learning, providing a means of dealing with difficult situations. Rules which encourage having to listen to other members of the group limited the domination of some speakers. Recognising that lacking an awareness of the ground rules underpinning discussion is not exclusive to children, Will (1997) emphasises the need to make ground rules clear in adult workshops to ensure a

shared appreciation of the goal of collaboration. Sutherland (2006) argues the benefits of coaching trainee teachers in the ground rules of productive talk, finding that trainees' increased awareness and consequent promotion of the ground rules positively influenced students' engagement in talk. In a small-scale study, Bullen, Trollope and Moore (2002) found that implementing Mercer's ground rules increased the exploratory talk of groups of male students, making their talk less disputational. Cazden (2001) supports the argument that if we want children to be able to engage in 'discourses of power,' those of the classroom and the workplace, then we must teach explicitly the ground rules underpinning them.

Mercer's ground rules:

- All relevant information is shared
- The group seeks to reach agreement
- The group takes responsibility for decisions
- Reasons are expected
- Challenges are acceptable
- Alternatives are discussed before a decision is taken
- All in the group are encouraged to speak by other group members

The Thinking Together teaching materials for 8-11 year olds (Dawes, Mercer & Wegerif, 2004) are structured to introduce the ground rules before students move on to engage in collaborative tasks. The activities, underpinned by the ground rules, require that all students take an active part, strongly emphasising that students should take turns to speak.

Examining how the ground rules are implemented via the Thinking Together lessons reveals a social function. For example, the third lesson which is designed to introduce the ground rules asks children to consider the ground rules for behaviour in a swimming pool or cinema. The ground rules emphasise how students should behave, taking turns and accepting criticism. While the ground rules provide a social framework within which children can interact, they may not necessarily serve to ensure students interrogate and share meanings. Although some lessons involve students exploring their understanding of words like 'opinion' and 'respect,' this is done in a rather mechanical way; when each group member has to take it in turns to say what they think a word means, students are required to tick a box. Learning to take turns is likely an effective means of teaching children to listen, to look for clues to indicate their turn, and to ensure their participation. It also, however, may encourage students to feel 'forced' to contribute, students may copy previous students, particularly if they have failed to understand the topic or what another student has said. Furthermore, the discourse pattern of a group taking turns does not represent the ebb and flow of normal discussion. While students' self-assessment of their talk is clearly valuable, the programme of activities suggests the use of a 'talk diary' which requires students to tick boxes to indicate their adherence to various ground rules. Ticking boxes rarely encourages deep reflection and are usually completed quickly and competitively. Furthermore, one child's perception of his or her own participation may be very different from others, so using these tick box activities as a basis for group discussion may be more effective.

However, these activities are designed to support students' developing understanding of the ground rules of exploratory talk. While the activities may cause students' talk to appear rigid and mechanical at first, their talk will become less so as the rules are internalised and students are able to engage more freely. Nevertheless, could learning to adhere to the ground rules serve to undermine the goals of exploratory talk? Students' literal engagement with the ground rules may

prevent them from ever flouting them, during which meanings are often made or communicated.

Mercer and colleagues make absolutely clear, however, that it is not the role of ground rules alone which are attributed to students' increased use of exploratory talk, the teacher's role is crucial. As discussed, the way teachers interact will affect how students engage in collaborative talk. The impact of the teacher was unexpectedly revealed in a study (reported in Wegerif et al, 1999) where one of the control groups performed better in post-tests than a target group; one reason proposed was that the control group teacher had developed a dialogic approach already, presumably without the implementation of ground rules. If a teacher fails to model exploratory talk effectively, it appears that the groups in his or her class will not engage as successfully in collaborative talk. Despite this crucial influence, the language of exploratory talk does not appear to be dealt with as explicitly as the ground rules in the Thinking Together programme. The notion of 'modelling' also raises the question of whether the students imitate the teacher's words or whether they appropriate those ways with words and ascribe their own meanings to them. The sociocultural position acknowledges that students bring their past experiences into the classroom; they also bring their language and its meanings. Students may not only follow different ground rules, they may also follow different meanings and making these explicit may allow them to make better sense of the ground rules.

A criticism of the Thinking Together approach is that students don't in fact generate their own ground rules but, in a roundabout way, come to agree upon predetermined ones. In the 8-11 year old Thinking Together lessons, students are given ground rules which they must decide are useful or not. The lesson plan states that the ground rules developed by the students should 'reflect those provided' but will be worded as 'original rules contributed by the class' (Dawes, Mercer & Wegerif, 2004, p.27). This demonstrates how the rules are predetermined and suggests that students are required to figure these out. The criticism that the rules of a 'superior' form of talk are imposed, talk which fails to represent children's meanings, is one adopted by Lambirth (2003, 2006) in his attack on Mercer's ground rules

Lambirth (2003, 2006) attacks the teaching of ground rules on the basis that they serve to promote a middle-class form of talk, to which many children have no access. He argues that the ground rules don't take account of the key cultural, ideological and political issues that affect school success. Acknowledging the difference in schools' use of exploratory talk according to socio-economic factors, Wegerif et al (1999) argue that the teaching of exploratory talk may be most beneficial for students less equipped with exploratory talk. However, although an ability to use exploratory talk may constitute 'cultural capital' (Edwards & Mercer, 1987), Lambirth attacks this conceptualisation as a means of disempowering alternative discourses and promoting those of the middle class. Bluntly, he argues that 'the predictably "safe", "antiseptic" nature of the ground rules smacks of a rather idealistic, "unnatural" but value-laden world – one might mischievously describe them as "Mary Poppins" rules for talk' (2006, p. 61). He goes on to argue that establishing ground rules, 'may make normal talk a rule-breaking activity,' illegitimising a fundamentally central part of the meaning making faculties of the child (2006, p. 61). Drawing on Bernstein, Lambirth argues that the ground rules serve to reaffirm inequalities that exist in discourse in society and privilege the teacher's talk.

Lambirth argues that in teaching talk we should explore students' home and cultural experiences rather than impose an idealistic form of language alien to most children: 'talk in schools need reflect the talk that forms the discourse from various sites and

cultures and 'mirrors' the 'stories' of all those in school and beyond' (2006, p. 68). In grappling with students' language, developing a meta-awareness of its use and sharing this understanding, may serve as a means to create a foundation for discourse which represents the meanings of many cultural and social backgrounds. Perhaps because the Thinking Together programme does not deal explicitly with students' language experience, it may be accused of promoting an alien discourse. If children are to find common ground, multiple forms of experiences need to be validated. The notion that we can be empowered into educational discourses may also need to be treated cautiously.

Nevertheless, as Mercer and Littleton (2007) point out in counter-argument, evidence suggests that children lack the capacity to engage in exploratory talk (Maybin, 2006). Furthermore, the child new to secondary school will encounter several sets of rules and discourses appropriate to different subjects and tasks, and we may underestimate the challenge this poses. It may be argued that the rules of the classroom suppress the voice of the child, restricting their creativity and learning. It could also be argued that being able to move between and engage in a variety of discourses appropriate to different purposes and settings is liberating, enabling full participation. As Mercer and Littleton argue (2007), knowing how to engage in exploratory talk does not mean that other ways of talking are forgotten or dismissed. By referring to Eliza in Pygmalion (Shaw, 1916), Lambirth implies that in teaching exploratory talk, we take away the child's language, his or her capacity to mean. Eliza's language is indeed replaced by another:

You told me, you know, that when a child is brought to a foreign country, it picks up the language in a few weeks and forgets its own. Well, I am a child in your country. I have forgotten my own language, and can speak nothing but yours. That's the real break-off with the corner of Tottenham Court Road. (Act V, p. 74)

But it is her inability to adapt and adopt her previous language which has caused the 'break-off.' Exploratory talk is not intended to replace, but a skill which should enable young people to move in and out of discourses, to recognise what works at Professor Higgins' house *and* on the corner of Tottenham Court Road. Being able to engage in exploratory talk is surely an additional and beneficial skill. Being able to participate in a range of discourses broadens the potential for engagement in society, providing a 'gateway' to other realities.

The importance of teaching children to create shared understanding should not be underestimated and finding ways to facilitate this in the classroom is vital; Mercer and colleagues have provided a valuable means of doing so. Exploring exploratory talk and students' experiences of it prior to the 'agreement' of ground rules may make this a more genuine process which reflects the understandings of all members of the class. Securing a foundation of shared linguistic understanding may allow a 'sturdier' IDZ to be created. The challenge may remain that while guiding children in effective forms of discourse, we must avoid imposing ideal forms of talk or putting 'words in their mouths.' As Mercer (2008) advocates, how students' talk develops over time and how words are used in different contexts, needs to be explored, and further links between teacher-student talk and consequent student-student talk made (Mercer & Littleton, 2007).

2.7.4 Teaching for the Workplace

Workshops have addressed the collaborative skills of the workforce (Hardy, Lawrence & Phillips, 2007), while team-building activities and programmes have become a big business in themselves (Moore, 2007). Team-building programmes

and workshops are available to businesses who wish to improve their teams' communication and effectiveness, increase productivity and reduce staff-recruitment costs (ibid). These are often designed to improve employees' relationships and communication skills, and in so doing, secure a sense of group identity (Hardy, Lawrence & Phillips, 1998). Creating a 'shared reality' has been advised to ensure participants' shared understanding of goals and purpose (Moore, 2007) echoing Mercer's (2000) concerns for creating shared contextual foundations.

A potentially valuable means of teaching collaborative talk is revealed in Fredrick's (2008) approach to preparing undergraduate students for collaboration in the workplace. Fredrick argues that 'learning to assert authority is key to becoming an effective collaborator' (2008, p. 439). He recognises that team members may not support those who are passive and appear to leave the decision-making to others, or may refuse to support those who are domineering and seek to make all of the decisions. Institutional structures common to school and university make it difficult for students to manage peer authority and conflict, including the hierarchy of the teacher and student classroom, and the emphasis placed on individual achievement: 'unlike workplaces where team work is essential to the company's success, Western systems of education continue to define the students as an individual trying to succeed alongside of, or in competition with, other students, but rarely in collaboration with them' (Fredrick, 2008, p. 441). Fredrick points out that every group unused to the non-hierarchal nature of group work will at first try to negotiate how team members assert authority and manage conflict, as can be seen in the observations of students' collaborative reasoning (Resnitskaya et al, 2009). In preparing students for the workplace, Fredrick argues that materials shouldn't be drawn from the workplace and applied to young people, and students shouldn't be

asked to imitate the roles of a workplace team. Instead, teaching strategies should highlight the importance of context in collaboration by utilising the collaborative strategies already used by young people to negotiate authority and manage conflict.

In his observations of undergraduate students working in groups, Fredrick (2008) identified two prominent discourse strategies used by students which form and constitute the institutional structure available to them in the classroom. Firstly, the knowledge-transfer sequence where one speaker takes on the role of 'teacher' and the other takes on the role of 'pupil.' The roles, however, remain non-hierarchical, are rotated and cooperative. This pattern may represent an implicit version of Brown and Palincsar's (1989) reciprocal teaching. Secondly, the collaborative sequence which occurs when students generate knowledge together without a clear differentiation of roles. This sequence may be more symmetrical, without domination, with multiple topics raised and responses overlapping. Interestingly, these shifting discourse patterns resemble the asymmetrical and symmetrical states of intersubjectivity described by Rommetveit (1985). Fredrick suggests that the knowledge-transfer structure may provide a good prompt to a collaborative task by emulating a model already available in the classroom, while the collaborative sequences which represent a circular approach to consensus give students the opportunity to maintain social relationships and make decisions, becoming tools for negotiating authority. However, teachers need to ensure that the knowledge-transfer structure is interchangeable and doesn't 'stick'; and, that 'cycles' of indecision don't continue endlessly, avoiding students 'blocking' discussion or 'free-riding.'

Fredrick argues that being unaware of their engagement in collaborative talk, students don't actively harness these discourse strategies for teamwork. Before collaborative activity, he advocates the discussion and study of collaborative talk by

making explicit the interaction patterns of knowledge-transfer and collaborative sequences. Because these models are familiar to the students, they are able to draw on and envision them, allowing students to actively prevent blocking and reflect on the control they assert, perhaps revealing collaborative weaknesses of which they were unaware.

After explicit discussion of the discourse sequences, Fredrick's suggested extended team work assignment involves teams identifying three possible projects on an issue, analysing them and writing a proposal. This proposal is presented to other groups who vote on the 'best' ones. Four projects are selected and students are divided into teams according to interest. Students read about collaborative strategies throughout this time. The first team discussion is started with a knowledge-transfer sequence to discuss members' initial project ideas. Collaborative sequences are then used to discuss the topic, followed by a written analysis of the meeting's interactions. Over the 4-6 week duration of the project, lessons are designed to address issues which groups may be experiencing. Recordings of interactions and analyses are shared with the teacher at intervals and a progress report is submitted each week.

Throughout this process, and key to reinforcing students' meta-awareness of discourse strategies and group processes, peer and self-evaluation and assessment are used carefully. Self and peer evaluation are used to catalogue students' contributions to the team but also to actively involve them in their own analysis of interactions. This approach avoids students getting caught up in the success of the outcome but forces them to focus on the overarching goal of developing group skills. Furthermore, by making peer evaluations a component of the assessment, focus is shifted from the individual. He even advocates the use of a conflict and challenges

log where students can record obstacles to group progress; these logs are occasionally shared between teacher and groups, providing opportunities for metadiscussion and an insight into individuals' contributions. Fredrick argues that developing effective teamwork strategies means not giving an individual final grade at the end of a project but evaluating the process by using meeting minutes, self and peer evaluations, e-mail exchanges, wiki and discussion boards and progress reports which emphasise their value. These tasks must not become further teacherdriven products but need to be used as windows in to the process at frequent intervals.

Fredrick's approach recognises the challenges faced by students trying to assert their authority and manage conflict in teams based on the institutional messages they receive. It emphasises the need for students to learn the importance of context for appropriate authority assertions. It draws upon students' existing strategies and develops metacognitive skills for collaboration, ensuring their applicability to a range of collaborative environments. Although Fredrick's teaching approach lends to the increased freedom given independent university students, its features may still be useful in approaches to teaching older secondary school students; in fact this age gap may smaller than between primary age, where most research in this area is conducted.

2.8 Conclusion

Theories of social learning have highlighted interaction as key in development. The talk which mediates learning has been revealed as a key mechanism in children's internalization of higher mental functions, revealing how individuals co-construct understanding. The recognition that knowledge is jointly constructed and shared has highlighted the value of peers' interaction regardless of ability, gender or group composition. Not only can teachers guide students in developing collaborative talking skills, students engaging in this type of talk can work together to secure intersubjectivity through which new understanding can be constructed. Not only do teachers need to create a classroom climate within which collaborative talk is the norm, they need to carefully design lessons to ensure that students engage in tasks which stimulate their discussion and enable them to try out different ways with words. Students need to understand that the process of collaboration is important, shifting the notion that learning is individual and competitive. They need opportunities to reflect on their talk in meta-discussion in order to develop an awareness of its significance for making meaning together. It is the process of objectifying in language what we have thought, then turning around on it and reconsidering it that allows us to develop this understanding (Bruner, 1986).

Chapter 3: Methodology

3.1 Aims

The aim of this study is to explore the teaching of collaborative talk. The study explores the role of the teacher in supporting the development of students' collaborative talk, with particular emphasis on teacher expectations. The study examines the development of students' collaborative talk and their awareness of its processes.

Although the literature reveals a number of approaches to the teaching of collaborative talk, very little research has explored how to support the development of secondary school students' collaborative talk at GCSE level. Research supports the argument that addressing students' communication skills explicitly, and *throughout* their education, is necessary.

As part of the requirement of the PhD CASE Studentship, the study began with an exploration of collaborative talk in the workplace. Informed by these workplace collaborative scenarios, a teaching unit (or Scheme of Work) was devised and implemented as a component of the Speaking & Listening requirement of English GCSE. Tasks and activities were grounded in collaborative scenarios drawn from the workplace, encouraging students' consideration of how talk is shaped by different speakers and contexts.

This thesis examines teachers' implementation of this teaching unit. In particular, teachers' use of talk is explored, as its implications for students' development. The development of students' collaborative talk in groups will be examined, as will their awareness of collaborative talk processes.

3.2 The Origins of the PhD CASE Studentship

This thesis is the product of a PhD CASE Studentship funded by the ESRC and British Telecom (BT). BT prompted the study, expressing a concern that increasingly, young people enter the workplace lacking the skills necessary for effective collaboration. The studentship was planned as a collaborative project between BT and the University of Exeter, which would investigate whether teaching strategies based on workplace collaborative contexts support the development of effective collaborative talk.

The project would involve visiting BT and observing team-working and collaborative talk in the workplace, then working with English teachers to develop teaching materials which draw on these authentic contexts to support the teaching of collaborative talk. BT have already produced teaching materials to support the development of talk, through their partnership with *Dialogics Ltd*, a London-based consultancy and production company specialising in interpersonal communication. Their founder, Andrew Bailey, was originally the partner supervisor for the studentship, as the BT-designated lead person for the study.

The CASE Studentship was accompanied by the following principal research question and anticipated outcomes:

Do teaching strategies based on workplace collaborative contexts support the development of effective collaborative talk?

- increased understanding by students and teachers of the significance of collaborative talk in the workplace
- direct interfacing of research, school and business with a common goal

- an understanding of how best to prepare young people for the collaborative skills required by 21st century employment
- a set of tested classroom materials which could be disseminated more broadly by BT and the university for use by other schools
- a series of project podcasts for BT to use in further work with schools

According to the orginal ESRC studentship proposal, the first phase of the research would involve a placement in a BT working environment, to provide both first hand experience of work outside an academic environment and understanding of the range of collaborative team working which occurs in this environment. This would provide a full induction into BT's work with schools on developing collaboration. In addition, the placement would provide opportunities to meet with other key stakeholders in BT to gain further understanding of the importance of collaboration in the workplace. It was BT's responsibility to support the placement period by arranging an appropriate programme of activities which would include visits to different BT centres to meet managers and team-leaders to discuss the nature of team-working required by the workplace and to explore the skills considered valuable. The placement would include observation of team-working in action. This would inform the generation of authentic workplace scenarios as the basis for teaching materials.

It was planned that Andrew Bailey would support the design of the teaching materials, which would form the basis of the research. They would utilise pedagogic principles for developing collaborative talk which capitalise on the existing BT resources for schools and Andrew Bailey's understanding of their use, and they

would also draw upon theoretical understanding gained from reviewing the literature. The materials would also fit the curriculum demands of GCSE English.

The data collection phase would have video data at its core. BT, through *Dialogics'* production facilities would provide training on the use of video technology and guidance on effective video capture in the classroom. *Dialogics* would then offer a full range of production skills, from scriptwriting and design to animation, studio and location shooting, graphics, music, editing and authoring.

However, due to unexpected changes at BT, the relationship with *Dialogics Ltd* changed and a reduced education wing was transferred to The Communication Trust. I would no longer be supervised by Andrew Bailey and neither would a programme of activities be organized on my behalf. Consequently, amendments were made to the research design. While BT were no longer directly involved, they still contributed funding to the study and it was therefore considered necessary and ethical to explore the research questions put forward. Replacing BT as the main business contact, The Communication Trust were visited and consulted in the early stages of the research.

Regardless of changes to the research partnership, the CASE element of the PhD inevitably placed parameters and expectations upon the research and the questions it sought to answer. For the PhD to satisfy the expectations of a CASE studentship, it had to maintain a focus on the workplace. Nevertheless, this focus and the original research questions were amended as understanding around the problematic notion of 'authentic' workplace talk developed. This thesis aims to make transparent the research process and the amendments made to the original research questions in

light of developing understandings and findings. It has sought to satisfy the requirements of its sponsors while remaining committed to research rigour.

The research questions explored and the research design as it was conducted is outlined in this chapter. A 3-stage research design is presented, followed by a description of the participants and consent procedures. Data collection methods and procedures will be discussed, and a consideration of ethical issues and limitations of the study will conclude the chapter. In particular, section 3.11.6 discusses the ethical issues raised by questions around education and the workplace, while clarifying the researcher's position in relation to these matters. The chapter which follows will further discuss the 'exploratory' stage of research and design of the teaching unit. Though considered briefly here, the data analysis process will be outlined in more detail and precede a discussion of the findings in chapter 6.

3.3 Research Questions

Principal Research Question:

How does collaborative talk develop amongst secondary school students and how is this development supported?

Subsidiary Research Questions:

- > What collaborative talk and scenarios occur in authentic workplace settings?
- How does the teacher support and influence the development of students' collaborative talk?
- How do student groups develop in their collaborative talk and their awareness of collaborative talk processes?
- Do teaching strategies informed by workplace collaborative scenarios support the development of collaborative talk?

3.3.1 Ontological and Epistemological Position

This research is positioned within a sociocultural paradigm which regards humans as creatures with a unique capacity for communication. Humans living in groups and communities share ways of using language, ways of thinking, social practices and tools for getting things done (Mercer & Littleton, 2007). Communication, thinking and learning, are considered processes shaped by culture, whereby knowledge is shared and understandings jointly constructed (ibid). Therefore, the activity of knowing and understanding are not private affairs but located in the sphere of social activity, discourse and dialogue.

This research recognises that positions regarding the 'real' aspects of the world tend to be driven by political, pragmatic and moral concerns (Nightingale & Cromby, 1999). This research is concerned with enabling teachers to participate in and utilise research for the benefit of the students in their classrooms; furthermore, it seeks to promote dialogic interactions within which questioning culturally, historically, politically shaped perspectives is the norm. The philosophical and theoretical framework underpinning this study is in keeping with this aim.

Underpinned by social-constructivist ontology, this research is positioned within an interpretivist framework. In assuming that human 'being' and human knowledge is formed by our essentially social nature and capacity for interaction, it may be argued that 'reality' consists of that which we discursively construct, or instead, that a 'real world' exists beyond to which we have restricted understanding. This stance prefers not to deny a 'real world out there,' but accepts that meaningful reality comes into existence through our interactions with each other and the world: 'human beings do not find or discover knowledge so much as we construct or make it' (Denzin & Lincoln, 2000, p. 197). A 'reality' is proposed which accepts the existence of facts, but within which humans subjectively construct society through the mechanism of language (Searle, 2010).

Influenced by critical theory, this position does not assume passive acceptance of the powerful social systems embedded in our constructions of knowledge, but seeks to question them, recognising that the way in which historical and cultural influences shape meaning can be limiting as well as liberating. This position recognises that while learning involves becoming a member of a community, it also entails taking a stand to overcome estrangement, oppression and division (Packer & Goicoechea, 2000). From this perspective, therefore, unbridled relativism is regarded as unhelpful

(Nightingale & Cromby, 1999). Relativism may undermine the notion that we can share intersubjective understanding, common ground and cause. On the other hand, dialogism, holding that we are never 'one voice,' might also undermine the notion of the individual. In emphasising perception as participatory, dialogism may diminish individual responsibility. To ensure human capacity for cooperation, for shared understanding, and ultimately for change, research needs therefore consider 'objectivity and subjectivity in constant dialectical relationship' (Freire, 2008, p.50).

This position recognises that 'I' and 'world' are inseparable (Merleau-Ponty, 1968). Suggesting that we know the world because we give meaning to it is not to imply that interpretation alone creates the world (Levering, 2007). Discourse is, 'always already situated in a material world; it is always already the product of embodied beings...we cannot construct the world anyway we choose' (Nightingale & Cromby, 1999, p. 9). Therefore, our language encompasses all that we may call 'objective' and 'subjective' in the world.

Language is therefore considered ontologically and epistemologically significant. Human capacity to cooperate, to create shared meaning, is remarkable. Language enables seemingly insignificant objects to take on meaning, meaning which is shared, rules which are adhered to, for the sake of civilisation (Searle, 2010): 'shared meanings are laid down in social rituals and customs and the common meanings that are embodied in language, and these are the product of their time and culture' (Levering, 2007, p. 219). This position holds that, 'every new discovery only really comes into existence when it is communicated' (Mercer, 1995, p. 66), that human interactions gives words their capacity to mean (Schwandt, 2000) and that, 'nothing to which we assign meaning escapes discourse' (Cole & Zuenglar, 2008, p. 75). Meanings are not the property of any one individual but the common property of

society, constituting the social matrix in which individual actors find themselves (Jupp, 2006).

Humans can share and develop meaning, construct reality and our sense of self through the achievement of intersubjectivity. An epistemological starting point for phenomenology, intersubjectivity is a central tenet of interpretivism. It is not an aspect of existence, but an ontological dimension of what it means to be human (Jupp, 2006). Humans are ontologically linked with the social and historical, continually remaking themselves and in doing so, society. The formation and transformation of person takes place within this 'intersubjective whole,' an ontologically powerful context; 'being' is therefore not essentially mind or matter, but varies with the societal and historical (Packer & Goicoechea, 2000).

Learning involves, therefore, epistemological *and* ontological change. Binding world and human, learning is a process of forging identities, of coming to 'be.' The sociocultural notion of learning is an integral part of broader ontological changes that stem from participation in a community (Packer & Goicoechea, 2000, p. 232):

A community of practice transforms nature into culture; it posits circumscribed practices for its members, possible ways of being human, possible ways to grasp the world – apprehended first with the body, then with tools and symbols – through participation in social practices and in relationship with other people. Knowing is grasping that is at the same time a way of participating in reality. (Packer & Goicochea, 2000, p. 234)

Influenced by Vygotsky, learning is regarded as social enterprise involving students' collaborative work and the negotiation of meaning. It is a sociocultural process: 'the structure of problems that humans attempt to solve...are situated in a social matrix of purposes and values' (Rogoff, 1990, p. 6). The shared ownership of learning, the

externalisation of thinking and the negotiation of agreement are stressed, drawing attention to the processes through which people come to know the thoughts, intentions, beliefs and mental states of others (Wertsch, 1991).

However, it is important to take a pragmatic approach, recognising that what is highly visible through one theoretical lens is obscured through another. In exploring the teaching of collaborative talk and peers' collaborative talk in groups, this research recognises that both Bakhtinian and Vygotskian frameworks may be useful for analysis. Theoretical plurality may provide a better means of understanding collaborative talk, perhaps opening up a dialogic space of difference within which to explore the phenomenon.

3.4 Research Design

Before outlining the 3 stage research design in detail, the arguments underpinning its main methods for exploring the development of collaborative talk are presented here.

3.4.1 Multiple Methods and Reliability

Mercer (2008) argues that exploring talk which mediates joint intellectual activity poses considerable methodological challenge. Recognising the historical and dynamic aspect of talk, both of which have temporal dimensions, Mercer asserts that a, 'profound problem for researchers concerned with the joint construction of knowledge is inferring what knowledge resources speakers are using' (2008, p. 40). Talk is a temporary, spontaneous phenomenon which cannot be understood as a static reality. Talk cannot be 'pinned down' because the words and meanings we appropriate may be rooted in experiences inaccessible to the researcher; neither can the researcher 'step outside' of dialogue.

Recognising these challenges, multiple methods of data collection and analysis were used to explore multiple 'dimensions' of collaborative talk. The research design emphasized the collection of audio and video data; to complement this core data set, interview and assessment data was collected, as well as written data collected via students' individual booklets. By changing and shifting the 'lens' through which we examine one phenomenon, interpretations can be informed, aligned and strengthened be several perspectives.

Furthermore, dialogue amongst students was examined over time to consider its history and future, recognizing the temporal and dynamic aspects of talk and experience (Mercer, 2008; Lefstein, 2010; Heidegger, 1978; Barnes & Todd, 1977). Therefore, reliability is strengthened and 'reveals itself in the consistency between utterance and deed at different moments in time' (Levering, 2007, p. 218).

Collecting multiple forms of data was not intended as a means of 'triangulation', recognising that 'the aggregation of data from different sources will (not) unproblematically add up to produce a more accurate or complete picture' (Hammersley & Atkinson, 2007, p. 184). The data collected was considered within the context in which it arose, acknowledging the, 'context-bound and skilful character of social interaction' (Silverman, 1993, p. 158). And, in keeping with an emergent research design, the data analysis would later involve prioritizing some data sets over others.

3.4.2 Data Analysis

Observational data enabled discourse analysis through coding, supporting an examination of the physical and material 'space' of dialogue. Although from a dialogic perspective, transcripts may be inadequate for capturing the multiplicity of

meanings, they later enabled an exploration of how utterances were 'chained' together between speakers, while verifying interpretations drawn from coding. The analysis, therefore, included examination of that which is larger than the individual, attending to speech, turn-taking (Rogoff, 1990) and shared references constructed in groups. By examining talk as participation in a shared sociocultural activity, the focus of analysis becomes how participants' participation changes (Rogoff, Radziszewska & Masiello, 1995).

Though the study does not seek generalities, it does argue that 'uniqueness of context does not entail uniqueness in every respect' (Pring, 2000, p. 119). By exploring the development of collaborative talk in the naturalistic classroom, within its 'real' constraints, the study aims to find similar features, 'particularising' (Zuenglar, 2008) and 'illuminating' effective approaches to its teaching.

3.4.3 Collaborative Research

A fundamental principle underpinning the research design is that of active and collaborative participation. Featuring the voices of participants in the research dialogue acknowledges the emancipatory potential of critical reflection in democratic action. Students are regarded as having a significant role to play in their own learning, that in order to improve schools we need to 'look at schools from students' perspectives to create a new order of experience for them as active participants' (Rudduck & Flutter, 2000, p. 78; McCallum, Hargreaves & Gipps, 2000).

However, although the study shares many of the principles underpinning participatory research, it is deliberately not labelled such. During participatory research participants are active collaborators, becoming a 'united voice for change' (Creswell, 2009, p. 9). In keeping with the moral discourse of qualitative research,

Reason (1998) argues that more is learnt about the world when we are interested in enhancing or changing it; participatory research may involve the reconstruction of theory and practice by those involved, where subject and object 'emerge as partners in the generation of meaning' (Crotty, 1998, p. 9). However, Hansen, Ramstead, Richer, Smith and Stratton (2001) argue that when participatory research is dominated, the agenda set by the researcher, the research is not participatory. Although students and teachers are key stakeholders in the research process, it is acknowledged that the focus of the research has been determined by an outside agent and therefore serves to explore the researcher's, rather than students' and teachers' questions.

Nevertheless, participants' voices are prominent throughout, whether observed during collaborative talk in the classroom or commenting on their progress and experiences in meta-discussion. The research considers the 'backdrop' of the classroom, recognising that dialogue is shaped according to context and that interpretations are culturally derived and historically shaped (Crotty, 1998).

By working closely with participants in natural settings, the study aimed to empower individuals and groups, and to minimize the power relationships between researchers and participants (Flick, 2007). For this reason, data collection methods also ensured participation. And, students remained in the same groups, enabling them to develop stable working relationships (Forman & Cazden, 1985). Students and teachers were both subjects and agents of the research process and project, in which practitioners and external researchers work in research partnership, each contributing their expertise and experience (Mercer, 1995).

3.4.4 Participant Observation and Critical Reflection

The research design required the researcher's 'participation' in the world of participants (Bryman, 2008), but acknowledges that there may be 'something logically odd about being both an insider and an outsider' (Pring, 2000, p. 107). Limitations of this approach can include a risk of bias, selective attention and interpersonal matters (Cohen, Manion & Morrison, 2007); and, by being immersed in the world chosen for study, it is critical to remember that in seeking *understanding* of what we observe, we draw upon our own perceptions and experiences. Conscious of these limitations, my role as participant observer in the classroom varied according to the research design, at times distancing myself from, or being fully involved in classroom activity.

Participant observation, and other elements of the research design, demanded a critically reflexive approach: while, it's not possible to 'eliminate' our personal experiences in the interpretations we make (Levering, 2007), the researcher can make transparent the data analysis process and resulting interpretations. Reflexive analysis is critical, as is exposing 'the theoretical context that defines practice to self-reflection' (Carr & Kemmis, 1986, p. 91).

3.5 Three Phases of Research

Although organized into 3 pre-defined phases, the specifics of the research design were flexible and evolved over time, in keeping with an emergent, interpretivist framework (Maykut & Morehouse, 1994). The research design was constrained by the school calendar and academic year and had to be conducted within a period convenient for teachers and students. The research design consisted of three

distinct phases: *exploratory, development and implementation*. The data collection spanned approximately a year (February 2011 - February 2012).

3.5.1 Exploratory Phase

During this phase, collaborative talk in authentic workplace settings was explored in order to inform the development of teaching materials during the second, development phase of the research design.

To gain an insight into how collaborative talk occurs in authentic workplace settings, observations were initially conducted of participants talking in collaborative scenarios. Observations were conducted with the intention that the teaching materials could be informed by in-depth, rich accounts of the particulars of real interactions (Griffiths & Macleod, 2008).

However, capturing genuine collaborative talk proved difficult, particularly given that access to 'collaborative scenarios' largely involved observing agenda-led meetings. Genuine collaborative talk often occurs informally (Asmu & Svenning, 2009) and may be better captured through ethnographic methods which were considered impractical and unnecessary for the main purposes of this study.

Though observations revealed some examples of language use unique to collaborative workplace contexts, interviews proved more useful and economical. Employers and employees, sometimes those previously observed, were asked for their perspectives on the talk skills required for collaboration and asked to describe authentic collaborative scenarios which could inform task design.

Throughout this phase, several workplace settings were visited. Time was spent with *The Communication Trust* and *Dialogics Ltd*, who were able to provide a wealth of

specialist knowledge, as well as further opportunities to observe or discuss collaborative talk within workplace settings.

3.5.2 Development Phase

Informed by the exploratory phase, a teaching unit for collaborative talk was devised in preparation for implementation. This phase involved working in collaboration with the participating teachers. Resources were trialed by both teachers and researcher, then reviewed and amended.

Throughout this phase, frequent meetings were arranged with the participating teachers, providing an opportunity to discuss resources but also the theoretical underpinnings of the research. By recording the meetings, teachers' perspectives expressed in an informal and unstructured context were captured.

This phase also provided an opportunity to observe informally the implementation classes. This allowed the researcher to become familiar with class routines and put names to faces, while also reducing reactivity effects which may result from the presence of an unfamiliar adult (Cohen, Manion & Morrison, 2007). Teachers were also encouraged to use audio recorders in activities to ease potential anxieties ahead of implementation. Field notes written during these observations detailed classroom arrangements, interactions between teacher and students, and so forth.

3.5.3 Implementation Phase

This phase used the opportunities provided by the GCSE Speaking & Listening requirements for English GCSE to engage in and be assessed upon group discussion and interaction skills as the curriculum focus for investigation (Edexcel, 2010).

The teaching unit was implemented over a three week period, first in one school, then in the other. This period represented an intense period of data collection, during which video and audio recorders captured teachers' implementation of the teaching unit and students' developing use and understanding of collaborative talk processes. The teacher wore an audio recorder in each lesson so that her interactions during students' independent work could be captured, as well as whole-class interactions. An audio recorder was placed on each group's table and a camera was positioned to capture each group. The video and audio recordings were later synchronized. This approach facilitated different perspectives on the teacher's role and captured students' ipublic' as well as 'private' group talk.

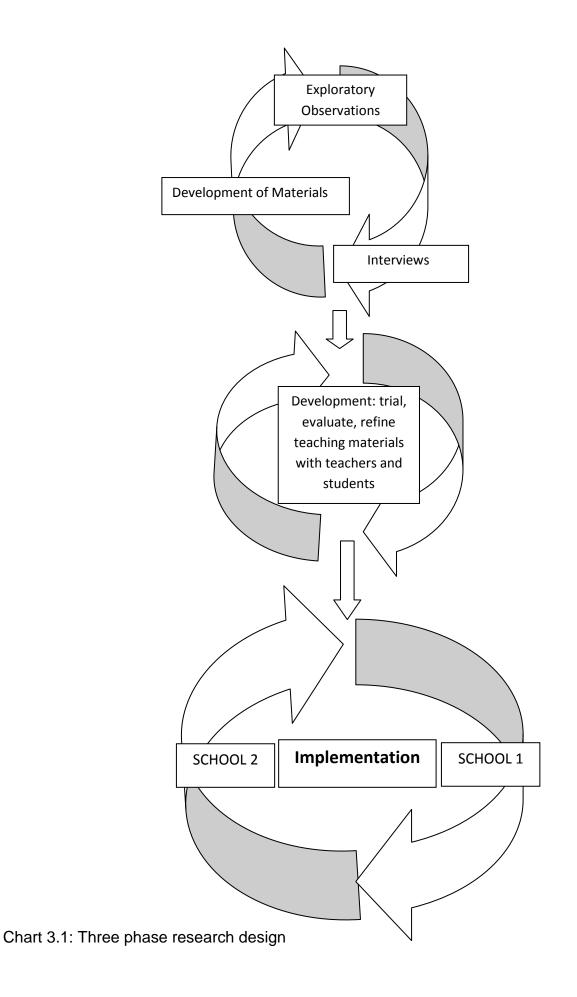
Teachers conducted a pre-implementation Speaking & Listening assessment and produced qualitative information for individual students and the class. The teaching unit would involve conducting an assessment which would serve as a post-implementation assessment, at which point teachers were asked to write further qualitative comments.

Groups were interviewed at intervals throughout the project. The consistency and frequency of these interviews was somewhat dependent on the timetable: it was easier to interview groups in School 1 because English lessons frequently preceded break or lunchtimes, for instance. The interview data served to complement the observational data and inform interpretations where appropriate.

Each student was allocated a booklet within which they would write individual and group responses to questions or tasks and complete self-evaluations. The teaching approach placed particular emphasis on gathering students' perceptions of their progress and development via meta-linguistic and meta-cognitive reflections. These

booklets provided another perspective, allowing students to share 'in private', possibly making points which conflicted with the group.

After implementation, meetings were held with the teachers in which the data was discussed, as was the implementation process and implications for teaching and further research.



Timescale	Research Activity	
	Phase 1: Exploratory	
February - May 2011	Workplace observations Workplace interviews Written reflections	
May – July 2011	Development of teaching materials Meetings with participating teachers and school visits Written reflections	
	Phase 2: Development	analysis and development of materials
July - October 2011	Further development of teaching materials Pre-implementation teacher interviews Task trials with two classes Students' evaluations gathered	
	Phase 3: Implementation	
November - December 2011	Pre-implementation student assessment data Implement SoW: School 1 and 2 Video capture Group interviews Gather student booklets Post-implementation student assessment data	
January – February 2012	Consolidation of teaching materials Post-implementation teacher meetings	

Table 3.1: Research design timescale

3.6 Access and Participants

3.6.1 Workplace

After establishing a contact, workplace settings were invited to participate by e-mail. The e-mail gave a brief outline of the research and its aims and described the type of talk which I was hoping to observe (appendix B). Written consent was sought from each interview participant (appendix C). With help from The Communication Trust, consortium members such as The Children's Society were approached by e-mail or telephone. Visits to a number of these settings were conducted, providing an opportunity to glean expertise but also observe collaborative talk in the workplace. As a significant developer of collaborative talk resources, though not a Communication Trust consortium member, *Dialogics Ltd* were approached by e-mail.

3.6.2 Teachers and Schools

Secondary state schools in the South West participated in the study. I met Abigail (Teacher 1) during the National Association for the Teaching of English (NATE) conference in 2011. Abigail and I discussed the project and she signaled her interest in participating. I approached the English department where I once worked, and Vicky (Teacher 2), also signaled interest in participating. Once interest in participation was expressed further details of the research was given, particularly regarding the commitment required (appendix D). After this, contact was made with Head Teachers and Heads of Department and a Memorandum of Understanding was completed (appendix E). Consent was then secured from individual teachers (appendix F).

3.6.3 Students

The research information provided to teachers, as well as the Memorandum of Understanding, outlined the requirement for GCSE classes to participate. However, late into the development phase, some unanticipated changes were made. The timescale probably resulted in this: schools and teacher participants were secured ahead of groups being arranged for the new academic year, when implementation would take place (though difficulties may have arisen regardless). In School 1, the

Head of Department made the unforeseen decision to arrange the top ability Year 10 students into groups by gender. So, Abigail's group would be a top-set all-girls group. In School 2, Vicky's responsibilities changed, and as a result of various pressures, she expressed a preference for implementing the teaching unit with a mixed ability, mixed gender Year 9 class. Participants therefore formed a convenience sample; classes included one group of 32 Year 10 students in School 1 and one group of 28 Year 9 students in School 2.

Given the focus on understanding the particulars of collaboration, the variation in groups was not considered problematic; in fact, the research design allowed for this flexibility. If the study's aim is to develop practical, useful teaching strategies, then their application to a broad range of students must be considered. For the same reason, students with SEN and EAL were not excluded from the study; School 2's class included a student with EAL (English as a second language) and one with EABD (emotional and behavioural difficulties). Both classes still represented 'normal' state school classes, representing a range of abilities.

This approach focused the research on the development of students' skills within familiar, 'real' contexts which were relevant to them, not on the experimentation of theories in contrived structured groups or settings. Forming a contrived sample would have undermined this aim and the collaborative nature of the study. Although selecting students in advance for certain features may allow a first approach to comparison (Flick, 2007), arranging students by characteristics may undermine the perspective of students as complex social beings. It may also be inappropriate to sample populations by attributes because of how these attributes may be defined in the research (Silverman, 2005).

School 2: Spring Lane College	
Teacher 2: Vicky	
Year 9 (13-14) mixed gender and ability	
class	
28 students in total	
7 groups of 4	

Table 3.2: Participants

3.6.4 Students' Informed Consent

Ahead of the implementation phase, students were informed of the project and its aims through a presentation given by the researcher (appendix G), providing opportunities for students to ask questions. Students were given a letter and consent form to fill in during the lesson and given another letter and consent form for parents (appendix H, I). While students filled out consent forms I circulated the room to check understanding and allow students to ask further questions. Students were given the opportunity to discuss any concerns with parents who could have objected to their participation. All parents returned consent forms, having agreed to students' participation.

Because the priority was to secure students as participants, the first consent was not concerned with the use of the data. At the end of the project, students were asked to indicate their preference for the use of the data (appendix J). They could signal their consent for the data to be used in research presentations and in resources or for CPD purposes. It was later decided that this form would not be taken as evidence of students' informed consent for videos to be used as resources or CPD materials.

To recognize and celebrate their participation in the project, students were presented with a certificate and letter of appreciation (appendix K). Students were encouraged to refer to the experience on their CVs.

	Data Collection		Instrument
Phase 1: Exploratory	Workplace observationsWorkplace interviews		 Unstructured/ semi- structured observation schedule Semi-structured interview schedule
Phase 2: Development	 Teacher meetings Student reflections and evaluations Teachers' critical reflections and evaluations of the materials Informal observations of implementation groups 		 Meeting agendas; audio recorder Task evaluation pro-forma Informal observation pro- forma
Phase 3: Implementation	Pre- implementation	 Pre- project qualitative and quantitative student attainment data 	 Pre-implementation assessment pro-forma
	Implementation	 Video and audio data of lessons Reflections on progress and development Group interviews 	 Teaching materials Video and audio recorder Student booklets Semi-structured interview schedule
	Post- implementation	 Post-project qualitative and quantitative student attainment data Teacher meetings Teachers' case descriptions 	 Post- implementation assessment pro-forma Meeting agendas; audio recorder Case descriptions form

Table 3.3: Data collection and instruments

3.7 Methods of Data Collection

3.7.1 Phase 1: Exploratory

Exploratory Phase: Observations

During the first phase, data collected during observations in the workplace ranged from detailed notation to holistic descriptions of events and behaviour. An assumption of this approach is that a profound understanding of the world can be gained through observations in natural settings (Anderson, 1998). The observations were unobtrusive, but it is acknowledged that the presence of an observer and an 'outsider' may affect the way people interact. These unstructured observations informed a later semi-structured observation schedule (appendix L).

Exploratory Phase: Interviews

Following observations in the workplace, semi-structured interviews were conducted with employers and employees to establish their perspectives on the skills required for effective collaborative talk (appendix M). Interviewees were also invited to describe authentic collaborative workplace scenarios which might inform task design. This method reflects the epistemological position that to understand the meaning-making process we should start from reconstructing how people, institutions and communications construct worlds and social realities, to show how meanings are built up in interactive processes (Flick, 2007).

Interviews made it possible to invite comments on the collaborative talk previously observed. Although this aims to capture authentic insights into participants' meanings (Silverman, 1993), it is important to recognise the difficulty in capturing the meanings participants attribute to words previously spoken. Detailed field notes were

written to capture features of the workplace settings and other details perceived as relevant at the time. My own reactions and thoughts post-interview were written immediately and limitations considered, my own characteristics having helped or hindered the interview process (Oppenheim, 1992).

3.7.2 Phase 2: Development

Development Phase: Teacher Meetings

At intervals throughout the development phase, meetings were held with the participating teachers, either in School 2 or at the researcher's home. Agendas were devised for these meetings and records maintained, including opportunities for the teachers to discuss the teaching unit and underpinning theory (appendix N), express concerns or reflect on teaching trials. This provided a means of capturing teachers' insights but also any developments from meeting to meeting. By recording meetings routinely, it was possible to capture teachers' views in a context less formal than via the interview. Prompted by an agenda topic or question, teachers would also talk together for prolonged periods, uninterrupted by the researcher. During these meetings it was possible to collect teachers' written descriptions of their teaching history, relationships with students and so forth, to inform later analysis.

Development Phase: Trials

Teachers were provided with a draft teaching unit with accompanying resources, which were discussed during meetings. During this phase, activities from the teaching unit were trialed with a variety of classes at Key Stages 3 & 4, as convenient. These were discussed during meetings. Both teachers were able to trial several tasks as 'stand-alone' activities. During this period, I did some supply

teaching in School 2 when I was also able to deliver a sequence of trial lessons to a year 9 class. Students were invited to comment on the tasks during lessons or asked to complete written evaluations (appendix O).

Development Phase: Informal Observations

The implementation groups were observed in a small number of lessons prior to implementation. This allowed classes to get used to the researcher's presence in the classroom. This process allowed the researcher to consider the relationships between teacher and students, and between students. Observations of their interactions informed the guidance that was given during the final preimplementation teacher meeting day. Again, field notes were written to document observations.

3.7.3 Phase 3: Implementation

During the implementation phase, the 'core' data collection comprised the audio and video data and was complemented by 'additional' data collected through a variety of methods.

Teacher Audio	Audio collected via recorder worn by	2 teachers
	teachers	18 hours total
Group Video	Cameras captured each group	8 groups school 1; 7 groups school 2
Group Audio	Audio collected via recorder placed on each group table	135 hours total

Table 3.4: Core data set

Assessment Data	Pre and post GCSE Interacting and Responding assessment	60 students
Group Interviews	Group interviews conducted where	14 interviews school 1
	possible during SoW	5 interviews school 2
Booklets	Booklets maintained throughout	60 booklets
	duration of SoW	
Teacher Meeting	Trial, pre and post-implementation	10 recordings
Recording	teacher meeting recordings	

Table 3.5: Additional data set

Implementation Phase: Video and Audio Data

Video and audio recordings of the lessons provided the rich core data set of talk and interaction (Parakyla, 2005), preserving the visual aspect of talk. The methods of data collection, crucially, ensured observational data of group talk independent of the teacher in the naturalistic classroom. By recording the teacher separately, it was possible to capture whole-class interactions and interactions or interventions with individual groups or students during their independent work.

Lessons were recorded in their entirety, as they occurred in the naturalistic setting. This approach was in keeping with the emergent design, and recognized that students' collaborative activity takes place within a broad context, framed by preceding and subsequent teacher instruction. By examining students' developments and perspectives over time, the long-term trajectory of the process of teaching and learning was appreciated, recognising that these processes cannot be understood as discrete educational events (Mercer, 2008).

Implementation Phase: Assessment Data

Although the research design emphasizes the collection of observational data, individual assessment data (qualitative and quantitative) was gathered to complement the core data set. Though the notion of 'abilities or skills as stable

possessions of individuals' (Rogoff, Radziszewska & Masiello, 1995, p. 144) is indeed questionable, individual accounts of learning may nevertheless be useful (Sfard, 1998; Packer & Goicoechea, 2000; Cobb, 1994). Eliciting individual assessments for collaborative activity is indeed a contradication; however, as it stands, this is a process required by English GCSE (and throughout our competitive education system). And while this study sought to promote the place of Speaking & Listening, it was imperative that the data collection fit with schools' curriculum and assessment procedures.

Teachers were asked to complete a pre-implementation Speaking & Listening assessment and to write qualitative information alongside. Teachers were also asked to provide current GCSE or Key Stage 3 levels and predicted grades for GCSE English. This revealed any discrepancies between 'general' English ability and Speaking & Listening 'ability'. Teachers were asked to note relevant information about the student: strengths and weaknesses, SEN or EAL, relationships, and so forth. In the final lessons, teachers circulated the room and listened to groups' talk to elicit post-implementation assessments for Speaking & Listening. Alongside GCSE grades, the teacher wrote qualitative comments for students in the back of their booklets. Teachers also wrote a comment on each group's progress as a whole. This was complemented by students' post-implementation self-evaluative comments.

Gathering the assessment data was more a priority for teachers than for the research. The research is more interested in examining students' interactions and their development throughout the duration of the teaching unit. However, the assessments provoked some interesting discussion regarding the complexities of 'marking' in this area and nevertheless, contributed another means of conceptualizing students' development. It also revealed teachers' perceptions of

students' communicative skills, sometimes exposing discrepancies with what was observed in the data. Quite simply, the assessment data provided another 'angle' on the data collection while also serving the needs of teachers and students.

Implementation Phase: Group Interviews

By interviewing students in their implementation groups, students were able to talk with each other, referring to a shared history and minimizing the role and influence of the researcher. The interviews during this phase were focused on gathering students' reflections on their progress and understanding (appendix P). Consistent with an interpretive approach, questions avoided being so specific, that other avenues of inquiry were shut off (Bryman, 2008), allowing enough flexibility for the respondents to shape and frame the discussion (Marshall & Rossman, 1999. The interviews were regarded as a socially situated event, where data must be interpreted against the background of the context in which they were produced (Hammersley & Atkinson, 2007).

The use of group interviews is grounded in the conception of knowledge as generated between humans, emphasising the social situatedness of research data (Cohen, Manion & Morrison, 2007). Adolescents may prefer to express their views in the private of an individual interview, or may prefer the social security of a group (Marshall & Rossman, 1999). The research itself emphasises that people need to listen to other opinions and understandings in order to form their own (Marshall & Rossman, 1999). The participants were viewed as experiencing subjects who actively construct their social worlds (Silverman, 1993), appreciating that interactions may prompt participants to thoughts that they may not have alone, reflecting the theoretical position of the study.

The researcher's role as participant observer may have exacerbated the potential for participants to respond in order to please the interviewer (Siegal, 1991; Perret-Clermont, Perret & Bell, 1991); or, respond in a way which would serve to either please or undermine the teacher, a physically absent yet influential presence. Interviewing students in their implementation groups may also have restricted talk to some degree; interviews where members were absent sometimes gleaned different responses. All of these factors were taken into consideration when referring to the data, recognising that what is asked and done during an interview may shape what students say (Silverman, 1993).

Implementation phase: Student booklets

Students were allocated a booklet to accompany all lesson activities. This served a practical purpose: the booklets included all resources, minimizing preparation for teachers. The design of this booklet and the accompanying teaching unit will be described further in the next chapter.

The booklets also facilitated a means of gathering students' individual and group comments and reflections. The booklet provided a qualitative record of students' developing talk awareness. This approach allowed an exploration of the meanings students' attributed to their participation in collaborative talk.

Post-Implementation: Teacher meetings

In the final meetings, teachers were invited to comment on the data, student assessments were moderated and teachers were asked to complete case descriptions, describing their personal experiences and commenting on the project and students' progress.

3.8 Implementation Phase: Data Collection Procedure

In a whole day meeting prior to the implementation period, teachers were provided with the teaching unit 'handbook', a corresponding booklet for each student and all resources. The teaching unit was discussed lesson by lesson, though teachers were encouraged to consult the guidance provided ahead of each lesson. The handbook outlined the rationale and theoretical underpinnings of the teaching unit. Each lesson plan outlined detailed objectives and referred to accompanying resources. Teachers were given a USB with all materials, including digital resources. Careful pre-implementation planning and organization minimized pressure on teachers.

Ahead of implementation, several visits were made to both schools to test the audio and positioning of recording equipment. Seating plans were determined in advance, not only to ensure that all members of each group could be captured by a video recorder, but to ensure that participants' positioning was advantageous to collaboration. This process highlighted a challenge facing teachers in the everyday classroom: positioning a large number of students around tables so that they are able to see and hear each other clearly is difficult in small classrooms.

Cameras were positioned well ahead of each lesson and tables were rearranged if necessary. To avoid disruption, it was necessary to plan this set-up around teachers' timetables; for the most part, Vicky's timetable (Teacher 2) required the researcher to arrive before the start of the school day. Video recorders stayed switched off until the lesson, when audio recorders would also be placed on the tables. Cameras and recorders were numbered to correspond with each other and a particular group. The teachers also wore a recorder and microphone, put on immediately before the lesson. After the lessons, all equipment was turned off and the data immediately

saved and copied. It was imperative to charge each video recorder before the next lesson. Also time consuming, video and audio were later synchronised in preparation for analysis.

Audio recorders were positioned on each group's table. In School 2, students were often observed drawing the recorder closer when they were due to begin a collaborative task; in doing this, they became active participants in the collection of data. On the other hand, some students in School 1 interfered with the recorders by tapping pens or talking into them.

Inviting students to interview was straight forward in School 1 where lessons generally preceded breaks or lunchtimes but more difficult in School 2 where the timetable was more erratic. Interviews were conducted in a private room and were recorded.

3.9 Data Analysis

3.9.1 A 3-Phase Data Analysis

Each stage of the 3-phase research design built on the findings of the previous one. In particular, the final implementation phase elicited a large data set.

The exploratory phase informed the design of the teaching unit. And although this phase stands somewhat apart from the main classroom-based research, it formed the beginning of the data collection and therefore, the data analysis (Maxwell, 1996). The design of the teaching unit constituted the beginning of the analysis because in defining a framework for the teaching of collaborative talk (described in chapter 4), assumptions were made about the talk that would result and be observed.

For this reason, the 3-phase research design and data analysis is iteratively deductive and inductive, one phase of research building on the preceding one and anticipating the next. Though some data was later considered less relevant in answering the research questions, it is necessary to acknowledge that the process of collecting that data forms part of the research narrative and resulting conclusions.

The analysis of the implementation phase observational data will be detailed further in Chapter 6, where instruments will also be presented. The analysis was organized into 3 stages: preparatory, macro-analysis and micro-analysis.

Preparatory Analysis	Group video and 135 hours total video audio synchronized and observed
Macro-Analysis: Teacher Audio	Teacher Audio Tapped and coded
Macro-Analysis: Group Video	Group video mapped and coded 90 hours total video (5 groups in each class)
Micro-Analysis	 Selected episodes transcribed Interview data, student booklets, assessment data and teachers' reflections referenced

Table 3.6: Narrowing focus on the data

3.9.2 Preparatory Phase

Such a large data set required careful organization and 'cataloguing', this process itself constituting a deductive and inductive analysis. The preparatory stage involved observing all of the synchronized audio and video data, writing a qualitative description of the lesson, using a deductively devised pro-forma intended to mirror the lesson structure, as outlined in the teaching unit.

3.9.3 Macro-Analysis Phase

The second, macro-analysis stage involved selecting 5 groups from each class for systematic analysis through coding. The 10th and 11th lessons in School 1 and the 10th lesson in school 2 were omitted from this stage and the subsequent stage of analysis to 'even' the number of lessons examined from both schools. Reducing the sample to 10 groups for macro-analysis was considered necessary to narrow the large data set; groups were selected on the basis of the quality of the audio recordings. Though, it became apparent that the most audible groups were, for the most part, the most interactive also.

The coding process was a lengthy one, spanning most of 2013. The synchronized audio and video was coded from audio instead of transcripts; this was more economical given the quantity of data examined during this stage, and more importantly, avoided de-contextualisation.

Codes were developed first deductively drawing on the preparatory analysis and then inductively as 'themes' and 'trends' emerged. One group from each school was the subject of coding and re-coding as the coding system was refined. Codes were developed to capture several dimensions: interactions between groups, individuals and the teacher; the features of collaborative talk, as defined in the teaching unit and inductively developed during data analysis; and, the 'cohesiveness' of this talk, examining how student groups developed and 'held together' their talk over the duration of the teaching unit. Codes also sought to capture things implicit, such as relationships between teachers and students.

Because it was important to retain the contextual nature of the interactions, it was important to consider how to quantify the codes (Cohen, Manion & Morrison, 2007)

and avoid the 'separation' of codes from the data itself. For this reason, a table format was used to record codes, allowing the sequence of codes as they appeared in the lesson to be recorded alongside any relevant qualitative information. This resulted in a 'map' of codes for each lesson. This approach maintained a close link between the codes and the data, and made it possible for codes and episodes to be easily located for later transcription. Afterwards, the frequency of codes for each group and class were totaled for each lesson and for the duration of the unit. Instead of transcripts resulting in quantified codes, quantified codes facilitated the selection of episodes for transcription.

This approach aimed to overcome the possibility that coding observations affects the sense of group dynamic, undermining the aim to explore how understanding is jointly constructed between participants. A means of retaining the inherently social nature of interactions was sought, sensitive to its sequential embeddedness (Silverman, 1993). The use of discourse analysis does not suggest a claim to an objective reality, recognising that to do language research is to, 'have one's hands in a theoretical, methodological, and political cookie jar much bigger than oneself' (Cole & Zuenglar, 2008, p. 3). It recognizes that the meaning of a word is subjective, shaped by our experiences of what words represent (Glasersfeld, 1989).

3.9.4 Micro-Analysis Phase

The final, micro-analysis stage served to verify and exemplify the talk observed and coded during the preceding stages of analysis. Episodes of talk were selected via the data 'catalogue' created during preparatory and macro-analysis. Transcriptions of these episodes then facilitated a rich discussion of the findings which emerged. Transcripts of the audio and video recordings provided 'an excellent record of

naturally occurring interaction' (Silverman, 1993, p. 10), helping to correct the limitations of memory, permitting repeated explorations and providing data for public scrutiny (Bryman, 2008).

During this final stage, students' booklets, interview and assessment data was consulted to complement and strengthen interpretations. Interview data enabled 'cross-referencing' between what was observed in lessons and what was said in reflection in an interview context, independent of the class and teacher, serving to confirm or contribute to interpretations of the observational data. While the interview data, as well as teacher meeting recordings, were not analysed systematically, they informed analysis where appropriate and may constitute relevant data for further research.

The data analysis served to 'layer' interpretations, beginning with a broad examination of the data and moving towards an exploration of its specifics. It was a continuous and iterative process, drawing on Klein and Myers' (1999) principle of the hermeneutic circle, exploring how all the 'parts' form the whole of our interpretation. It is recognized that the researcher has the added responsibility of being both the collector of data and culler of its meaning (Maykut & Morehouse, 1994). The conclusions drawn aim not only to represent my own interpretations but the constructed views of several people in several places, recognising that every voice represents the voices of many, in keeping with the study's theoretical framework.

3.10 Trustworthiness

The debate surrounding criteria used to evaluate the quality of qualitative research is clearly a contentious one (Bryman, 2008), the notion of quality itself being 'confused with narrow expectations of what will count as research at all' (Bridges & Watts,

2008, p. 42). While Denzin (2009) argues that the interpretive community must create their own standards of quality and criteria, this may prevent the standardisation of research, and lead to 'a lack of over-arching criteria, and ultimately to a form of relativism' (Alvesson & Skoldberg, 2000, p. 67). This research is concerned with what is useful for teachers and students, and this may be considered a criterion of its quality. In conducting and presenting the research, trustworthiness is integral to ensuring its relevance and usefulness to practice (Denzin, 2009; Hammersley, 2007; Thomas & Pring, 2004; Guba & Lincoln, 1981). Trust is recognised as an ethical issue (Pring, 2000), and is not considered proxy for 'objectivity' (Denzin, 2009).

In applying for the CASE studentship, I applied for a research question which was not my own. As Oancea and Pring (2008) point out, the verifiability of the question is complicated by the ways in which researchers conceptualise the issues and highlight some things over others, depending on the values they espouse. As the emergent research design developed, I confronted the preconceptions which guided the original design, recognising that the process of interpretation starts with the question itself (Peshkin, 2000). Confronting preconceptions and prejudices throughout the research process helped counter bias (Klein & Myers, 1999; Norris, 1997).

The data collection process recognised that 'the perspective of the qualitative researcher can influence the collection of evidence in such a way as to introduce a lack of trust in to the research process' (Denzin, 2009, p. 159). Decisions made regarding data collection were made clear and the context in which evidence was gathered was considered crucial in determining its validity (Thomas & Pring, 2004). Drawing on Klein and Myers' principles of the hermeneutic circle, that 'the harmony of all details with the whole is the criterion of correct understanding' (1999, p. 71), the

process of analysis was reflective and iterative. The collaborative approach also recognised that 'neither the perceiver nor the perceived...is wholly passive in the event of perception' (Abram, 1997, p. 53). However, interpretations which differ or do not 'fit' the 'whole' are represented in the findings, recognising that it may not be possible to 'harmoniously' conceptualise participants' experience of talk. Furthermore, in arguing for the voice of participants to inform policy, steps were taken to ensure the views of these individuals could be trusted (Griffiths & Macleod, 2008) and that 'authenticity and individual "agency" were subject to doubt' (Garrick, 1999, p. 147). Nevertheless, the generation of theory aims to 'remain intrinsically related to and compatible with the actor's own understanding' (Thomas & Pring, 2004, p. 141).

By making the processes of data collection and analysis transparent, the research aims to be coherent, rigorous and plausible, avoiding the presentation of the findings as 'an inevitable sequence of miraculous events' (Bourdieu, 1980, p. 16).

3.11 Ethical Issues

The research design is informed by the BERA Revised Ethical Guidelines for Educational Research (2004), recognising responsibilities to participants and operating within an ethic of respect. Because there is 'rarely a clear-cut, and context-free, set of rules or principles which can be applied without deliberation or judgement', it is necessary to view moral thinking as a kind of practical thinking throughout the research process (Pring, 2000, p. 142).

3.11.1 Responsibilities to Participants

Relationships between researcher and participants were integral to the success of the study. However, the focus of research and the methods of data collection do highlight power relations. While group interviews may aim to dissolve these power relations, interviews cannot escape them. The call to dialogue is in itself an exercise of power, one which may empower some but silence others (Lefstein, 2010). The research aimed to ensure sensitivity towards the social values of the workplace and classroom contexts involved in the study and to the inter-personal relations of participants. As a form of performance, dialogue requires one to 'take the floor.' It was necessary to consider the threat presented to participants' identity when confronted with conflicting opinions and views (Lefstein, 2010), avoiding detriment, distress or discomfort. This highlights how the notions of openness which underpin collaborative talk, may be difficult to achieve within the social boundedness and social expectations of the classroom. Deciding when to intervene in the event that a discussion became heated required judgment on the part of the facilitator or observer, acknowledging that this judgement is made according to one's own notions of what is acceptable. In this case, decisions were made to avoid distress to participants.

Recognising that 'the outsider may not grasp the truth in all its complexity,' accounts by 'insiders' were important (Pring, 2000, p. 150). As key stakeholders in the research, participants' interpretations and criticisms were acknowledged and incorporated. Like observational methods, the research avoided intrusion in participants' lives but was sensitive to the fact that data collection methods can be intrusive (Cohen, Manion & Morrison, 2007). Steps were taken to limit the

inconvenience of interviews on students' and teachers' time, minimising the impact on workload.

While the research design may be perceived to benefit the particular groups involved, the research results in the development of materials which could benefit others. It may also be perceived that the research does not benefit participants in the workplace. It is important to emphasise that the research design elicits understandings from these settings to inform the learning of others.

I endeavoured to communicate the research in language appropriate to the audience, with a particular focus on enabling teachers to make judgments about it (Thomas & Pring, 2004). Making the process of analysis clear was considered an academic and ethical necessity.

3.11.2 Voluntary Informed Consent and Right to Withdraw

The concept of informed consent may be incompatible with an emergent, inductive research design (Bryman, 2008); however, the aims of the research and the methods of data collection were defined in advance. Both workplace and school participants were fully informed of the purpose of the research, its implications and how they would be affected.

Participants volunteered to participate in the study and voluntary informed consent was secured from all individuals involved. It was important to discuss the purpose of the research directly with students to ensure their understanding and to ask teachers directly if they wished to be involved in the project. The interests of students were prioritised and their rights to express themselves respected. The researcher's and participants' rights and responsibilities were outlined at the start of the project.

Agreement was sought pertaining to the conditions for the conduct of research and the school was assured of the relevance of the research and of the researcher's dispositions.

Although the research seeks to learn from the interactions of participants, it also seeks to improve them, which is not to presume that teachers' practice is flawed, and neither should it suggest the authority of the researcher's approach. Participants were made clear of their valuable role in the research and its inductive process.

3.11.3 Privacy

Observational methods do raise questions about the invasion and protection of privacy (Carr & Kemmis, 1986; Cohen, Manion & Morrison, 2007). Neither privacy nor confidentiality could be promised to participants as a result of the observational data. Pseudonyms are used in the presentation of the data and the data is stored to comply with the 1998 Data Protection Act. However, while within the thesis, participants' identity is protected, using observational data in an academic presentation, for example, would forfeit this privacy because participants, settings, school uniform are identifiable. For this reason, students were required to specify to what extent they consented to later use of the data, as outlined earlier in the chapter.

Because recorders remained turned on for the duration of each lesson; this meant that 'off-task' talk and asides were captured. Because it is difficult to anticipate every conceivable situation which may arise (Pring, 2000), students were made aware of the implications for them of making sensitive or illegal disclosures. On the other hand, teachers were told that neither could the recorders be used to reprimand students for their off-task talk or asides, because this would constitute 'spying' and undermine the purpose of the recordings for the research.

3.11.4 Incentives

The research provided opportunities to improve practice, possibly as part of teachers' professional development. The study resulted in the production of materials which participating teachers and schools continue to use. Teachers also benefitted from a financial incentive of £1,000, in recognition of the time required to attend meetings outside of school (10 meetings equivalent to 5 days). This cost was drawn from the funding made available by British Telecom as part of the CASE studentship; using the funding in this way was considered an ethical and appropriate decision.

Students benefitted from the implementation of the materials and the opportunity to reflect upon progress and their involvement in the project may benefit their GCSE Speaking & Listening grades. The benefits of being involved should have outweighed the burden on participants' time. Students were presented with a letter and certificate to celebrate their participation in the project.

3.11.5 Responsibility to sponsors

The stakeholders in this research include: The University of Exeter, The ESRC, The Communication Trust, British Telecom and of course, teachers and students. Although Wragg notes how policy increasingly derives from 'different countries' governments, rather than from individuals, schools or teachers' (2005, p. 196), the aim of this study and those involved is to move the research in this field forward by providing practical solutions and guidance relevant to practice. I recognise the importance of fulfilling my responsibility to the sponsors, ensuring the completion of the project on time. The research will acknowledge its limitations and be open to criticism.

3.11.6 Further Ethical Considerations: Teaching Talk for the Workplace?

BT's Better World Campaign is predicated upon a belief that 'helping people to communication improve their skills will help create better world' а (www.btbetterworld.com/the_better_world_campaign/positioning_within_bt_csr_strat egy). This statement rests on the assumption that world problems can be addressed through talk, that being able to communicate effectively and meaningfully with those around you is to live a happier, healthier life. The PhD proposal suggests that school students should be preparing for the discourse of the workplace and beyond, and may therefore imply that education serves an economical purpose. While the prerogative of business is the achievement of productive and effective outcomes, this production model does not translate to education as neatly, particularly given the argument for moving away from individual, outcome-based assessment (Alexander, 2004). While preparing young people for the workplace is an aim of this study, it is not its sole aim. This thesis holds that learning to collaborate can support integration into society, for citizenship, with implications for personal fulfillment. It recognises that the potential for learning is present in every context, in and beyond the workplace and classroom. It emphasises the importance of being able to amend our discourse to the communicative context as a fundamental skill.

Teaching talk in itself raises further ethical issues. The perceived quality of talk raises questions: What constitutes 'good' talk? Do ground rules for 'good' talk silence the voices of participants? Would the flouting of these rules constitute a violation of the 'rules'? Does the teaching of language structures restrict personal expression? This research avoids imposing 'superior' language forms or suppressing participants' voices. It respectfully recognises that talk embodies certain principles which may

vary according to culture, for example, 'of accountability, of clarity, of constructive criticism and receptiveness to well-argued proposals' (Mercer, 1996, p. 370).

The research question may be interpreted as suggesting the extraction of talk from one setting to the other. The frequent use of the word 'authentic' in this thesis implies the existence of 'authentically' occurring collaborative talk from which students can learn. As discussed in the next chapter, it is problematic to assume that 'authentic' collaborative talk occurs in the workplace and more so to suggest that young people may learn from adopting or mimicking these discourses.

However, I avoid initiating change which is driven by my personal ideals but regard any step to change as a participatory process. As the researcher, I do not claim value neutrality because in pursuing knowledge we must treat value as truth (Scott, 1999), recognising that research cannot occur in a moral vacuum (Bryman, 2008). Social constructivism is itself value-laden in its drive for new knowledge and change (Crotty, 2007). I therefore strive to make transparent the values which shape the study and my interpretations.

3.12 Difficulties and Limitations

3.12.1 Workplace Collaboration

A limitation of the initial research design was that it began with the assumption that collaborative talk occurs authentically in the workplace and that this would provide a 'model' from which to teach collaborative talk in school. The workplace shares many of the power struggles apparent in the classroom which makes genuine collaboration difficult. However, recognising the multi-dimensionality of talk, Lefstein argues that 'idealistic models of dialogue are ultimately inimical to formal educational practice'

(2010, p. 171). Whether collaborative talk occurs productively or not, it is important not to fall into the 'trap' of presenting an ideal set of rules for the conduct of collaborative talk which would neglect its multi-dimensionality. Informed by conclusions drawn during the exploratory phase, it proved more useful to use 'models' of dialogue as an image from which to critique practice, rather than as an ideal to be achieved (Lefstein, 2010). These considerations will be important in order to push forward theoretical understandings in the field.

3.12.2 Teaching Collaborative Talk

While teaching collaborative talk inevitably involves promoting the principles which underpin it, those of openness and equality, determining the topic of conversation according to the curriculum in lessons may undermine these principles. On the one hand principles which encourage independence will be espoused, while on the other, the activity will be constrained by the expectations and values of the classroom context. However, if we accept that talk is inevitably constrained by implicit social rules and that how we engage in collaborative talk inevitably varies according to context, then taking an approach which is grounded in students' experiences may be useful. It will not be possible, or desirable to produce a definitive way of teaching collaborative talk, but it will be possible to take a situated approach grounded in the realities of the contemporary classroom (Lefstein, 2010).

And of course, the entire study is in some respects a contradiction: it espouses collaborative, egalitarian principles yet supports teachers in securing individual 'grades' in-line with the expectations of an undermining, competitive educational system.

3.12.3 Methodological Limitations

The methodological challenges involved in researching talk are many; in an attempt to overcome this, multiple methods of data collection were used, resulting in a large data set. The quantity of data might be regarded as both strength and limitation. The organization and analysis of such a large data set was highly demanding and timeconsuming for an individual researcher; however, this demanding process resulted in a rigorous approach to analysis.

It has been noted that classroom talk cannot be considered independent of the relations of speakers or the history of their dialogues. It is difficult to 'pin down' that which is implied; it is also difficult to ascribe the same meaning to words spoken by different participants. The process of coding talk is problematic for this reason. The study of talk cannot avoid the limitations imposed by the interpretations of the interpreter; and it is unethical and unconvincing when superior insight or understanding is claimed. It is difficult to ascertain how far the implementation of materials resulted in learning, or to isolate the conditions for that learning. How far students will be able to abstract or transfer their learning to different domains is also difficult to establish. Sensitive to these limitations, this study has sought to conduct an analysis which retains contextual information and remains close to the words spoken by participants.

3.12.4 Collaborating with Participants

Although the project was highly collaborative at times, it was not entirely or consistently collaborative. The development phase was intended as a period where teachers and researcher collaborated to design and trial teaching materials which would then be implemented in the final phase of the data collection. During the

development phase of the project, teachers responded enthusiastically during meetings; however, discussions were routinely side-tracked by talk about GCSE pressures. While teachers contributed ideas during meetings, neither teacher contributed to the actual development of teaching materials.

Teachers are overwhelmed with responsibilities and deadlines and this had an inevitable impact on their participation in the project. It was necessary to ensure teachers' understanding of the project but do so in a way that was sensitive to the demands of their jobs. I sent frequent reminders and updates and often repeated discussions or meeting content. Basically, it proved very difficult to engage busy teachers in a genuinely collaborative research project; the stakes simply weren't the same for teachers and researcher.

However, both teachers proved highly reliable and delivered all implementation lessons within the timeframe agreed. I have learnt that it is important that researchers do not design projects, the success of which, rely on genuinely collaborative participation.

3.12.5 Policy

As will be discussed in the concluding chapter, the study was prompted in order to develop resources which would be applicable to the teaching of English GCSE. While the resources still have this potential, their applicability has changed dramatically in light of recent changes to policy and the position of Speaking & Listening at English GCSE. While this does not impose a limitation on the validity of the findings, it is a shame that it limits the relevance of the resulting materials.

143

*

The chapter which follows describes the exploratory phase, its findings and how this informed the development of a teaching unit for collaborative talk.

Chapter 4: Exploring Workplace Collaboration and Collaborative Talk to Inform the Development of a Teaching Unit

'Chasing the expert is a mistake...we should stop hunting and ask the crowd' (Surowiecki, 2004, p. xv)

This chapter represents the 'CASE' (Collaborative Awards with Science and Engineering) element of the PhD. During the exploratory phase, and in-line with the CASE Studentship brief, collaboration and collaborative talk was explored in a variety of workplace settings. The data collected was consolidated to inform a developing framework for effective collaborative talk. Underpinned by this framework, a teaching unit with accompanying resources and teacher guidance was devised for the teaching of collaborative talk at GCSE.

This chapter presents the findings of the exploratory phase and discusses how these findings informed the development of the teaching unit.

Research Question:

What collaborative talk and scenarios occur in authentic workplace settings?

4.1 Positioning the Exploratory Phase in the Wider Research

The original research design sought to explore the features of collaborative talk as it occurs in the workplace. As discussed elsewhere, authentic collaborative talk rarely occurs and is difficult to capture. After observing 'collaboration' as it was perceived by those who provided access, the focus of this phase shifted to exploring skills and scenarios for collaborative talk through interviews. The data collected informed the development of a framework for collaborative talk and served as a stimulus for teaching activities and their sequence.

It was important to avoid the research resulting in a dual focus, which would have required systematic analysis beyond the remits of this thesis and its time constraints. This phase was therefore described as 'exploratory' deliberately to signal how it informs the study but does not constitute its 'main' focus.

Designing a teaching unit is a creative process and the exploratory phase represents this.

4.2 The Exploratory Process

Initially, access to observe collaboration and collaborative talk was sought via a generic e-mail or letter, which secured few responses. Despite having defined 'collaborative talk,' the formality of the letter and the potentially unfamiliar term may have been inaccessible. Therefore, a personalized letter or e-mail was sent to a smaller number of workplaces. Approximately 10 hours of observation was secured but it was nevertheless apparent that it was difficult for the workplace to pin down instances of collaborative talk which it would be convenient or practical to observe. It also became apparent that the scenarios perceived as collaborative by the workplace tended to be restricted by a meeting agenda or the status of participants. Fleeting instances of genuine collaborative talk were observed after a meeting had finished, or in speakers' asides. The conclusion was drawn that observing authentic, spontaneous collaborative talk would require ethnographic methods which were beyond the remits (and unnecessary) for this study.

In an attempt to glean insights into collaboration and collaborative talk via other methods, interviews were conducted which sought participants' views on the skills required for collaborative talk and collaborative scenarios. This also provided another avenue when gatekeepers said that they were unable to provide observational opportunities. This approach was more fruitful: 12 interviews were recorded in total.

A semi-structured schedule was devised for interview but this proved problematic because of interviewees' and researcher's sometimes divergent perceptions of collaborative talk and the different terms used to describe its features. It proved more effective to encourage descriptions of examples of collaboration or teamwork (as it was more frequently described in the workplace), from which point respondents were able to pinpoint the collaborative or communicative skills required. In visiting a variety of workplace settings, it was possible to experience a variety of workplace contexts and their 'rules'. Instead of observing contrived meetings, this approach allowed brief observations of genuine collaborative talk, though it wasn't possible to capture them.

Workplaces weren't approached at random but were selected for their potential value or relevance to young people. Drawing on Game Theory (Wright, 2000), visiting workplaces where high stakes collaboration occurs, the successful completion of which is mutually beneficial, was considered important. Workplaces where the need for communication skills may be underestimated were also explored, as were creative or technological settings. Opportunities to observe collaboration amongst representatives of different companies was also sought.

'...we don't want someone who's selfish, who doesn't want to be part of a team ...he's got to 100% realise that that individual standing next to him will cover him in his time in Afghanistan ...if we don't work as teams, it's not going to work at all...we fight, we work, we live in teams.'
Royal Marine 'Policing is very much about team work, even though the service that many of the public receive will be delivered by a single officer... behind them is a whole team...when I joined, I joined a team...we work as a team and in policing you develop very close knit teams because sometimes it's us against them...' Chief Superintendent

To complement this process, further avenues were explored which took advantage of the expertise connected with the PhD CASE Studentship. To gain a better understanding of the work of The Communication Trust, I attended the *HELLO* National Year of Communication Conference where I was able to speak to a number of people about the difficulties young people frequently experience in their communication, particularly when entering the workplace. I was also able to compliment this with a meeting with the manager of *Connexions* to discuss the work options students often have when leaving school and the communication skills they need or have difficulty with. And I visited a participation worker at *The Children's Society* where I was able to glean views on young people's participation in the community.

'There is very little that a young person can do where there is not contact with colleagues, a team, working as part of a team...' Careers Advisor, Connexions

Dialogics Ltd and their co-director, Andrew Bailey, were initially connected with the PhD CASE Studentship. *Dialogics Ltd* are educational consultants who specialise in developing resources to promote effective collaboration amongst young people, and in the workplace. They have and continue to work with British Telecom. Although changes to the Studentship meant that the connection with *Dialogics Ltd* was severed, I was still eager to gain a better understanding of their work and glean Andrew Bailey's views on collaboration and collaborative talk. I secured a workplace placement with *Dialogics Ltd*, where I was able to browse their resources and gain access to the literature underpinning them. I was able to observe highly authentic instances of collaboration, including observing Andrew Bailey and Julie Blake of *The Full English*, discussing the plans for an online interactive timeline.

The interviews facilitated 'talk about talk' while observations provided an insight to how collaborative talk does (or does not) occur in authentic settings and how it is structured within the timeframe permitted.

Workplace Setting	Observation/ Visits	Interview
Commando Training	Lunch at the Officers' Mess and an afternoon of	Interview: Royal Marine
Centre, Royal	teacher workshops on Royal Marines training.	Corporal in charge of
Marines		recruitment and
		education.
University Officer		Interview: Army Major
Training Corps		
The Horse		Interview: Yard 'Head
Sanctuary		Girl'
Reed Hall		Interview: Events
		coordinator
Sound Canvas		Interview: Music
		producer
Oil Rig		Interview: Oil rig
5		engineer
Devon and Cornwall		Interview: Chief
Police		Superintendent
South West Grid for	Observation in offices and attendance at a	Interview: SWGfL admin
Learning	conference on VLEs.	officer.
YESS: Youth		Interview: YESS officer
Enterprise Support		
Services		
Job Centre	Observation: meeting held at the job centre. The	
	meeting was attended by people from various	
	workplaces: HM Revenue and Customs, YESS,	
	Sixth form colleges, unemployment services. The	
	meeting's purpose was to agree on a plan for the	
	design of an online self-employment tool.	
Connexions		Interview: Senior
		careers advisor,
		Connexions manager
Secondary school	Observation: 4 hours of senior leadership	Interview: Maths teacher
5	meetings	
Sixth Form College	Observation: meeting attended by several	
5	secondary and primary teachers and held by the	
	Centre for Excellence for Mathematics Teaching	
Devon County	Two meetings observed. One meeting attended	Informal discussion with
Council	by representatives from various workplaces:	social worker
	youth service, parole office, social services. The	
	aim was to agree on a pathway which	
	consolidated the services provided by those	
	attending. A second meeting was observed at	
	Collumpton Library: attended by a variety of	
	people with different priorities; the meeting's aim	
	was to discuss the use of a newly built library.	
Dialogics	4 days with Dialogics	
The Children's		Interview: Participation
Society		officer
		1

Table 4.1: Summary of workplace visits, observations and interviews

4.3 Organising the Data

The data collected was compiled using Nvivo; interview data was transcribed. Drawn from the transcripts and observations, a list of collaborative scenarios was compiled

and categorized. Interviews were coded to identify frequently cited communication skills; interesting quotes were highlighted. To retain contextual information, vignettes and field notes written immediately after interviews or observations were 'linked' to the data.

Scenarios were explored for their potential to inform the design of collaborative activities, while the communication skills cited, as well as field notes, informed the development of a framework for collaborative talk.

4.4 Scenarios for Collaboration

To retain the context within which collaborative scenarios were described in interview, tree nodes were allocated in Nvivo to signal the related workplace. Memos were linked to each scenario, proposing a possible teaching activity, allowing a trace between the teaching activities in the teaching unit and its source of inspiration in the exploratory data.

The collaborative scenarios described were organized into 3 categories: *physical, problem and brief.*

4.4.1 Physical

'We have rope tied in a tree with different size access points, like a spider's web...they have to fit people through there without touching the string...and they can't use the same hole twice...they've got to get the team from one side to the other...it looks easy. The first one will step through but then they'll get a smaller one where someone's got to get through, and have they picked the right person?...so they're looking at it out of the box...looking forward to see what they can do.' Royal Marine

As mentioned previously, I was interested in gleaning collaborative scenarios which occur in workplaces where a team ethos is integral for survival. I was interested in

what a 'non-zero sum' task might look like (Wright, 2001; Poundstone, 1992). These tasks are designed to encourage team bonding and the recognition that working together is more effective than working as an individual. Team building days are becoming increasingly popular in the workplace, often aiming to improve relationships between colleagues and their consequent decision making potential. In keeping with the educational literature, strong relationships between students might also improve their capacity to work together (Baines, Blatchford & Kutnick, 2009). The military, as discussed at the Marines' Base and the University Training Corps, use several team-building activities when training their recruits. These activities are designed to strengthen teams' capacity to make decisions under pressure but importantly to instil a team ethos, a sense of trust and loyalty, essential when in the field.

The process of preparing recruits for 'real' military action by fostering team ethos and developing problem-solving skills was echoed in a discussion with an oil rig engineer. He described the 'practice run' which oil rig workers will go through prior to an oil drill. Drilling for oil involves working in isolated and dangerous conditions, often with external political pressures. Individuals who may never have met will comprise an oil rig team for an intense period of time, when there is little room for errors. The team will attend a pre-drill conference when they run through the forthcoming drill, trouble-shooting in advance. Recognising the need for effective collaboration and communication, they also engage in survival simulation tasks, developing an appreciation of the importance of teamwork. Interestingly, the engineer noted that this opportunity allows them simply to talk together, making communication on an oil rig easier, particularly when challenges are made.

'There's an exercise...crashing a plane in Alaska...I don't know if it's a real scenario...but the first thing you do is, you're given the scenario and then you do it yourself...crashing the plane, you've got to get out and survive for a week...and then they give a group of ten of you the same problem, so you've got a team and then they'll prove to you that the team lasts, at least a few days longer than you would have done as an individual, you know, the improvement on everything...so you've forgotten that the...there's a tarpaulin in the plane, which you forgot...someone else remembered it and brought it with you...so you made a tent out of it and brought it with you so you don't freeze to death on the first night...all these things to prove that the team is a better working unit than as an individual.'

Oil rig engineer

The team building days which they have on the run up to a big project is really interesting - not only does it allow them to build relationships which strengthens the project but also the sense of trust between them (_____ mentioned that people might not believe you if you said something was dangerous, not working etc - if you know people better, perhaps this process is smoother?). They run through the project on paper allowing them to problem-solve before the project gets underway, avoiding high costs, damage and risk. Could you have an activity where the process of collaboration has to be run through first, allowing them to effectively plan for the project which has to be done carefully and without cost, damage or risk? So they have to think through the problem before attempting to solve it? This means that they would have to discuss the task but also act on what's been discussed.

Memo written after interview with Oil rig worker.

4.4.2 Problem

Common collaborative scenarios discussed or observed, like the survival task above, involved solving problems. It has been noted in the literature review that the kind of collaborative tasks students are presented with will affect how well they engage to achieve a goal or reach a decision. The scenarios which were either discussed or observed highlighted the often complex process of reaching an agreement which satisfies the prerogatives of all team members. While individual students in school groups may have divergent interests, their common responsibility in the classroom is to achieve the task goal set by the teacher. When individuals with divergent workplace responsibilities come together to solve a problem this may make the process more complex. Individuals' participation in a group may be constrained by their responsibilities elsewhere or may be adversely affected by the fear of change or job insecurity.

I was fortunate to observe a number of meetings where individuals representing different sectors came together to consolidate their perspectives in order to create something new. I observed a meeting in the job centre where representatives of Exeter College, HM Revenue and Customs etc (see table 4.1) were discussing the design of an online self-employment tool. In another meeting, Devon County Council employees met to agree on, amongst other things, the use of spare space in a newly built library, and different responsibilities shaped how they wanted the space to be used. Problem solving in the workplace requires participants to understand different perspectives and consolidate ideas productively.

'Some voids in this part of the building...there is a possibility that we could spend some money on art work...'
'What about schools?'
'...Or commission a local artist to create...'
'...or commission a local artist to create...'
'...an installation?'
'I'm thinking that we could use local school work...'
'What about time of year..?'
'It's a flexible space...'
'Need to think about protecting it...
'How big is the space?...
'So, yes, a community space for art.'
Notes made during a Devon CC Meeting

The problems encountered in the workplace highlight how we might underestimate the teamwork required in all kinds of workplaces, drawing attention to how effectiveness and efficiency relies on good communication skills. Several of my own misconceptions about various workplaces were challenged during the exploratory phase. For instance, a considerable element of Police work is finding 'bottom up' solutions to prevent crime instead of dealing solely with perpetrators after a crime has been committed. The data reveals how the resolution of seemingly simple problems can have a broad and positive impact:

"...so for example, we might have been getting a load of criminal damage at the children's centre...now we can investigate each individual offence but actually to solve that... there may be some activities that we need to kick off, perhaps the youth service with the local football team...like Sunday foot-balling for the kids...so you might speak to the parents and say the kid can have a caution for this offence but I want to see you at the football on the weekend...so they start to develop a personal relationship with the PCSO, they start to respect the centre because it's where they go to play football so that would be what a problem solving approach to policing could be...'

Chief Superintendent, Police

'Some horses like certain companions but don't like others. Some like little horses but some don't, even the horses have their own characters so you can't always stick them out in the same field. You always need to communicate with the other girls. We have radios, so we can ask whether they're ready to get this horse out... yes I'm ready...you ok...can you get and sort this...So it's always a matter of...it's a bit of a puzzle every day, you know. So you always need to be in communication with everybody to know what's going on'

Head Girl, Horse Sanctuary

4.4.3 Brief

'Brief' tasks differ from 'problem' tasks in that they could be designed to require independence and creative thinking. Physical and problem tasks include information which boundaries the activity; and, while this acts as a 'scaffold' to support students' ideas, it also places limitations upon them. In the same way a workplace 'problem' task may involve teams having to consider a number of variables or limitations which shape their suggestions and consequent decisions. For example, a team of police officers may be given the task of finding a way to prevent vandalism of the local community centre, as described above. But further information will inform the way they find a solution: the community may have a bad relationship with the police, the teams are limited in the hours they can patrol the area etc. On the other hand, a brief task could be designed so that a group has to determine themselves what the limitations on their choices are. For example, a brief task might be completely open, such as organising a prom or setting up a business. But with an open brief task, information such as audience and budget is withheld. Groups have to decide themselves and design the event accordingly. While such a task allows groups more freedom, its openness presents challenges and requires more negotiation. These challenges need to be overcome through effective communication and understanding.

"...there is a lot involved with student balls, they have to decide whether they want a drinks reception on arrival, they have to decide whether they're going to organise the music themselves or whether they're going to book the band or we could arrange a disco or DJ for them...they've then got to decide what menus they're going to have...different prices, they might want a finger buffet or gala meal, it's ordering their wine for the table, ordering the linen, they might want bedrooms, they might want rooms for their guests, they might want security... the options are endless'

Events Coordinator

4.5 Skills for Collaboration or Collaborative Talk

During interviews, respondents were asked to consider explicitly the collaborative talk skills needed in their workplace and within the scenarios they described. After coding the data with the free node, 'collaborative talk skills', the data was coded further within two categories: talk skills and group dynamics

Talk	Skills	Group Dynamics
 supporting each other tone audience listening rules pace or efficiency clarity building focus on big picture sharing expertise talking too much or too little developing with time rhetorical devices questions engaging with other speakers overcoming obstacles hypothesizing 	 sharing perspectives vocabulary or shared linguistic understanding developing shared understanding particularisations taking on others' words statement, question, support structure reasoning visual aids respect empathy assertive negotiation consolidation challenge continuity 	 positive attitude group traits relationships negative group culture: recession negative team bonding

Table 4.2: Talk skills and group dynamics codes

4.5.1 Group Dynamics

'Group dynamics' was separated from 'talk skills' because these features were considered to be 'outside' of the talk. However, these features were commented upon far more readily than specific talk skills, which could prove difficult to elicit. Several respondents made comments about personality, positivity and negativity, group relationships etc as factors which determined the success of collaboration. The common view was that if an individual did not *possess* the right attitude, then he or she was unable to listen, cooperate or share.

If we perceive that a person cannot collaborate on this basis, then there is little scope for *learning* how to collaborate more effectively; instead, communicative competence represents personal characteristics. This of course neglects the possibility that an individual may lack the skills to collaborate, or deliberately avoid applying them. This assumption resonates with widespread cultural assumptions made on the basis of a person's ability to 'talk properly.'

Relationships amongst group members were emphasized by many as important. The Royal Marines discussed the importance of avoiding homogenous groups and forging relationships amongst different people. A teacher emphasised the importance of team unity, of supporting an argument not only for the sake of team cohesion but to ensure that the decisions reached during collaboration are realised and accepted by others. The unity or identity of a team serves to validate decisions to outsiders.

'There's been a time when we've had to make decisions without the rest of the department and feed it back to the department...and the three of us have had to support it...it's not necessarily the case that all three of us have thought it was the best reason, but for it to work, you need to have that...you don't want all the same personality traits... you need the person prepared to listen, to lead the discussion, the people prepared to disagree at times, be prepared to speak up because they don't agree...but when you deliver it to your audience, the rest of the staff...you need to show your togetherness...'

Secondary Maths Teacher

'If you get a troop of A grades you get no team spirit in that troop... they are quite selfish, they always try and do things themselves... So we like a combination of individuals so we'll pick people...people from Manchester, Liverpool, Northern Ireland, Scotland, South West, London, and we'll draw all those different counties together to make one troop because when you go to the Royal Marines unit, you will have all sorts of backgrounds there... if you come from Devon, you're going to be working with someone from Liverpool...you'll be becoming best buddies....and that's what we try and do, we try and take a piece from every region to form a troop'

Royal Marine

The dangerous potential of groups was highlighted by the Chief Superintendent of police. He stressed that negative group culture can result from so strong a bond or group identity that actions begin to serve the interests of the group alone, conflicting or competing with other groups. This highlights the possibility that individual responsibility can be diluted by the cohesion and homogeneity of a group, silencing challenging voices. This suggests the need for groups to 'balance' unity with diversity.

'...we see lots of ineffective teams on tv dramas...teams that are perhaps loyal to the team rather than to justice or the law...'

Chief Superintendent of Police

4.5.2 Talk Skills

The importance of clarity was expressed by several respondents during interviews, a lack of clarity in talk having implications for people's understanding of a situation or task. A Police Officer's lack of clarity in a collaborative situation may have serious implications, as might a Royal Marine's. Clear communication is required in a horse sanctuary, for instance, to ensure that horses receive the correct medication. In the same sense, an awareness of how much to talk is helpful – when can something be accomplished by contributing concisely to a discussion, or when is further elaboration appropriate? Several respondents were sensitive to the tone of a speaker, suggesting that this affected the dynamic of a discussion. An ability to be assertive without being aggressive or accepting decisions without appearing passive, were also amongst considerations raised. These supposedly 'basic' skills highlight the complexity of engaging effectively in discussion and indicate how a meta-awareness of talk may be important in accomplishing that.

"...the people that'll struggle will perhaps be people who don't have the appropriate assertiveness skills...who aren't able to articulate clearly what it is they mean...' Chief Superintendent of Police

'Sometimes I don't...I have to say, let me tell you that again...to make sure they understand properly...Or, some people are very vocal and will almost say too much. So that you forget what she's talking about and what the focus is... it needs to be quick and to the point...' Head Girl, Horse Sanctuary

During observations, it was interesting to consider how speakers achieved understanding and whether decisions were forged or amended as a result. Some speakers were observed persevering with words and meanings to reach an understanding, to find a way of expressing an idea in their own terms. Perseverance was important: a speaker might recognize his or her own misunderstanding and persevere to improve it; and, by persevering, speakers created a 'platform' of shared understanding.

When speakers grappled with unfamiliar concepts, 'knowledgeable' speakers provided support by making contributions which extended utterances, 'scaffolding' understanding through talk. Sometimes, speakers had to grapple with different words until meanings 'over-lapped' and were shared or created anew. An interesting moment occurred between Ryan and John - they had to grapple with their different ideas in order to understand each other's perspectives. But when they reached an understanding, they prompted the term, 'A Must Group' to represent a consolidation of their combined views. Not only had they collaborated to reach a shared understanding, they'd created a new term to represent that joint understanding and decision. By creating the new term, they created a new understanding. This may reinforce the argument that language needs to be grappled with and meanings shared amongst speakers...

The 'flashes' of collaborative talk featured speakers turning their heads, indicating the 'back and forth' of the conversation. Speakers' utterances were probably shorter and more elliptical. Progress appeared to be made when speakers would 'adopt' each others' words, and apply their own reasoning or opinion. The use of a specific word or words would then feature in the turns of several people, making a 'visible' thread in the discussion. This happened with the word 'frustrating,' interesting because this word describes feelings. However, in being able to share different experiences of the word, they constructed a more shared opinion regarding the topic of discussion. Another important observation, was that when members of the team would 'present' the work they were doing etc, it was other members of the team, in asking questions or for clarification, who would highlight the flaws in that person's plans. This is a good example of the benefits of team work: one person will see things that you don't and perhaps this is the strength of bringing several different people from varying backgrounds together. The least helpful comments were those that served to 'block' the discussion. For instance, one speaker said 'I don't think that'll work' instead of offering reasoning, or giving her opinion more gently. These comments made it harder for the original speaker to continue. Whereas, the direct and concise questions asked served to support the speaker and enabled him or her to move forward. When a topic became a little heated and there was lots of negativity and interruptions, it was Claire who would often offer a positive comment, who brought the discussion back to focus. She was particularly good at presenting a view but positively reinforcing the topic of discussion. She was able to offer reassurance while also supporting colleagues. Humour was also used interestingly to diffuse the seriousness of a topic.

It was highly notable that some members of the team, particularly those who I believe are less experienced in leadership, tended to particularise and refer to personal or professional experience in an attempt to justify an opinion or objection, or simply to offer a contribution. Sam did this at several points throughout, probably eight or so, where she referred to her annoyance as a head of department, her department's willingness to go the extra mile and so on. There seemed to be a dual purpose here: to support her argument but also to promote herself and her department. The trouble was, however, that the frequent lapses to making her good practice an example or justification served to take the real focus of the discussion off track. In making narrow references, the broader issues were lost. However, in sharing those experiences, she was able to connect with other members of the team who shared them. It is, however, important to note that when some people offered personal anecdotes as justification, it was in response to a challenge. It was also the case, with Lisa in particular, that personal anecdote might be followed with reasoning, which was more effective.

Memo written after school senior leadership meeting

Speakers, in taking responsibility for their own understanding asked questions to gain clarity. These moments were often collaborative because they involved contributions and developments, until a consensus of understanding was achieved. Questions also served to 'trouble-shoot,' raising issues which someone else might not have seen. Questions were frequently employed as rhetorical devices for argument or persuasion. Speakers might ask a question and answer it in the same turn; or, speakers might appear to invite comment: 'I don't know what you think?' but allow no room for response. A question might also set an 'obstacle' to talk's progress; or, questions can manage and drive talk towards a conclusion.

'My understanding is...' 'My understanding is very different... 'I still think we're talking about different things...' It took quite a long time to make sure that everyone was on the 'same page.' Speakers had to commit to persevering to achieve shared understanding of the topic. Notes taken during County Council meeting

Several groups were observed creating a visual aid or external tool to support their talk. This enabled speakers to literally share a focus, allowing them to grapple with understanding, consolidate ideas and create a representation of the outcome of their talk. This physical outcome is likely important because it creates a concrete representation of the talk, something to which speakers can later refer. It may also validate the process of talk.

Perhaps less considered in educational literature, the pace and efficiency of the collaborative decision-making process was considered highly important. People in the workplace are limited by time constraints, with implications for the process of collaborative talk. Given the emphasis placed upon this during interviews, a considerable focus during observations became how speakers managed the discussion in order to reach a decision that represented all members of the group.

Strategies were used by speakers to overcome obstacles that were set by individuals, or as the Chief Superintendent put it, 'throw bricks.' Speakers are required to manage digressions, returning the focus of the talk to the topic at hand. On the other hand, strategies were used to draw in passive participants or, as John at Devon County Council put it, the 'Ghandis.' To 'dilute' or engage with direct challenges, speakers were observed proposing a hypothesis as a strategy to present an argument without appearing to hold that view personally, avoiding imposing ideas but 'planting' them.

Speakers have to manouvere several challenges in order to reach consensus. And genuine consensus required group unity, often reinforced by the use of the pronoun 'we.'

'Because there are time constraints and limits, we have to come to an agreement fairly quickly...we come to an agreement fairly quickly...we can't spend hours talking about it, we need to get it done and sorted.' Secondary Maths Teacher

'As you know, you have dynamics within teams, the team leader, there's the thinker, doer, noisy one...trying to get the quiet ones to engage. I guess the important thing is getting the quite ones to say their piece...to feel part of the group but they may have something useful to say...so a group member has got, not to dominate...but manage.'

Oil rig engineer

'I get a lot of examples of people...if they don't agree with something in a meeting, they won't say anything...and then right at the end of the meeting, when you've just concluded, they'll say...I need to think about this for a bit longer...I've listened to everything but I don't agree with it...and they'll leave it right until the end, a kind of passive aggressive sort of behaviour...who will undermine or throw a brick in...or people will suggest ideas and others will immediately rubbish them...so there are some skills around team work that you can learn...while I'm chairing a meeting, half of my brain is managing the way it's being conducted'

Chief Superintendent of Police

As John pointed out in discussion, before the meeting, having people from different sectors meant that people diverged in their priorities rather than consolidated. Instead of focusing on the whole task, individuals will draw back to their individual needs - an obstacle?

One guy drops in negative comments throughout the meeting to hinder progress, but they may be relevant because the problems prompt a resolving comment, pushing the discussion forward. So in this sense, his negative comments become trouble shooting ones, allowing other members of the group to engage in a conflict which is resolved, moving discussion forward.

Some people make comments which can 'shut down' people who persevere with disagreement. On the other hand, others will persevere with comments if they are unclear, trying to gain clarification.

Memo written after day at County Council

The need for pace was apparent - they only have a limited amount of time to make decisions, create actions to be acted upon in preparation for the next meeting. In fact, there was a structure which may be applicable to lessons on collaborative talk. Ideas were presented, acknowledged by others, reformulated and carried forward, with others effectively trouble shooting the suggestions. There was a sense of the ideas evolving. A highly important aspect was the effective use of questions, knowing which questions to ask which would carry things forward. The questions also reflected the concerns of each representative, providing alternative perspectives.

Memo written after meeting at job centre

4.6 Structure

While observations of meetings were not consistently 'collaborative' in nature because they were largely led by agendas, the structure of meetings proved interesting in how it facilitated shared decision making more or less effectively.

Structure:	
•	practice run
•	building on foundation of understanding
•	consolidating
•	summarising
٠	sustaining focus
•	actions
•	clarifying
٠	explaining
•	exploring

Table 4.3: Structural features noted during observation

The importance of structure has been suggested in the previous section; structuring collaborative talk which achieves its goal requires effective management of the talk. The meeting observed in the job centre was a particularly interesting example of structuring collaborative talk. The meeting involved several representative of various sectors, including HM Revenue & Customs and Exeter College, coming together to discuss the design of a self-employment tool. It was probably the 'best' example of collaborative talk observed but it was also highly structured.

Ideas were presented, acknowledged by others, reformulated and carried forward with trouble-shooting comments. There was a sense of the ideas evolving. Speakers seemed aware of which questions to ask, which would push the discussion forward. And even though the questions represented individual concerns and alternative perspectives, they served to 'stream-line' the idea. At intervals, the talk was paused to consider what had been proposed so far. These consolidation intervals created a new platform on which to further develop ideas and allowed participants to raise questions and clarify understanding. Allowing significant time at the end of the meeting, one speaker summarised what had been discussed and decided. The group then signalled their agreement and understanding before actions were agreed. The meeting, though conducted very quickly came to a productive end, with participants clear about their next steps.

Structuring collaborative talk with several opportunities for consolidation and clarification may be important in facilitating the creation of new platforms on which ideas can be built. Allowing significant time at the end to ensure genuine agreement and understanding might be highly important to ensure that the decisions made are realised. In meetings observed which were closed in a rather vague way, there was a sense of an incomplete process and it was unconvincing that what had been

decided would be acted upon. This may be relevant for students' collaborative talk – their talk should result in a decision, one which they all understand and agree upon.

The meeting started very informally, with a discussion about recession cuts and how these would affect them and their schools. This was interesting to watch because in discussing a shared 'anger' the team seemed to tie together, to become quite cohesive, as though uniting in their beliefs. The team had met before and this was apparent but I wonder if a team building idea might involve speakers thrashing out some sort of shared annoyance? And, annoyance seems to work better than sharing a liking for something? The fact that they were able to empathise with each other appeared to allow them to unite. This may have facilitated shared understanding and agreement. The passion underpinning this discussion has not been seen elsewhere - perhaps this is what's needed or meant when we discuss the need to address things that students care about...

Memo written after centre for the excellence of Mathematics meeting

4.7 Developing the Teaching Unit

The data collected and understandings gleaned during the exploratory phase, informed the development of a teaching unit which comprised a teacher handbook, resources and accompanying student booklet (appendix Q). How the exploratory phase informed the design of the teaching unit will now be outlined.

4.7.1 Framework for Collaborative Talk

To inform and underpin the teaching unit, a framework was devised to conceptualise collaborative talk. The collaborative talk framework was organized into 3 strands: *Participating, Understanding and Managing.* These strands represent the features highlighted as important in the workplace. Furthermore, this framework draws on Andrew Bailey's (*Dialogics Ltd*) argument that 'Speaking & Listening' is an inadequate description of dialogue. *Participating* captures the way in which we take part and contribute to talk, shaping meaning and contributing to its 'evolution.' *Understanding* emphasizes an active, not passive, process of achieving

understanding through questions and reformulations. *Managing* recognizes the significance of utterances which serve to manage the talk of others and drive it toward a conclusion.

During collaborative talk,	This involves:
participants:	
	Speaking clearly and concisely
Participate	Sharing experiences and challenging ideas without conflict
	Showing respect for other people's ideas
	Building on other people's ideas
	Listening carefully in order to understand what's being said
Understand	Listening with an open mind
	Using questions to explore ideas and ensure understanding
	Making sure that everyone in the group understands
	Managing the talk to make sure that goals are met
Manage	Keeping the talk focused on the goal
	Managing challenges and objections with sensitivity
	Encouraging others to contribute

Table 4.4: Framework for collaborative talk

4.7.2 Lesson Tasks and Structure

Each lesson was organized into 4 parts, representing in part the structural features observed in the workplace. Students begin with a 'warm-up' task, and then complete an analysis task, followed by a collaborative task and evaluation. Each lesson had a theme, sometimes linked to the preceding or subsequent lesson. More tasks were prepared than would be used during implementation. The teaching unit was devised to allow flexibility and teachers' choice with regards the most suitable tasks for their classes.

Collaborative tasks drew on the *physical, problem-solving* and *brief tasks* described previously. 'Warm-up' tasks resembled 'physical' tasks and were designed to encourage positive relationships amongst students and to highlight the potential for mutual benefit.

In 'analysis' tasks, students examined transcripts or video clips of effective, ineffective, and sometimes 'ambiguous' collaborative talk. Using the collaborative talk framework, students would comment on the features of the talk read or observed. This approach was based on the premise that in talking about talk, and importantly, subsequently talking about their own talk, students might apply a developing understanding of talk strategies to their own participation in collaborative talk.

The lessons' main collaborative tasks initially involved problem-solving, requiring students to come to a shared decision or create an idea or plan. These tasks were supported by task outlines and resources which served to 'scaffold' the talk and drive it towards a conclusion. Towards the end of the teaching unit, students were given a 'brief' task which, removing the 'scaffolds', provided minimal guidance and required students to manage the activity and produce a concrete outcome. Collaborative tasks were followed by an evaluative task, encouraging students' reflection on their talk.

The accompanying student booklet was designed to support students' completion of analysis tasks, collaborative tasks and subsequent evaluation. Like the collaborative tasks, the student booklet was 'scaffolded' to support students' talk awareness. The tasks in the booklet begin by eliciting students' existing understanding and experiences of collaborative talk. The framework for collaborative talk is then presented, as a 'springboard' from which students could 'talk about talk.' As students progress through the booklet, the 'explicit' version of the framework is removed and students are encouraged to comment on *participating, understanding* and *managing* in collaborative talk 'in their own words.'

At the time of designing the teaching unit, the process of analysing talk was highly relevant to the new Edexcel GCSE syllabus. Not only was the focus on analyzing talk deemed relevant for students' learning, it was also relevant to the spoken language element of GCSE; the teaching unit aimed to broaden its applicability. During the development of the teaching unit, materials were trialed in the classroom and amended in response. I was able to teach 5 consecutive lessons to a year 9 group, while Vicky and Abigail taught a total of 5 'stand alone' lessons, which were observed. Trials and observations of students' talk informed the development of a more detailed collaborative talk framework to support teachers:

articipating
 Speakers will attempt to express their views, perspectives, questions or challenges with confidence and clarity
 Speakers will recognise the value of other people's contributions, demonstrating respect and empathy for others
 By sharing perspectives, speakers will be able to trouble shoot
 Speakers may use modal verbs to hypothesise, creating a non-threatening, non-hierarchical space for discussion
 Speakers will consolidate, clarify and summarise ideas at intervals to ensure new platforms of understanding are created
 Speakers will carry forward developed ideas, perhaps evident in the reformulation of similar words or the joint construction of sentences
 Speakers may use particularisations which are relevant to group goals, understanding and empathy
nderstanding
 Speakers will listen carefully in order to gain a genuine understanding of the opinions and perspectives of others
 Speakers will use questions to ensure that understanding is achieved prior to decisions or agreement
 Speakers will persevere to achieve understanding through questions, reformulations and other strategies
 Speakers may explore the meanings or experiences they ascribe to words in order to achieve a shared understanding
 Speakers will signal understanding or confusion through utterances and gesture
 Speakers are responsible for monitoring their own understanding and may be conscious of the understanding of others
 Speakers may use external mediators to support the discussion, explore and clarify understanding
 Speakers will use questions in a variety of ways: to explore understanding, show genuine interest, hypothetically, rhetorically
interest, hypothetically, rhetorically

Managing		
•	Speakers will co-manage collaborative talk to ensure that goals are met with pace and efficiency	
•	Speakers will draw attention to the collaborative goal if discussion diverts, encouraging a sustained focus on the 'big picture'	
-	Speakers will ensure opportunities for consolidation, clarification and summary	
•	Speakers will attempt to manage reluctant contributors by encouraging participation – 'Ghandi'	
•	Speakers will attempt to manage obstacles to progress while avoiding unconstructive conflict – 'brick-throwers'	
-	Speakers will manage challenges with sensitivity, perhaps using 'buffering'	
•	Speakers may encourage group cohesion, perhaps evident in the use of pronouns	
Talk A	wareness	
•	Speakers will be aware of the relevance and quantity of their contributions and able to comment on this in later evaluation	
•	Speakers will be aware of how contributions shape discussion and carry ideas forward and will be able to comment on this in later evaluation	
•	Speakers will be aware of their roles, their communication skills and when these are constructively contributed and will be able to comment on this in later evaluation	
Table	4.5: A developing framework for collaborative talk	

4.8 Conclusion

The exploratory phase provided another dimension in considerations of 'good' collaborative talk. While the aim was not to claim generalities, this phase highlights skills and strategies used in a variety of workplace contexts. The scenarios described provide a means of underpinning classroom tasks with 'authentic' workplace problems. This phase has contributed to conceptualizations of collaborative talk and informed an approach to its teaching which takes account of the multiple 'dimensions' and demands of the collaborative process.

In the chapters which follow, the implementation of the teaching unit will be discussed and the findings presented. Alongside, the structure of the teaching unit will be presented and collaborative tasks further specified.

Chapter 5: Case Descriptions of Schools, Teachers and Students

This first of 3 data analysis chapters sets a context for the two which follow. This chapter begins by describing the participating schools, teachers and students. The data collection took place in two Comprehensive secondary schools near to Exeter, Devon.

5.1 School 1: Bayside College

We will develop unique individuals who are confident global citizens with the ability to make informed choices and who will, through their individual effort, make a positive impact on their own future and on the future of others. College Vision Statement

- To help every student acquire skill, confidence and accuracy in the use of both the spoken and written word.
- To encourage every student to read with understanding, appreciation and discrimination.
- To enable students to develop not only critical autonomy, but also sensitivity and an open mindedness to the ideas and views of others.
- To prepare students for external examinations.
- To help students achieve, through Literature and Media Texts, a greater understanding of people in different times, cultures or places.
- To do these things in an attractive, friendly and caring environment where students treat each other with respect and where each is given an equal opportunity to succeed.

English Department Aims

Bayside College is a co-educational comprehensive school. At the time of the data collection, there were 1100 students aged 11-18 on roll. As described in the June 2011 Ofsted report, the college consists mainly of white British students who come from the town and surrounding rural areas. The proportion of students with disabilities is broadly average, though the percentage of students with a statement of special educational needs is above the national average. The college have a below average intake of students entitled to free school meals. The college has specialist status for Maths and Science. Major changes in leadership have taken place since the last Ofsted inspection in 2008.

The 2011 Ofsted report describes the college as a 'Good school that is rapidly improving.' Students' progress in English, Maths and Science by the end of year 11 is good. Teaching is also considered 'Good', though Ofsted inspectors observed that some teachers are too dependent on narrow strategies for adapting the level of challenge for varying learning needs.

GCSE Results 2011:

53% 5 A*-C including Maths and English

67% A*-C in English

A-Level Results 2011:

96% pass rate

5.1.1 Description of Project Classroom

The project classroom was situated on a corridor of English classrooms, looking out on to the yard and the adjacent main school building. A whiteboard was at the front of the class, with the teacher's desk in the corner. There were two entrances: one from the playground which students were asked to use and one from the corridor. The room was small and very cramped when the project group of 32 were all present. The tables and chairs were very old and wobbly. The classroom had displays of current or recent work, with information about levels and grades. During the project, the teacher hung prompt sentences from the ceiling.

5.1.2 Teacher 1: Abigail

I met Abigail during the National Association for the Teaching of English (NATE) conference in 2011. Abigail and I discussed the project and she signalled her interest in participating. The project started very soon after. Abigail was in her second year at Bayside College when implementing the Scheme of Work in her year 10 class.

Abigail completed a PhD focused on linguistics and a Post Doc on children's language acquisition and worked in academia before setting up an Arts Education company with her husband. She trained as a teacher in 2006. She had turned 50 just before the implementation of the project. Abigail thoroughly enjoys teaching and expressed disappointment at not having trained earlier.

'How would you describe yourself as a teacher?

Probably quite loud? I have to keep adjusting my expectations of pupils (down a bit). Enthusiastic about lots of English skills and experiences. Encouraging of pupils. Maybe intimidating towards shy ones? Good with data. Happy to collaborate, usually reliable/ supportive in implementing measures we decide upon as department. Quite brave at trying things out? I think I'm pretty confident (though definitely make mistakes) so I'll try things that take energy, eg drama, group work, big round classroom stuff...'

5.1.3 School 1's English Department

The department had recently implemented the new Edexcel GCSE syllabus and were struggling with the new content.

'Lovely department....HoD is often tired and under stress, but we do what we can....she's brilliant as mentor, supports us with crap behaviour, she's very honest...very positive with things we want to do. We all chose new exam board (and all regret it!). Think we do very well with our students, although very frustrated at lack of aspiration and home support for many of our intake.'

5.1.4 Project Class 1

The project was implemented with a year 10 top set of 32 girls. The groups are usually mixed gender but the Head of Department made the decision that year to arrange the top sets by gender because of a stronger cohort of girls. This was an unforeseen arrangement and a decision which Abigail and I were unaware would be made at the beginning of the research process. The group was made of up of students from different tutor groups.

'Before the project I felt under pressure as PM target was to get n number of A* and A, and class had been created for this purpose...They were still a bit wary or unaware of GCSE format and need to perform high from start...

During the project I was cautious about group dynamics, aware I had some boffins/ high achievers, plus some cool beauties and some bitchy-group-manipulator tendencies. My relationship was early days, and I think some found me intimidating rather than approachable...'

5.1.5 Researcher's First Impressions of Project Class 1

The girls were very chatty and didn't seem to have a terribly warm relationship with Abigail. When I observed the group prior to the implementation period, it seemed that the group rarely engaged in discussion and that Abigail tended to dominate the talk. There was a wide variety of characters, from very quiet students to a small number of very vocal and occasionally disruptive students. Although students stayed in the same groups throughout the project, the dynamics of those groups would change if someone was absent. There was a great sense of complacency amongst several students regarding their ability. Initially, the class seemed rather suspicious of me and the project so it took a while for their enthusiasm to increase. I was able to develop relationships with them and found them to be an incredibly bright, lively group of girls, who had the potential to be a teacher's 'dream' class.

5.1.6 School 1: Groups

The teachers were asked to arrange the class into groups based on their knowledge of the students. Ahead of implementation, Abigail asked students to arrange themselves in pairs; she then asked each pair to join with another pair, to make a group of 4. In those groups, the students completed a short collaborative drawing activity so that we could observe how they worked together and then make changes if necessary (no changes were made). Because Abigail was concerned that she wasn't aware of problematic relationships, she was able to ensure some familiarity amongst students by taking this approach.

Pre-implementation, both teachers were asked to write a comment about each student, with reference to their Speaking & Listening skills:

Group 1.1

Sarah	Able pupil. Not known to me as a group/ interactive student.
Olivia	'A' on contribution and maybe management. Olivia is able and extrovert. Weakness
	may be in responding sensitively/ clarifying assumptions.
Gemma	Attitude may be blocking Gemma from high academic achievement. Needs to
	engage.
Naomi	Naomi is outgoing and bright. Her challenge will be to listen and show her
	awareness of other points of view.

Group 1.2

Samantha	Able, slow hand-writing, careful, cautious? Needs to push herself.
Carrie	Carrie should be an active and able participant. She may resist engaging fully – eg,
	'resolving differences' and may lack confidence.
Willow	Willow is a top contributor in class. However, the group interaction may be
	interesting as I'm not sure what she's like in a 'team'. Should be a high-flyer.
Lisa	I don't know Lisa well. Quite quiet?

Group 1.3

Claire	A very hard-working but very very quiet girl. S&L will challenge her.
Megan	Can be reserved, and is not renowned for speed of reactions. Not sure how pro-
	active Megan will be.
Amy	Should be 'A' but lazy. Not sure how she'll respond, how engaged she'll be. Too cool?
·	
Laila	Probably quite good at challenge – can be surly? Will need to develop positive
	contributions and assist others.

Group 1.4

Lucy	Not sure how active a participant Lucy is. Lucy works quite hard but is very shy.
Jessica	Jessica has lots of potential but doubts herself sometimes. Coursework so far not
	'A' grade, quite.
Brooke	S&L will be the decider for Brooke. Potentially in written mode, an 'A*' but extremely quiet, resists contributing. In year 8/9 gave a superb monologue, so can be done! Will need her group to present opportunities to resolve differences or wrestle with complex ideas.
Sally	I don't know Sally. She has begun to make contributions, occasionally, while in
	class. Very bright (A* coursework grade) but will need to show interactive abilities.

Group 1.5

Carla	Carla is probably top Interacting & Responding pupil. I think she currently hits several of the top descriptors. Will need to show flexibility, challenge assumptions and resolve differences.
Ruth	Should do well. I'm not sure if she can manage the 80 to 90% shift – she's very motivated but may lack perceptive powers.
Millie	Millie is a mix of keen, slightly naïve and unreliable – wobbly attendance. Slightly other-worldy, not sure if she will learn enough to get to A in S&L.
Eloise	Eloise is becoming perceptive and insightful but is quiet. In a nurturing

	environment she could really show higher grades. Will she ever 'resolve conflict'
	though?

Group 1.6

Kathryn	Not known well to me. May be easily influenced so depends on how independent she can be – motivation. Quite confident.
Mollie	Mollie seems quite confident and outgoing. Her essay work was stronger than I expected, I'm not sure what her S&L/group interaction level will be in the project.
Ariadne	Ariadne's attitude can be arrogant. She may respond rapidly, seeking to reach an outcome without taking due consideration, and she will have a negative influence on the group. Target will be to show thoughtfulness and sensitivity to others.
Grace	Very able on paper. Very quiet in group. I don't know her well.

Group 1.7

Rose	Rose is not very confident, and lacks academic ability relative to peers in this class. Now known well by me – note sure what her S&L ability isRarely contributes in class.
Мау	Could be feisty enough to be original and resolve conflicts. Hope not too cool to engage.
Miriam	Miriam should do better at I&R than academic writing. She is outgoing and aware of others, listens well and is quite perceptive. Could she 'resolve differences'?
Krissy	New to our school this term – outgoing and with positive attitude, which should go a long way.

Group 1.8

Verity	Verity can be very perceptive, and I think is aware of others and of differing or alternative ways to do things. Could do very well.
Elle	Interesting points of view from Elle – she's perceptive and prepared to take risks or speak up, be different. Could do very well.
Josie	Very pleasant student and able. Quiet in general but I think in her present group she will be out-going. Needs stretching on S&L front.
Lucille	Lucille is kind and thoughtful, lacks confidence. She may be at the limit of what she is capable of, academically. I get the feeling GCSE is tough for her – some odd lack of insight sometimes?

5.1.7 Implementation

Abigail's group didn't seem as well informed and less enthusiastic about the unit, commenting in interviews that they thought it would be boring. I observed Abigail during several pre-implementation visits refer to the project work as 'different',

emphasising how it stood apart from the work they normally did; I'm not sure this enthused students.

However, Abigail took a highly collaborative and reflective approach to implementation, keen to discuss and critique lessons. After each lesson, I would e-mail the teachers feedback with possible suggestions for the next lessons. With Abigail, this correspondence became the basis for further discussion. Abigail commented in an e-mail that the process had been a highly intensive training opportunity; she was interested in what students were learning. Interestingly, the only aspect that Abigail seemed not to reflect upon was her relationships with the students and how this may have affected the lessons. Abigail was driven by the concern that the students should gain from participation and that the project wasn't in any way detrimental to their GCSE.

The teaching unit was implemented with this group straight after half term, from October 31^{st} – November 23^{rd} in 11 consecutive lessons. Autumn term is a long and challenging one for teachers, particularly on the approach to Christmas. Students and teachers arrive in school in the dark and often leave when it is dark. The weather was bad throughout the project. Lessons took place 3 times per week during period 1 (8.50-9.50 am) Monday, period 5 (after lunch, 2 – 3pm) Wednesday and period 1 Friday. It was occasionally noticeable that students were more sluggish first thing on a Monday. Abigail would have taught four lessons prior to the fifth lesson on Wednesday. Prior to the teaching unit, students had completed a unit and controlled assessment on *An Inspector Calls*. I observed a few of these lessons prior to the implementation period. Following the implementation students moved on to the *Spoken Word* unit.

5.2 School 2: Spring Lane College

Spring Lane College will challenge students and strive for continual improvement. It will maintain and enhance its reputation as a genuinely caring and inclusive community which encourages all individuals to fulfil their potentials, academically and socially. Students will be safe and happy.

Spring Lane College Ethos Statement

Your ability to use and to interpret language has a direct influence on your ability to control your life. We all think and communicate using the English language, and in many respects language controls our sense of the world as we know it. Developing the perceptiveness and sophistication of reading skills, and nurturing the range and command of spoken and written English, are the key aims of the English Department at Spring Lane College. The teachers in the Department endeavour to deliver lessons in a creative and engaging way for all students whatever their ability. We aim to pass on our passion for English and we hope that it will continue into adulthood for our students.

English Head of Department Statement

Spring Lane College is a comprehensive school with a mixed gender intake of students aged 11-18. At the time of the data collection there were 1012 students on roll. Like school 1, Spring Lane College has a mainly white British intake of students coming from the nearby city of Exeter or surrounding rural villages. The college had just completed some building improvements following the decision to postpone the proposed relocation of the college to a new settlement nearby. The college has specialist status for Maths, Science and Computing. An average proportion of

students have special educational needs and disabilities, though the percentage of students with a statement of special educational needs is above average. A below average number of students are entitled to free school meals.

There was a dip in standards during the 2008 Ofsted inspection, though the later 2010 Oftsed inspection described the college as 'Good with outstanding features.' The report states that the school is a caring one with supportive parents. It was observed that students work well individually and in cooperation with others. However, inconsistencies were identified in teaching, and particularly in the marking of year 7-9 work. These students were found to be unclear about what to do to improve their work.

The proportion of students securing 5 A*-C GCSEs including English and Maths fell in 2008 and was below average. Progress also dipped and was unsatisfactory overall, particularly in English. Senior leaders accepted that planning for a move which never happened may have influenced the dip. The 2009 results improved to slightly above average and progress in English and Maths by the end of year 11 was 'Good.' There has been a new Head of English Department since 2010 and the college became an Academy in April 2011.

GCSE Results 2011:

72.2 % 5 A*-C (a new record)
74.7% A*-C English Literature
68.4% A*-C English Language (a new record)
A-LEVEL Results 2011:

96.4% Pass rate

62% A-B English

5.2.1 Description of Project Classroom

The project classroom was situated in a newly built English block, next door to Performing Arts and overlooking the yard and fields. Students are expected to line up outside the block and are brought in by the teacher. The classroom was spacious, with a whiteboard and projector at the front. The room sat the project group of 28 comfortably. The tables and chairs were new. The project teacher runs an Amnesty International group so there were several posters etc displayed connected to this. There were also several posters of Ghandi or mottos promoting equal rights etc. The teacher prepared a display for the project with prompt sentences to support the students.

5.2.2 Teacher 2: Vicky

I met Vicky when she was appointed as an English teacher in School 2, where I worked at the time. Vicky and I worked together for a year and have been friends since. I approached the department to invite a teacher to participate and Vicky signalled her interest to do so. Vicky was in her fourth year of teaching at the time of

implementing the project and had recently been appointed KS4 coordinator. Vicky also held a position as an examiner for Edexcel and moderator for Speaking & Listening.

Vicky went through the Scottish education system, which she described as very different from her more recent experience of education. Vicky did a wide variety of jobs after University, including selling aerial photographs door-to-door in the US and UK. She travelled extensively before training as a teacher in 2007.

'I really think I was born to be a teacher...It's a wonderful profession and I'm lucky to be in it.

I have become a top-heavy teacher lately – perhaps reflecting where my skills are. I teach 3 GCSE classes and all of the A-Level...I am a 'firm but fair' teacher. I am passionate, funny, hard-working, caring...I go the extra mile for the students and make the relationships with them the most important aspect of my practice. I am well-liked by the students as I show my personality...I value the development of students in terms of all-roundedness. I hate number crunching and I think that education is troubled in many ways...Life is based on relationships and I will strive to help develop them personally for the rest of my career. I obviously want them to do well in English, but this is not my main drive.'

5.2.3 English Department 2

Like School 1, this department had recently implemented the new Edexcel GCSE syllabus, having previously done AQA, and were also struggling with the content and organisation. This became a frequent topic of conversation for the teachers during meetings.

'My department is very laid back...filled with a kaleidoscope of characters...My HoD is passionate and out-spoken. We all share the vision of teaching mixed ability and none of us want to change that.'

5.2.4 Project Class 2

Vicky implemented the project with a year 9 class of 28 students. In previous years, groups in years 7 - 9 would remain in their tutor groups for English; this year, it was decided to mix the tutor groups. As a result, this group consisted of students who did not necessarily know each other well. The group were mixed gender and mixed ability so represented quite a contrast to the class in school 1.

'I love my Year 9 class...I love them more each week as our relationships develop – they are so much fun and they bounce off each other. They want to learn and are always keen to develop.'

5.2.5 Researcher's First Impressions of Project Class 2

When observing a small number of lessons prior to the implementation of the project, it was clear that this group enjoyed English and had a warm relationship with the teacher, interacting confidently with Vicky. They were a lively group with a range of characters, from very quiet students to a few disruptive ones. A few students were considered to be very weak in English and there was one EAL student (Vicky was honest about her struggle to include him in the lessons and ensure his understanding). They were a very welcoming class who enthused about the project throughout.

5.2.6 School 2: Groups

Vicky arranged the groups in advance of the project also. With the mixed ability class, Vicky composed mixed gender, mixed ability groups. She made sure that there was one 'weaker' and 'stronger' student in each group, with one potentially disruptive student. Vicky's approach revealed her knowledge of the students and their relationships with one another.

Group 2.1

Harry	Not very confident but can develop his skills when working with others. He responds well, can be sensitive to others' points and help conversation. Likes working with others, doesn't always challenge points but respectful.
Stephanie	Very strong in English. Has some lovely perceptive comments. Can challenge and develop. She does enjoy group work, can be a bit dominant. Can challenge ideas but needs to learn to work better with others.
Dean	As an EAL student so it is very hard for Dean but he is improving. He is improving as time goes by but he struggles to understand and comprehend what is going on. Very reluctant to offer any contributions but when he does, these are good.
Jude	Not always confident of his own ability, but once started can make some excellent contributions. Can be purposeful and if supported, her contributions can be very strong. She does enjoy group work and is very respectful.

Group 2.2

Oscar	Has real problems working with others. Can't contribute properly. Very controlling and dismissive. On his own he could be an A grade students but there are major problems with Oscar when he is around others. Not respectful, often rude, terrible body language.
Nicky	Is not very confident but can work well with others. Needs someone to help guide her in her conversations with others. If she is feeling good she can control the tone of conversation and be really perceptive. Is respectful and works in a team.
Charlotte	A confident student who works well with others but needs to develop her ideas more. She does enjoy group work and respect others views. She is confident and is able to challenge others' ideas. Needs to manage her talk better.
Johnny	Not forthcoming at all but can speak in certain situations. Does make relevant contributions to discussion. He doesn't work well in a group or on his own. Does not offer much towards discussion. S&L is very hard for Johnny.

Group 2.3

Richard	Offers a lot to group situations and is able to work well with others. Thoughtful and confident. Good in groups. Respectful, challenges ideas. Can be perceptive and insightful.
Joanna	Perhaps strongest student in the class. Sustained concentrating, understanding of complex ideas. Is a stunning student. Confident, able, respectful, challenges ideas, works well in group work situations.
Jamie	Can listen well. Engages with what is being said but needs to develop confidence. Ok in groups work. Can be respectful, doesn't have confidence to challenge enough. Does enjoy group work. Is able to adapt to different situations.
Gareth	Listens well, needs to learn to react to others better. Not challenging. Works as an individual, not great in groups. Challenging ideas, but needs to develop team working skills.

Group 2.4

Liam	Is very nervous when being assessed. Can be positive and make some good contributions. Allows others to talk well. Can work well in groups. Can be respectful but doesn't always challenge ideas. Very unsure of himself in situations. Not great at asking questions.
Evie	Excellent Speaking & Listening. Respectful and challenging. Helps to develop other ideas. Sometimes need to listen better. Works brilliantly in a group. Can challenge and develop ideas. Confident and respectful. Can adapt talk to different situations.
Joseph	Is not always forthcoming, but can make very positive contributions. Engages with discussion. He does respect others, although finds it hard to challenge as he is not confident in speaking to others. Is able to offer very good points when he is confident to approach subjects.
Ryan	Strong speaker, can challenge and develop. Can respond to what others say well. He does enjoy working in groups, respectful and challenging. Does have strength in groups, but needs to develop them more.

Group 2.5

Phil	Can make some lovely contributions and can engage with what is being said. Can make significant contributions. Not great at staying on task. Can be dismissive of others or struggles to maintain attention, can be respectful and can challenge.
John	Can make some lovely contributions and can engage with what is being said. Can make significant contributions. Not great at staying on task. Can be dismissive of others or struggles to maintain attention, can be respectful and can challenge.
Hannah	Makes some brilliant contributions. Is thoughtful, considered, measured, analytical and reflective. Is good with others, is respectful, can sustain discussion and stay on task. Challenging to others and positive.
Victoria	Victoria is a confident speaker when pushed, but is always forthcoming. I have watched her excel in groups, but she doesn't always offer lots to discussion. When she does talk she is very good. Lovely intonation.

Group 2.6

Jordan	Can make positive contributions to class but has real difficulty in listening. Does enjoy group work but not always respectful. Doesn't listen very well. Can't always adapt talk – gives up easily.
Lauren	Very unconfident, unable to work well in groups. Not forthcoming at all. Needs to be pushed in this area. Does not believe in herself so offers very little to group discussion. Does not challenge ideas.
Charlie	Makes positive contributions. Can develop them and is able to analyse well. Does enjoy group work. Is respectful but doesn't always stay on task. Not always able to ask the right questions. Can be challenging. Confident with others.
Anne	Good student, needs to develop confidence. Hopefully will be a B grade by the end. She is not confident in groups, but I have seen improvement over the last few months.

Group 2.7

Will	Listening to other people is very hard for Will. He can speak well in certain situations. If in the right group, surrounded by the right people, Will excels. He can speak confidently and clearly but struggles to listen.
Hannah	Very strong, works really well with others. She responds to others and can help lead conversations. Is strong in her responses. Respectful, perceptive, not always on task.
Tom	Is confident in speaking. Can concentrate, and listen to others' views. Can reflect well. Enjoys group work. Respectful, challenging. Can vary purpose, matures, needs to involve others.
Lola	Not always confident but does engage. She is very good at listening. Makes good points. Not bad in groups but needs encouragement to be involved. Can ask some good questions. Respects the views of others. Adds to what others say.

5.2.7 Implementation

Vicky stressed to students that the project would be exciting, that the students were lucky and special to be taking part. She excited the students about their participation and probably helped sustain their motivation and energy until the end.

Vicky taught the lessons with little discussion or support required in between. Vicky did not seem to regard the process as a reflective one and was simply eager to deliver the lessons. I e-mailed Vicky more detailed feedback because of the lack of discussion, some of which I believe she took on board. Vicky's concerns were more with the literal delivery of the lessons and less so with the analysis of the lessons. It was also apparent that it was far less urgent for Vicky's students to achieve GCSE grades as a result of the unit and the class weren't under the same pressure as Abigail. It is likely that the difference in GCSE demands influenced teachers' participation; in turn, teachers' different approaches likely influenced students' participation.

The project was implemented directly after school 1, in the last four weeks of the Autumn term. The project started on Tuesday 22nd November and continued in 10 consecutive lessons until December 15th, students' last English lesson of the term. The national strike and an Amnesty day meant that two lessons were missed so the project rolled over and finished slightly later than planned. Initially I was concerned about the teachers' and students' enthusiasm and energy during the end of a long term, but they proved highly enthusiastic and remained engaged right until the end. Vicky's timetable varied from week to week: period 3 Tuesday (9.55-10.55 am), period 1 Thursday (8.55-9.55 am), period 3 Friday (12.15-1.15 pm), then period 5 Tuesday (2.20-3.30 pm), period 1 Wednesday and period 5 Thursday. Of course, the timetable here did create some challenges with the equipment, charging cameras etc. It also made it harder to find times at lunch or break to interview students, and harder for students to remember to turn up. Just before the unit, students had worked on the play version of *Noughts and Crosses* by Malorie Blackman.

5.2.8 Researcher's Connection to School 2

I taught English in School 2 from 2006 – 2009. I taught across key stages 3-5 and went on to become Second in Department and Key Stage 3 Coordinator. During this time I supported teacher 2 through her NQT year. I had a very warm relationship with students and colleagues; however, the school has changed dramatically since I left. My old classroom has been demolished, the English department are in a new building and the old Head of Department left after 30 years. I was asked to do some supply teaching during the summer term, prior to the implementation of the research project. As discussed in Chapter 4, I was able to trial several project lessons with a year 9 group during this period. I taught this group in year 7 so had warm

relationships with them; however, I had no previous connections with the project group.

*

This chapter provides a context for the data collection and analysis. The case group descriptions reveal two teachers who perceive their roles and relationships with students differently. The data analysis presented in the following chapters will reveal the different ways in which student groups engaged with the teaching unit, and how teachers' approaches have implications for students' development.

Chapter 6: The Macro-Analysis of the Teacher's Role and Student Groups' Collaborative Talk and Talk Awareness

This chapter begins with a brief description of the collaborative talk teaching unit, an overview of its implementation and the data collection and analysis process. The findings of the 'macro-analysis' will then be presented. While this chapter discusses the coding of the data, the following 'micro-analysis' chapter will present transcribed episodes of talk.

The following research questions will be explored:

- 1. How does the teacher support and influence the development of students' collaborative talk?
- 2. How do student groups develop in their collaborative talk and their awareness of collaborative talk processes?
- 3. Do teaching strategies informed by workplace collaborative scenarios support the development of collaborative talk?

6.1 The Collaborative Talk Teaching Unit

The teaching unit consisted of 10 consecutive lessons intended to be delivered over approximately 3 weeks.

Lessons 1-4 f	ocus on introducing the concept of collaboration and collaborative talk, developing students'	
capacity to ta	lk about talk.	
1 W	What is 'collaboration' and 'collaborative talk'?	
2 W	What makes collaborative talk ineffective?	
3 W	What makes collaborative talk <i>effective</i> ?	
	People in collaborative talk are Participating, Understanding and Managing – What does this mean?	
	5-6 focus on collaborative talk in drama or on TV. Using these resources, students further develop their	
capacity to an	alyse their talk in more detail, referring to how participants manage, understand and participate	
in talk.		
5	X Factor: How do participants make decisions in collaborative talk?	
6	Superheroes/ Time 100: How do participants in collaborative talk develop ideas and coordinate	
	plans?	
7	The Apprentice: How do participants in collaborative talk understand each other's points of	
	view and come to an agreement?	
Lessons 8-10	involve students in a prolonged activity. They continue to analyse and discuss 'real-life'	
collaborative talk in The Apprentice complete a brief by the end of the week. The lessons culminate in students		
giving a presentation on their concept, concluding their collaborative activity.		
8	Developing your own ideas in collaborative talk	
9	Continuing to develop your own ideas in collaborative talk	
10	Presenting your ideas and evaluating your learning	

Table 6.1: Overview of the collaborative talk teaching unit

Each lesson was designed in four parts: *Warm-Up, Development & Analysis, Collaborative Task* and *Reflect & Evaluate*. The *Warm-Up* tasks were designed to support students in developing the relationships within their group through 'team-building' activities while highlighting skills of cooperation and collaboration. The *Development and Analysis* activity provided an opportunity for groups to observe, discuss and evaluate examples of collaborative talk on the page, on video or 'live' in

the classroom, making the skills of collaborative talk explicit and supporting students in the development of their collaborative talk and subsequent evaluations. The *Collaborative Task* was designed to engage students in scenarios which required genuine collaboration in order to reach a shared decision or joint construction of an idea. The *Reflect and Evaluate* episode was stressed as an important opportunity for students to reflect on their participation in the collaborative task, evaluate their skills and identify areas for development.

Given the teaching unit's concern with the analysis of talk, a 3-strand framework was devised to support teachers and students in the development of a vocabulary with which to talk about talk (as described in Chapter 4). Collaborative talk, therefore, was conceptualised as: *Participating, Understanding and Managing*.

During collaborative talk, participants:	This involves:
	Speaking clearly and concisely
Participate	Sharing experiences and challenging ideas without conflict
	Showing respect for other people's ideas
	Building on other people's ideas
	Listening carefully in order to understand what's being said
Understand	Listening with an open mind
	Using questions to explore ideas and ensure understanding
	Making sure that everyone in the group understands
	Managing the talk to make sure that goals are met
Manage	Keeping the talk focused on the goal
	Managing challenges and objections with sensitivity
	Encouraging others to contribute

 Table 6.2: Collaborative talk framework

6.1.1 A Summary of the Implementation, Data Collection and Analysis

The collaborative talk teaching unit was implemented in two schools, one directly after the other. The unit was completed in 11 lessons in School 1 and 10 lessons in School 2. Throughout each lesson, the teacher wore an audio recorder which captured the teacher's delivery of the lesson, interactions with the whole class and separate groups. Students remained in the same groups for the duration of the unit.

Each group was filmed via Flip camera and an audio recorder was placed on each group's table. The group video and audio was later synchronised for analysis.

School 1: Bayside College	School 2: Spring Lane College
Teacher 1: Abigail	Teacher 2: Vicky
Year 10 (14-15) all-girls high ability class	Year 9 (13-14) mixed gender and ability class
32 students in total	28 students in total
8 groups of 4 (numbered 1.1-1.8)	7 groups of 4 (numbered 2.1-2.7)

 Table 6.3: Participants

6.1.2 Stages of Data Analysis

Implementation	\circ Field notes taken during implementation of the teaching unit
Preparatory Analysis	\circ All video data observed and an overview written of each group (15)
Macro- Analysis	 Teacher audio mapped and coded
	\circ Video of 5 groups from each school mapped and coded (10)
	 Narrative description written of each coded group
	 Discussion of assessment data
Micro-Analysis	• Selected episodes transcribed and presented alongside discussion of
	emergent themes

Table 6.4: Stages of data analysis

6.1.3 Preparatory Analysis

The preparatory analysis was conducted with the aim of becoming thoroughly familiar with the whole of the data set, to reconcile impressions during implementation and in field notes with the audio and video data. A table was used to record qualitative descriptions of the teacher's role and each group's participation during each lesson. The table was devised deductively, organised into sections to represent the four part lesson structure: *Warm-Up, Development & Analysis,*

Collaborative Task and Reflect & Evaluate, as described in section 6.1. The table was also used to note relevant contextual information. This process served to map and organise the large data set and resulted in a 'catalogue' which facilitated the location of episodes and cross-referencing during the subsequent macro and micro-analysis.

Lesson:	
School:	
Group:	
Group Members Present:	
Data:	
Contextual information:	
Lesson Summary	
Warm Up	
Development & Analysis	
Collaborative Task	
Reflect & Evaluate	
Approximate time allowed for group talk:	

Table 6.5: Preparatory analysis table

6.1.4 Macro- Analysis: Teacher Audio

The macro-analysis involved coding the video and audio data. During the preparatory analysis, 5 'themes' or 'patterns' emerged in teachers' talk: the teacher explains each task; the teacher monitors students' independent completion of each set task and may intervene; and the teacher supports students in reflecting on each task. Teachers' talk also served to set expectations and emotionally engage students. Codes were determined inductively within these 5 'groups' to analyse the teacher audio:

Task-Setting	Teacher sets up independent tasks through instructions, procedures
	or eliciting student understanding
Students' Independent Work	Teacher monitors or intervenes during students' independent tasks
Reflection	Teacher guides students in reflecting upon their independent tasks
Expectations	Teacher makes expectations for talk, conduct and behaviour explicit
Emotional Engagement	Teacher emotionally engages students through praise, humour etc

Table 6.6: Descriptions of code groups for teacher audio analysis

The table devised for the teacher audio analysis (and then for group video analysis) is a development of the one devised for preparatory analysis (table 6.5). These tables facilitated the mapping and coding of the data across the four part lesson structure.

	Task Setting	Students' Independent Work	Reflection	Expectations	Emotional Engagement
	During task-setting, the teacher's talk is:	The teacher's monitoring and intervention of students' independent work is:	The teacher support students' reflection by initiating/ discussing:	The teacher sets expectations with reference to:	The teacher emotionally engages with reference to:
Code	Instructional 1: Providing instructions/ procedures Transmissive 1: Providing information/ knowledge Exploratory 1: Exploring understanding through questions/dialogue	Instructional 2: Providing instructions/ procedures Transmissive 2: Providing information/ knowledge Exploratory 2: Exploring understanding through questions/dialogue	Feedback 1: task outcome or decision Feedback 2: talk analysis/ awareness Feedback 3: self- evaluation of talk Exploratory 3: exploring self-evaluation of talk	Purpose Behavioural Management Responsibility GCSE Difficulty Talk Expectations	Praise Validates Humour Personal Encouragement Dispute
Warm-Up					
Development and Analysis Collaborative Task					
Reflect and Evaluate					

Table 6.7: Table devised to map and code the teacher audio

After mapping and coding each lesson in table format, code frequencies were totalled for both teachers in:

- each four parts of the each lesson
- each whole lesson
- the whole teaching unit

6.1.5 Macro- Analysis: Group Video

5 groups were selected in each class for coding based on the quality of the audio and represented a variety of students. To analyse the group video, codes were devised deductively and inductively, some mirroring codes developed to analyse the teacher audio. The codes were organised in the same 5 groups (as presented in 6.1.4), allowing continuity between the teacher and groups' analysis. This analysis facilitated a view of the teacher's role from each group's perspective.

Task-Setting	Students listen to the teacher's instructions or respond to questions
	related to the subsequent task
Students' Independent Work	Students work independently, either individually or in their groups
Reflection	Students are supported by the teacher in reflecting upon prior tasks
	and talk
Expectations	Students make expectations for talk explicit or respond to peers'
	expectations
Emotional Engagement	Students response/interaction with teacher or peers is suggestive of
	their relationship

Table 6.8: Descriptions of code groups for student group analysis

		GROUP -	SCHOOL –LESSON-		
	Task-	Students' Talk	Reflection	Expectations	Emotional
	Setting				Engagement
	ES: Early Start	Talk awareness: TA:P Participating Talk Awareness TA:U Understanding Talk Awareness TA:M Managing Talk Awareness Collaborative talk: PC Contribute PCH Challenge UT Task UI Ideas UA Agreement ME Encouragement MO Obstacles MOr Organization	Talk awareness: TA:P Participating Talk Awareness TA:U Understanding Talk Awareness TA:M Managing Talk Awareness Collaborative talk: PC Contribute PCH Challenge UT Task UI Ideas UA Agreement ME Encouragement MO Obstacles MOr Organization	PE: Peer expectation TR: Teacher expectation	TR: Teacher relationship PR: Peer relationship
Warm Up		OT: Off-Task Talk O: Obstacles LS: Leader Strategies	OT: Off-Task Talk O: Obstacles LS: Leader Strategies		
Collaborative					
Task					
Development &					
Analysis Reflect &					
Evaluate					

Table 6.9: Table devised to map and code group video

After coding each lesson in table format, code frequencies were totalled and recorded for each group:

- 1. in four parts of each lesson
- 2. in each whole lesson
- 3. for the whole teaching unit

The group frequencies were totalled, resulting in a total code frequency for each school.

6.1.6 Presenting the Findings of the Macro- Analysis

The analysis of the teacher audio is presented first, providing a 'backdrop' to the group data. Examining how group participants interact with the teacher and each other, the analysis of the video data is then presented, followed by narrative descriptions of each group and a brief discussion of assessment data. Where relevant, discussion of codes may draw on the preparatory analysis.

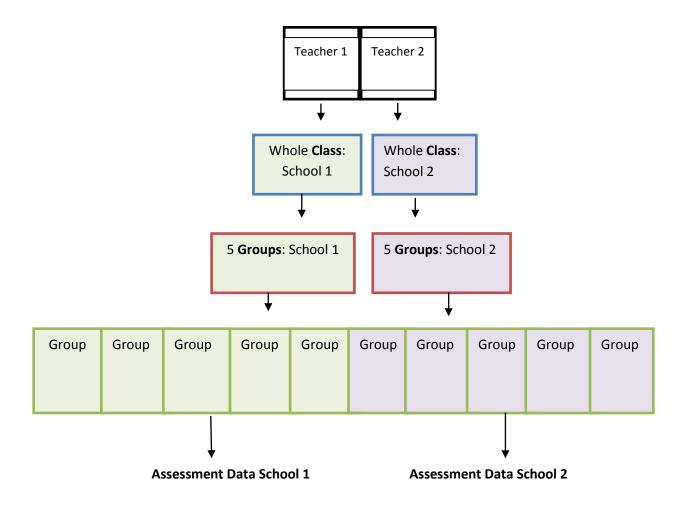


Chart 6.1: Presenting the findings

6.2 Analysing Teacher Audio

6.2.1 How do teachers use lesson time during the implementation of the teaching unit?

While coding the data, the time dedicated in each classroom to *Task-Setting, Students' Independent Work* and *Reflection* within the four-part lesson structure was recorded. The table below presents the average time dedicated by teachers to each strand during each lesson and in total across the unit. Lessons in both schools were approximately an hour long.

	Abigail	Vicky	Abigail	Vicky
	Unit Total	Unit Total	Lesson Average	Lesson Average
Task-Setting	113m	76m	11m	7.5
Students' Independent Work	327m	307m	33m	31m
Reflection	86m	125m	8.5m	12.5m

Table 6.10: Temporal data

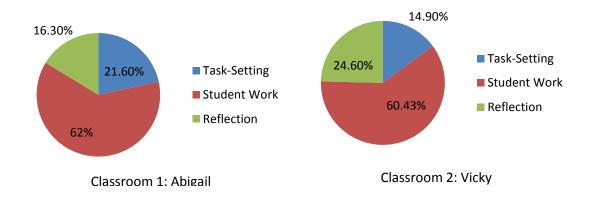


Chart 6.2: Minute totals converted to percentage values

In both classrooms, approximately the same time was allowed for students to work independently, whether individually or in their groups. Approximately 6.5% *more* time was dedicated to task-setting in Abigail's classroom throughout the unit than in

Vicky's classroom. Approximately 8.5% *less* time was dedicated to reflection in Abigail's classroom than in Vicky's.

The time dedicated to *Task-Setting and Reflection* may be indicative of teachers' priorities within their particular classrooms. By dedicating more time to task-setting, Abigail controlled longer periods of talk prior to students' independent work. In allowing more time for reflection, Vicky provided more opportunities for students to evaluate tasks and talk after independent work.

6.2.2 How do teachers talk during task-setting?

To examine how teachers used talk during *Task-Setting*, teachers' turns were coded as *instructional*, *transmissive* or *exploratory*. *Instructional* turns provided instructions or procedures to guide students in the completion of tasks. For example, a teacher might instruct students to complete a series of questions individually, in silence. *Transmissive* turns provided information or knowledge, usually to support completion of the subsequent task or remind students of expectations for collaborative talk. For example, a teacher might explain to students that they need to avoid being passive in the decision-making process and question the ideas that are put forward. *Exploratory* turns engaged students in dialogue, perhaps by asking questions to check understanding of the task or explore prior learning. For example, a teacher might ask students what *they* think it means to be passive in discussion. The table below presents the total frequency of coded turns during teachers' task-setting, throughout the unit.

Code	Abigail	Vicky
Instructional: Providing instructions/ procedures	51	49
Transmissive: Providing information/ knowledge	18	7
Exploratory : Exploring understanding through questions/dialogue	3	5
Total	72	61

Table 6.11: Teachers' Talk during task-setting

Although Abigail dedicated more time to task-setting than Vicky, both delivered approximately the same number of turns related to instructions and procedures. There is not a significant difference between teachers' exploratory turns during task-setting. However, Abigail initiates 11 more transmissive turns which serve to provide information than Vicky.

Preparatory analysis revealed that Abigail would often deliver lengthy instructions or explanations during task-setting, in contrast to Vicky's brief, snappy instructions. The data presented here supports these observations: Vicky delivered approximately the same number of instructions in less time, suggesting that her turns were 'quicker' than Abigail's. The frequency of Abigail's 'transmissive' explanations suggests an eagerness to 'transmit' information and understanding to the students. By talking for lengthy periods, Abigail was able to maintain control for longer, possibly reluctant to 'let students go.'

Preparatory observations suggested the influence of context on teachers' approaches: Abigail dedicated considerable time to explaining GCSE assessment criteria and procedures, frequently emphasizing 'advanced' talk features to support students' talk awareness. Despite the unit representing a component of GCSE, some of the Year 10 students appeared complacent about Speaking & Listening skills and the teacher worked hard to challenge this and reinforce the importance of the unit. For Vicky, the stakes weren't as high: it was not a necessity for students to achieve GCSE assessments during the unit's implementation. Though Vicky stressed that assessments could be carried forward, the unit was more experimental and less 'real' for the Year 9 students in School 2. Abigail's lengthy explanations and reluctance to 'let students go' may have implied a lack of trust in students' ability to work collaboratively and independently, perhaps justifiable given their initial

resistance to the teaching unit. It is important to recognise the considerable pressure upon Abigail to ensure her students' achievement of top grades, and the implications of this for her talk.

6.2.3 How do teachers talk in their interactions with students during independent work?

The frequency of codes presented below represents teachers' interactions with students during their independent work. The codes are the same as those used to explore teachers' talk during task-setting.

Code	Teacher 1	Teacher 2
Instructional	16	12
Transmissive	28	8
Exploratory	30	60
Total	74	80

Table 6.12: Teachers' talk during independent work

Although approximately the same time was allowed for independent work in both classrooms, Abigail interacted less frequently with students than Vicky during these periods. Of their turns, Abigail's were concerned with instructions and procedures, while Vicky's were exploratory in nature. A significant difference is evident in the frequency of exploratory turns: Vicky's exploratory turns are double Abigail's.

Abigail's turns suggests that she provided guidance or further explanations to support students' independent work, while Vicky was inclined to ask exploratory questions, prompting students to clarify an idea or identify an area for development. The high number of exploratory turns may also indicate chains of dialogue between Vicky and her students as a question prompts another question. Transmitting information or explanations is less likely to prompt dialogue.

Preparatory analysis suggested that Vicky was more consistent in her monitoring and intervention than Abigail who was more likely to stand back, though perhaps as a means of 'letting students go'. Preparatory analysis also suggested that Vicky used periods of independent work to engage students emotionally and reinforce expectations.

The findings here reveal the different ways in which students' independent work was monitored in each classroom. However, it is important to consider how each teacher's interpretation of their role in implementing the teaching unit may have shaped their decisions regarding the monitoring of independent work, particularly given the aim to develop students' *independent* collaborative talk. Nevertheless, the presence of the teacher during these periods likely has implications for students' engagement and their perception of teachers' expectations for collaborative talk.

6.2.4 How do teachers support students in reflecting upon tasks and collaborative talk?

The table below presents the frequency of codes during periods of *Reflection*. Teachers' talk was coded to signal the function of the question or utterance initiated to elicit feedback from students according to the preceding independent task. As described elsewhere (Chapter 4; section 6.1 this chapter), collaborative tasks involved:

- 1. achieving a group decision, agreement or conclusion;
- 2. the analysis of example episodes of collaborative talk;
- 3. self-assessment of collaborative talk.

The codes below are linked to these 3 tasks.

	Abigail	Vicky
Feedback 1: task outcome or decision	11	37
Feedback 2: talk analysis/ awareness	15	20
Feedback 3: self-evaluation of talk	13	34
Exploratory 3: exploring self-evaluation of talk	8	16
Total	47	107

Table 6.13: Teacher-led feedback during reflection

Periods of reflection totalled 125 minutes in Vicky's classroom and 86 minutes in Abigail's classroom (see section 6.2.1). Within this time, Vicky initiated double Abigail's turns. Vicky elicited considerable feedback concerned with task outcome and self-evaluation. Vicky also probed students' comments regarding self-evaluation.

Vicky's concern with task outcome and Abigail's concern with talk analysis suggests different priorities. By seeking feedback regarding task outcome, Vicky demonstrates an interest in the outcome of groups' collaborative talk. This may validate groups' decisions and in turn, the process of collaborative talk. Abigail's focus on talk analysis may be in keeping with GCSE priorities, serving to extend and challenge students' understanding. In stressing the features of 'quality' talk, Abigail may reinforce her expectations for students' participation.

There is a significant difference in teachers' handling of self-evaluation: 21 of Abigail's turns were concerned with self-evaluation compared with 50 of Vicky's. More so than the type of feedback elicited, the way in which teachers managed feedback and shaped subsequent talk is important. The frequency of *Exploratory 3* codes suggests that Vicky probed students' responses, resulting in chains of turns.

Preparatory analysis suggested that Abigail maintained high expectations for students' responses and their justifications, often challenging a self-evaluative or analytical comment. In contrast, Vicky was highly accepting of most responses, even if they were vague or repetitive. It was during these episodes that teachers' subject

knowledge appeared differently: Abigail demonstrated considerably more confidence with the topic (unsurprising given her background, as described in Chapter 5). In School 1, students' responses would often prompt a lengthy explanation from Abigail, which may have clarified understanding and supported talk awareness. On the other hand, though less focused on talk awareness, Vicky's interactions occasionally created a platform for further dialogue, creating a whole-class 'dialogic space.' The different forms of talk promoted and facilitated by the teacher may have implications for what students perceive as important in talk

6.2.5 What expectations do teachers make explicit?

The frequency of codes below signal expectations made explicit by teachers throughout the unit. *Purpose* refers to turns which clarified the purpose of tasks for collaborative talk. *Behavioural* refers to expectations for students' behaviour and conduct. *Management* refers to strategies used by the teacher to set time limits etc to support students in completing the set task. *Responsibility* signals teachers' emphasis of individual and group responsibility. *GCSE* signalled reminders about expectations related to assessment. *Difficulty* refers to teachers' emphasis of a task as difficult. *Talk Expectations* refers to reminders about expectations for collaborative talk, perhaps drawn from the collaborative talk framework.

Code	Abigail	Vicky
Purpose	3	17
Behavioural	8	18
Management	25	41
Responsibility	4	19
GCSE	20	10
Difficulty	15	5
Talk Expectations	30	87
Total	105	197

Table 6.14: Teachers' expectations

Vicky used approximately double the turns than Abigail to make her expectations explicit. Vicky refers more frequently to task purpose and reminds students more often of her expectations for behaviour, while using strategies consistently to support the management of tasks. Vicky also emphasised individual and group responsibility more frequently. Abigail makes more references to GCSE assessments and task difficulty than Vicky. Significantly, Vicky reinforces her expectations for collaborative talk approximately treble the frequency of Abigail.

By setting high expectations for students' behaviour and responsibility, Vicky may have reinforced the expectation that students focus and sustain their collaborative talk for the duration of the time allowed. By making time limits clear and using strategies to gain groups' attention quickly, Vicky effectively managed the collaborative activities. Predictably, Abigail referred more frequently to GCSE assessment but also to task difficulty. She may have emphasised the difficulty of a task more frequently in order to reinforce the 'seriousness' of the topic, perhaps challenging complacency.

By frequently reinforcing her expectations for collaborative talk, Vicky reminded students of its principles, perhaps prompting them to engage more 'consciously'. However, the codes here represent expectations stated explicitly; therefore, this analysis does not examine students' *perceptions* of expectations conveyed explicitly or implicitly by teachers. For instance, Abigail's explanations *imply* her expectations for students' talk, as suggested in section 6.2.4.

6.2.6 How do teachers emotionally engage students?

The frequency of codes below signal the strategies used by the teacher to emotionally engage students. While *praise* is self-evident, *validates* signals

agreement with a student's idea. *Humour* signals teachers' 'banter', perhaps gently teasing a student or making a joke. When teachers shared a personal experience or anecdote with students it was coded as *personal*. *Encouragement* signals teachers' reassurance of students' efforts while *dispute* signals an argument between teacher and student.

Code	Abigail	Vicky
Praise	34	69
Validates	12	12
Humour	14	69
Personal	6	12
Encouragement	8	14
Dispute	2	1
Total	76	177

Table 6.15: Emotional engagement

Approximately 100 more of Vicky's turns were coded under emotional engagement than Abigail's. Vicky was more inclined to praise students, though both teachers were equally likely to validate a suggestion. Vicky used more humour than Abigail, and she also shared more personal anecdotes and encouraged students more frequently.

In Case Descriptions (Chapter 5), Vicky described the importance she placed upon forging relationships with students, while Abigail expressed concerns about her relationship with the project class. Abigail also described how she didn't know some students well in her pre-implementation comments. The codes here support the interpretation that Vicky seeks positive relationships with students, and that she is the more confident in doing this through dialogue. Vicky praised students more frequently, shared personal information and used humour, not only to engage students' interest but to *engage* them in dialogue.

Preparatory analysis suggested that Abigail's high expectations for students' responses meant that she was less likely to praise. Though perhaps more

constructive, Abigail would validate a response by engaging critically with the idea put forward. In contrast, Vicky may have 'over-praised' or praised students more for effort rather than the quality of their responses. To recall, Abigail had to elicit 'real' GCSE grades from the class while there was an element of 'play' in School 2 where students were praised for engaging in something supposedly beyond their age group. Nevertheless, the differences are representative of the teachers' different approaches in these contexts.

6.2.7 The Implication of Teachers' Talk for Students' Perceptions of Collaborative Talk and its Development

The differences between teachers' use of talk emerges from the codes, and the interpretations drawn are supported by the Case Descriptions (chapter 5).

The data reveals that during these lessons, Abigail's talk featured more 'transmissive' characteristics than Vicky's. She spent more time task-setting, delivering instructions and explanations, and focused on supporting students' talk analysis. Her approach indicates GCSE assessment as a greater priority than in School 2. However, in delivering 'monologic' explanations and 'transmitting' knowledge instead of encouraging dialogue between her and the students, Abigail may implicitly influence students' perception of valid talk. The principles underpinning a 'transmissive' stance conflict with those underpinning collaborative talk. Furthermore, by intervening in group work to provide further information or 'knowledge' students may not perceive the exploratory nature of collaborative talk.

In contrast, Vicky's talk may have been more characteristic of collaborative and dialogic talk (as described in sections 2.6.2 and 3.3.4) and may have 'modelled' its forms. By making expectations for students' talk explicit, the teacher may also

support the development of a vocabulary with which to participate in and critique talk. And furthermore, by prompting dialogues between teacher and student, students are encouraged to grapple with the language of talk while practising collaborative forms of talk with the teacher as 'scaffold'.

Vicky's emotional engagement of students may also facilitate a classroom environment in which challenging the teacher and asking questions is the norm. Vicky dedicated more time to reflection, in keeping with the importance she placed upon validating students' efforts and ideas. On the other hand, Abigail's reluctance to praise all responses may have supported students' identification of 'quality' talk features more effectively.

This analysis suggests that the different contexts in which teachers operate have implications for the way in which they use talk. The talk 'demonstrated' by the teacher may have implications for what students perceive as valid talk. A 'transmissive' pedagogy may undermine the principles of collaborative talk while dialogues which serve to emotionally engage may embody its principles. The latter may serve as a model to students seeking to forge relationships within their groups, perhaps supporting the development of dialogue.

Because of the implications for the development of students' collaborative talk, this stage of the analysis sought to explore how the teachers used talk during their implementation of the unit. However, the interpretations drawn do not suggest that individual teachers can represent a pedagogy or 'teaching style' which is applied regardless of the classroom context. It is argued that the way in which the teachers interact with their students is influenced by social, cultural and historical factors within, and beyond, the classroom.

Furthermore, this stage of the analysis is 'one-dimensional' because it does not take into account students' engagement and development as a response to their teachers' roles. Importantly, while the analysis reveals the different characteristics of teachers' talk, it does not show how this shaped subsequent discussion. We cannot see from this analysis, for instance, how Vicky's questions may have opened up students' consideration of alternative perspectives. Therefore, the next stage of the analysis serves to both confirm and challenge the interpretations drawn at this stage.

6.3 Analysing Group Video

6.3.1 How does the teacher interact with the 5 groups selected for coding and support talk awareness?

The frequency of codes below signal teachers' interactions with the 5 groups selected for coding during independent work. They also signal teachers' interactions with individual students belonging to these 5 coded groups during whole-class teacher-led discussion.

The codes also signal which interactions were concerned with *talk awareness*. As described previously, the collaborative talk teaching unit was designed to support the development of talk awareness through the analysis of examples of talk, informed by the collaborative talk framework. This approach was based on the premise that in developing an awareness of talk, and a vocabulary with which to describe it, the unit would develop students' ability to critique their own talk, perhaps exposing, challenging and re-aligning perceptions of their participation. 'Talking about talk' was intended as a concrete means of supporting students' understanding and development of something which is highly fleeting and temporary in nature. This challenges assumptions that talk develops simply with time and practice and must instead become the object of teacher and students' *dialogues*.

To note discrepancies which appear between the frequencies presented here and in the previous section, *TT* and *TL* codes signal teachers' interactions with these particular groups only and account for turns coded under the categories *Expectations* and *Emotional Engagement*.

Code	Abigail	Vicky
TT: Teacher's talk during independent work	50	140
TL: Teacher-led talk during whole-class discussion	55	153
Total	105	293
TT:TA Teacher's talk during independent work prompts/ supports talk awareness	5	0
TL:TA Teacher-led talk during whole-class discussion prompts/ supports talk awareness	31	101

Table 6.16: Teachers' interactions with groups

The difference in the total frequency of teachers' turns with these particular groups during independent work and whole-class teacher-led discussion is stark: Vicky's turns are approximately treble that of Abigail's. However, Abigail uses opportunities during independent work to support talk awareness. Approximately a third of both teachers' turns during whole-class teacher-led discussion are concerned with talk awareness.

The frequencies presented here reinforce the findings of the teacher audio analysis: Vicky interacted more during both students' independent work and during wholeclass teacher-led discussion than Abigail, suggesting that she monitored independent work and engaged in more teacher-student dialogues.

The findings here facilitate further exploration of the role of the teacher in supporting *talk awareness*. Unlike Vicky, Abigail prompted 5 turns during students' independent work related to talk awareness. However, to recall the teacher audio analysis, a large proportion of Abigail's interactions during independent work were coded as 'transmissive'. Therefore, these particular interactions may represent Abigail's monologic explanations of talk features and analysis. Vicky initiated approximately treble the interactions during whole-class teacher-led discussion related to talk awareness. Again, recalling the teacher audio analysis, Vicky was more inclined to exploratory turns. Therefore, she may have grappled more with talk awareness in *dialogue* with students. While the preparatory analysis observations suggest

Abigail's greater preoccupation with talk awareness, talk analysis may be more the object of her *monologic explanations*, as opposed to the object of Vicky's *dialogues* with students. However, it is also relevant to recall the different ways in which the teachers managed student responses during reflection: while Abigail would often deliver explanations revealing her very good knowledge in this area, Vicky would elicit brief responses, often accepting and praising students' analyses, regardless of their 'quality', possibly accounting for the higher frequency of codes.

6.3.2 How do students demonstrate talk awareness and how does their awareness relate to the collaborative talk framework?

The frequency of codes presented below signal turns demonstrating students' talk awareness in relation to the 3 strand collaborative talk framework: *participating, understanding and managing* (see table 6.2). These codes account for students' interactions independent of the teacher, as well as in response to the teacher during independent work and whole-class teacher-led discussion.

Code	School 1	School 2
TA:P Participating Talk Awareness	112	201
TA:U Understanding Talk Awareness	84	114
TA:M Managing Talk Awareness	62	102
Total	258	417

Table 6.17: Talk awareness

The data here shows that groups in School 2 engaged in talk analysis or demonstrated talk awareness more frequently than groups in School 1. Of the coded turns, students' talk awareness in both schools was related most frequently to the *participating* strand of the collaborative talk framework, then to *understanding* and least to *managing*. However, students in School 2 demonstrated a more equal awareness of *understanding* and *managing* than students in School 1.

The findings presented in section 6.3.1 reveal that Vicky prompted students to demonstrate talk awareness during independent work and whole-class teacher-led discussion more frequently than Abigail. Additionally, the data here shows that Vicky's groups demonstrated more talk awareness than Abigail's when talking independent of the teacher. The frequent talk expectations made explicit by Vicky (section 6.2.5) and the feedback elicited during *Reflection* (section 6.2.4) likely supported the development of students' talk awareness, suggesting that this type of teacher input is more effective in supporting the development of talk awareness than delivering explanations on talk features. However, it is important to note that, in the same way that the codes do not reveal the 'quality' of the responses that teachers praise, these codes do not reveal the 'quality' of students' talk analysis turns.

Students may have commented most on *Participating* because its features were more familiar, and likely reflected 'rules' reinforced by teachers. Students demonstrated more awareness of the way in which they participated by contributing an idea, taking a turn, respecting others and so on, but were less aware of how they responded to others or understood them. And they were less conscious of the way in which a group might approach and organise a task. Particularly early on, students were more concerned with their role as an individual, above the unity of the group. However, the data here does not reveal how students developed in their awareness of these strands.

6.3.3 Analysing collaborative talk: How can students' collaborative talk and its development be conceptualised?

To analyse students' collaborative talk and its development, codes were determined deductively, based on the collaborative talk framework but developed inductively, informed by preparatory analysis observations.

Participating	Understanding	Managing
PC1-3: Contribute	UT1-3: Task	ME1-3: Encouragement
PCH1-3: Challenge	UI1-3: Ideas	MO1-3: Obstacles
	UA1-3: Agreement	MOr1-3: Organization

Table 6.18: Collaborative talk codes, sub-codes and numbers

The codes *P*,*U*,*M* (*participating*, *understanding*, *managing*) signal the *type* of turn taken in relation to the collaborative talk framework. The codes were assigned subcodes to capture a specific feature of each strand. *Participating* sub-codes signalled a student's *contribution*, perhaps an idea or suggestion, and signalled a *challenge*, possibly a counter-argument or alternative. *Understanding* and *managing* subcodes signalled the ways in which participation was shaped. Participants may have signalled understanding or sought clarification by asking a question related to the *task* or participants' *ideas*. They may establish understanding amongst participants by seeking *agreement*. Managing the talk may involve *encouraging* participation, overcoming *obstacles* and *organising* an approach to the task. Coding students' collaborative talk in this way was intended as a means of examining whether teachers' explicit reference to the framework impacted students' talk.

However, coding trials showed that coding students' talk according to the framework alone failed to capture fully how participants responded to each other, connecting or constructing ideas or agreement, and how this developed over the duration of the

unit. Preparatory analysis suggested that group participants' talk became more 'attuned,' perhaps representing intersubjectivity. Therefore, sub-codes were assigned a number from 1-3 to represent the cohesiveness of a turn to the preceding or subsequent turn.

For example, *PC1* signals a contribution or suggestion given without justification and *divergent* from the previous contribution, *PC2* signals a suggestion *connected* to or in keeping with the previous contribution while *PC3* signals the *development* of a contribution or suggestion adopted by the group.

Determining these codes formed an important stage of the analysis and the conceptualization of collaborative talk.

6.3.4 How do groups in School 1 and School 2 *participate, understand* and manage in collaborative talk?

The table below presents the total frequency of turns coded as *Participating, Understanding and Managing* in School 1 groups' and School 2 groups' collaborative talk independent of the teacher, as well as the frequency of sub-codes and numbers.

Code	School 1	School 2
PC1: Contribution	192	252
PC2	612	743
PC3	160	219
Total	964	1214
CPH1: Challenge	37	48
PCH2	157	131
РСН3	15	14
Total	209	193
Participating Total	1177	1407
UT1: Task	19	36
UT2	78	111
UT3	11	8
Total	108	155
UI1: Ideas	18	28
UI2	160	211
UI3	24	55
Total	202	294
UA1: Agreement	31	28
UA2	95	151
UA3	39	46
Total	165	225
Understanding Total	475	676
ME1: Encouragement	11	22
ME2	36	50
ME3	6	6
Total	53	78
MO1: Obstacles	4	25
MO2	21	49
M03	1	3
Total	26	77
MOr1: Organization	2	16
MOr2	159	156
MOr3	53	47
Total	214	219
Managing Total	293	374
Total	1945	2457

Table 6.19: Collaborative talk frequencies

Of the turns coded, groups in School 1 took a total of 1945 turns while groups in School 2 took 2457 turns. Students' turns were coded most frequently as

participating, then *understanding* and least as *managing*, reflecting the pattern of talk awareness (section 6.3.2).

If the total codes are expressed as percentage values, the frequency of *participating*, *understanding and managin*g codes within periods of groups' collaborative talk are approximately the same in both schools:

	Participating	Understanding	Managing
School 1 (of 1945 turns)	60%	25%	15%
School 2 (of 2457 turns)	57%	28%	15%

Table 6.20: Total frequency of P,U,M codes converted to percentages

However, sub-codes and numbers reveal some subtle differences within *participating* and *managing*:

Participating:			Challenge	Sub-code	Divergent (1)	Connected (2)	Developed (3)
				no:			
School 1	(of	1117	18%	(of 209	18%	75%	7%
turns)				turns)			
School 2	(of	1407	14%	(of 193	25%	68%	7%
turns)				turns)			

Table 6.21: Percentage value of students' challenge turns and whether they were divergent, connected or developed

Expressing the frequency of *challenge* codes (a sub-code of participating) as percentage values reveals that within their collaborative talk, groups in School 1 were more inclined to challenge than groups in School 2. By expressing the code numbers 1-3 as percentage values, further differences are revealed. The frequency of *divergent* challenges is higher in School 2. Connected challenges are more frequent in School 1. However, groups in both schools resolved or developed challenges approximately the same number of times.

Managing:	Encouraging participation	Obstacles	Organisation of task
School 1 (of 293 turns)	18%	9%	20.5%
School 2 (of 374 turns)	21%	20.5%	58.5%

Table 6.22: Frequency of managing sub-codes converted to percentages

Expressing the frequency of *encouraging participation, obstacles and organisation of task* codes (sub-codes of managing) as percentage values reveals further subtle differences. During collaborative talk, groups in School 2 were more likely to encourage other group members to contribute than groups in School 1. Groups in School 2 managed or attempted to manage obstacles in over double the frequency of turns than those in School 1. And, groups in School 2 organised their approach to tasks more than groups in School 1.

Groups in both schools were allowed approximately the same period of time to engage in tasks independent of the teacher. Within that time, more turns were coded in School 2 than in School 1. Predictably, *participating* turns were most frequent, representing a participant's contribution to the talk. Although *participating* codes were fewer in School 1, *challenge* codes were fairly equal in both schools. This suggests that groups in School 1 may have been more inclined or confident in challenging each other during talk. There were more *divergent* challenges in School 2 suggesting a higher number of participants who based challenges on personal preference or refused to compromise. Nevertheless, groups in School 2 were more inclined to seek understanding of tasks and ideas and ensure shared agreement. In a similar vein, participants in School 2 were more encouraging of each other's participation, suggesting positive group relationships. This may suggest better unity amongst groups in School 2, or a willingness or perseverance to overcome disagreements.

Though the data here cannot verify this, the preparatory analysis suggested that in some groups, turns lengthened as the unit progressed, possibly indicating more elaborated explanations and improved listening.

6.3.5 What other features of students' collaborative talk emerged in coding?

The table presents the frequency of students' *early starts*: talking about the task while the teacher was still talking or giving instructions. *Off-task* signals students' off-task turns, while *obstacles* signals turns which make talk or task progression difficult. *Leader strategies* signal turns which serve to take control or promote a personal preference.

Code	School 1	School 2
ES: Early Start	17	4
OT: Off-Task Talk	121	79
O: Obstacles	24	26
LS: Leader Strategies	17	49

Table 6.23: Additional features of students' talk

Students in School 1 started tasks early considerably more times than students in School 2. Students in School 1 were also more inclined to off-task talk than students in School 2. Students in both schools presented a similar number of obstacles to their groups, while over double the frequency of leader strategies were coded in School 2 than in School 1.

The tendency of students in School 1 to start tasks early may suggest an eagerness to begin the task and possibly frustration at Abigail's lengthy task-setting. While this may not appear to bear on students' collaborative talk, preparatory analysis suggested that when students started the task early, they do so incorrectly or with an insufficient understanding of task requirements. As a result, students lacked shared understanding of the goal and management of the task. As the unit progressed, teachers were encouraged to explain tasks in brief and transfer responsibility for understanding the task to the students.

Fewer interventions by Abigail during groups' independent work (section 6.2.3) and fewer explicit talk expectations (section 6.2.5) may have made off-task talk and behaviour easier for students in School 1. The codes here do not account for the period of time spent talking off-task; however, recalling the difference in the total frequency of groups' turns in collaborative talk suggest that students in School 1 talked less than those in School 2 (see table 6.19). The codes therefore, and supported by preparatory analysis, suggest that groups in School 1 sustained their talk for shorter periods than those in School 2. Recalling the codes and sub-codes presented in the previous section also supports the interpretation that students in School 2 were more likely to encourage participation and manage obstacles, likely discouraging off-task talk and behaviour in their groups. Furthermore, their better management of tasks may have supported groups in sustaining their talk. This supports the purpose of coding off-task talk: not to condemn it as 'bad' talk but to examine whether students are able to or develop skills to manage it and their peers.

Preparatory analysis and macro-analysis coding reveals that the code LS usually signalled the initiation of a vote by a participant as a means of 'winning' a personal preference or choice. There may be a link between the use of the vote as a leader strategy and other participants' passive agreement, undermining the purpose of collaborative talk.

6.4 Groups

At this stage, each group will be referred to by their group name. In most cases, these names were determined by the groups themselves (it is interesting to note groups' tendencies to use 'Team' instead of 'Group', suggesting a competitive edge).

Scho	pol 1	School 2		
Group 1.1	Team Batman	Group 2.1	The Superheroes	
Group 1.2	Team Gossip	Group 2.2	The Better Group	
Group 1.5	The Talkers	Group 2.4	The Business	
Group 1.6	The Dream Team	Group 2.6	The Lead Team	
Group 1.7	The Shoppers	Group 2.7	The Mean Team	

Table 6.24: Group names

6.4.1 How do groups in School 1 interact with the teacher and engage in collaborative talk?

The table presents the total code frequencies across the teaching unit for each group in School 1. The codes presented here reveal the differences between each group's interactions with the teacher and make more distinct the differences between groups' collaborative talk.

Group:							
		Team Batman	Team Gossip	The Talkers	The Dream Team	The Shoppers	
Early Start		7	6	0	3	1	17
Teacher talk during independent work		3	18	15	8	3	50
Teacher led talk		9	13	16	8	8	55
Off-task		34	22	7	36	22	121
Obstacles		2	0	4	15	3	24
Leader strategies		2	12	2	0	1	17
Talk awareness	Р	3	36	34	21	18	112
	U	35	12	18	14	5	84
	М	17	14	17	11	3	62
Participating:	1	22	62	35	44	29	192
Contribution	2	85	62	178	134	153	612
	3	15	31	30	36	48	160
Challenge	1	1	8	15	10	7	37
	2	13	22	86	16	20	157
	3	2	10	3	0	0	15
Participating total		138	195	347	240	257	1177
Understanding:	1	0	15	0	3	1	19
Task	2	8	17	25	14	14	78
	3	0	5	3	2	1	11
Ideas	1	0	15	0	2	1	18
	2	6	13	53	44	44	160
	3	5	3	8	2	6	24
Agreement	1	1	5	8	5	12	31
	2	9	19	29	19	19	95
	3	3	13	14	5	4	39
Understanding total		32	105	140	96	102	475
Managing:	1	2	7	0	2	0	11
encouraging	2	7	3	15	6	5	36
participation	3	3	0	3	0	0	6
Obstacles	1	1	0	0	3	0	4
	2	6	8	4	3	0	21
	3	0	0	1	0	0	1
Organisation	1	0	1	0	1	0	2
	2	27	26	48	31	27	159
	3	6	16	12	14	5	53
Managing total		52	61	83	60	37	293
Total		222	361	570	396	396	

Table 6.25: School 1 groups' talk

Teacher Interactions

During students' independent work, Abigail interacted most frequently with *Team Gossip* and *The Talkers*. During whole-class interaction she also interacted most frequently with individuals from *Team Gossip* and *The Talkers*. Abigail therefore

interacted least with *Team Batman*, *The Dream Team* and *The Shoppers*. Abigail interacted between 11 and 31 times with participants of each group. She interacted more equally with groups during independent work than during whole-class teacher-led discussion (range= 8; 15 respectively).

Team Batman

Team Batman were most likely to start tasks early and engage in off-task talk. Although they demonstrate a fairly high awareness of *understanding* strategies, the frequency of their *participating, understanding and managing* in collaborative talk is the lowest of the groups. Nevertheless, they did organise their approaches to the tasks.

Team Gossip

Team Gossip interacted most frequently with the teacher during whole-class teacherled discussion and, in comparison to other groups, frequently during independent work. Despite this, and the high frequency of talk awareness codes, their *participating* turns are amongst the lowest of all the groups and the frequency of leader strategies is the highest. The frequency of unsuccessful or passive attempts at encouraging participation is 7, high in comparison to other groups.

The Talkers

The Talkers, along with Team Gossip, interacted most with the teacher and were, by far, the least likely to engage in off-task talk. The frequency of talk awareness turns is also the highest of all the groups. They achieved the highest frequency of turns in *participating, understanding and managing*. The group asked questions or sought understanding most frequently but also challenged considerably more than other

groups. Despite the high frequency of reasoned challenges, few resulted in compromise or were developed. The group also organised their approach to the tasks.

The Dream Team

The Dream Team was off-task more often than any other group and its participant(s) were also most likely to set obstacles. Despite this, few attempts were made to manage obstacles and there are no coded leader strategies. Talk awareness is also lower than other groups. Despite this, *participating* codes are fairly high, though *understanding* codes are low. Nevertheless, the group achieve a high frequency of developed turns.

The Shoppers

This group interacted least with the teacher during independent work and teacher-led discussion. Despite this, the group achieved the highest frequency of developed contributions. There are few references to *understanding* and *managing* in their talk awareness, though they demonstrate understanding frequently in their collaborative talk by asking questions etc related to task, ideas and agreement.

Discussion

Groups who interact least with Abigail, or are monitored less during independent work, may be more inclined to off-task talk. The teacher interacted least with *The Shoppers, Team Batman* and *The Dream Team* whose turns were coded off-task between 22 and 36 times. However, *Team Gossip* interacted frequently with the teacher but also talked off-task 22 times, compared with *The Talkers* low frequency

of 7. *The Shoppers* may have talked off-task less because of the researcher's position close to them during the early part of the unit.

In this class, groups who interact more frequently with the teacher during independent work and whole-class teacher-led discussion do not necessarily talk more frequently or effectively in collaborative talk. The total frequency of *The Talkers* coded turns was 570, while the total of *Team Gossip's* was 361. The frequency of *The Talkers* turns and the infrequency of their off-task talk suggests that the group were able sustain their talk; however, the group only developed 30 contributions compared to *The Dream Team's* 36 and *The Shoppers'* 48. And in fewer turns, *Team Gossip* develops contributions 31 times. Therefore, in this class, more frequent turns does not result in the better development of ideas. *Team Gossip* and *The Talkers*, in part due to teacher-initiated interactions, did however demonstrate more talk awareness than other groups (62; 69 respectively). This suggests that in this class simply encouraging students' awareness of talk strategies is not enough to ensure they apply these skills during collaborative talk.

The data suggests that although Abigail's monitoring of independent work and interactions with students may encourage more sustained talk, this does not necessarily affect the quality of their collaborative talk. Furthermore, an increased awareness of collaborative talk processes does not necessarily have a positive effect on participation in collaborative talk.

The participant(s) of *Team Gossip* and *The Talkers* may have been more eager than other groups to interact with the teacher, particularly during whole-class teacher-led discussion. Preparatory analysis suggested that when eliciting feedback Abigail would rely on the 'hands up' approach. If the teacher relied on students to volunteer

responses to her questions, then participants in *The Talkers* and *Team Gossip* were the most eager respondents. However, despite *Team Gossip*'s frequent interactions with the teacher, they are off-task the same number of times as *The Shoppers*, with whom the teacher interacts least. This suggests that *Team Gossip*, while keen to interact with the teacher and get the 'correct answer', were less concerned about their interactions independent of the teacher. This may suggest that this group failed to recognise the validity of collaborative talk. Their reluctance to collaborate is reinforced by a high frequency of leader strategies, when compared to other groups.

What is also stark in *Team Gossip* and *The Talkers* compared to *Team Batman, The Dream Team* and *The Shoppers* is the frequency of challenges (40; 104; 16; 26; 27 respectively). Both *Team Gossip* and *The Talkers* were far more inclined to challenge; and, while 'challenge' is considered a positive feature of collaborative talk it may also indicate unresolved challenge or dispute. *The Talkers* challenged each other frequently but resolved challenges comparatively infrequently. While different strategies emerge within these groups, both groups appear to take an individualistic approach, demonstrating a concern with individual preference and reluctance to compromise and collaborate.

This competitiveness may be reinforced by a desire to 'impress' the teacher on an individual level, driven by a perception of teacher-student interaction as more valid than interaction amongst peers. This argument is reinforced by the effective collaborative talk observed in groups who did not interact frequently with the teacher. Perhaps those less 'concerned' with the validation that might result from teacher-student interaction were better able to forge group relationships and engage in genuine collaboration. If the teacher's role in supporting the development of collaborative talk is to be effective, there may need to be a closer relationship

between the principles espoused in teaching collaborative talk and those implied in the teacher's interactions. Then, developed talk awareness may usefully inform participants' engagement in collaborative talk.

6.4.2 How do groups in School 2 interact with the teacher and engage in collaborative talk?

Groups							
		The Superheroes	The Better Group	The Business	The Lead Team	The Mean Team	
Early Start		0	1	1	1	1	4
Teacher talk during		14	16	26	59	25	140
independent work Teacher led talk		20	22	27	22	20	153
Off-task		26 F	22	37	32	36	79
Obstacles		5	24	1	19	30	35
		2	9 1	0	15	9	49
Leader strategies	Р	8	-	1	39	0	201
Talk awareness	-	33	47	46	42	33	
	U	27	18	31	17	21	114
Deuticination	M	31	14	25	11	21	102
Participating: Contribution	1	51	68	26	54	53	252
0011010001011	2	216	64	188	217	58	743
	3	38	36	90	17	38	219
Challenge	1	8	7	2	22	9	48
	2	27	3	31	46	24	131
	3	1	2	4	4	3	14
Participating total		341	203	342	360	198	1444
Understanding: Task	1	17	1	1	8	9	36
TUSK	2	17	11	24	29	30	111
	3	0	2	4	0	2	8
Ideas	1	8	7	0	5	8	28
14003	2	59	15	63	47	27	211
	3	15	15	11	2	12	55
Agreement	1	5	17	1	5	0	28
Agreement	2	45	13	30	50	13	151
	3	0	9	24	0	13	46
Understanding total	5	166	94	156	146	114	676
Managing:	1	5	1	0	13	3	22
encouraging	-		-	Ŭ		5	
participation							
	2	8	8	18	13	3	50
	3	3	0	2	0	1	6
Obstacles	1	6	3	0	4	12	25
	2	10	11	4	12	12	49
	3	0	1	0	2	0	3
Organisation	1	0	6	1	5	4	16
	2	33	17	35	37	34	156
	3	1	5	27	3	11	47
Managing total		66	52	84	89	83	374
Total		573	349	582	595	395	
Table 6 26: School	2 groupo'	tolk					

Table 6.26: School 2 groups' talk

Teacher Interactions

In total, Vicky interacted most with *The Lead Team* and least with *The Better Group*. Vicky interacted considerably more with *The Lead Team* during independent work than any other group. She interacted least with *The Superheroes* during independent work. During teacher-led whole-class discussion, Vicky interacted fairly equally with all groups.

The Superheroes

The Superheroes interacted with the teacher a total of 50 times, were off-task 5 times and used leader strategies 8 times. The teacher interacted least with this group during independent work. This group demonstrated talk awareness in 91 turns. This group used a high frequency of leader strategies but also initiated the highest frequency of *understanding* turns.

The Better Group

The Better Group interacted with the teacher least, and were off- task more than most groups. Compared with other groups, participants also set obstacles fairly frequently, making it difficult for talk to progress. The group initiated *understanding* strategies least of all the groups. This group demonstrated talk awareness in 79 turns.

The Business

The Business interacted with the teacher more than most groups, particularly during whole-class teacher-led discussion. They talked off-task only once. This group demonstrated talk awareness more than any other group. This group initiated the

highest frequency of *understanding* turns, second only to *The Superheroes*. This group also achieved the highest frequency, by far, of developed contributions.

The Lead Team

The Lead Team interacted with the teacher considerably more than other groups during their independent work. They talked off-task more than *The Superheroes* and *The Business*, but less than *The Better Group* and *The Mean Team*. *The Lead Team* initiated the highest frequency of leader strategies and the highest frequency of obstacles. This group initiated the highest frequency of challenges and the highest frequency of *divergent* challenges of all groups. This group also achieved the lowest frequency of developed contributions. This group demonstrated talk awareness in 70 turns, the least of the groups.

The Mean Team

The Mean Team interacted with the teacher less than *The Lead Team*, approximately the same as *The Business* but more than *The Superheroes* and *The Better Group* during independent work. They talked off-task 30 times, more than other groups. This group also initiated the highest frequency of unsuccessful attempts to manage obstacles. This group demonstrated talk awareness 75 times in total, low compared to most groups.

Discussion

In this class, the groups with fewest coded turns were also more likely to talk offtask. However, in this class, there doesn't appear to be a link between off-task talk and teacher interaction: the group who interact the most with the teacher talked off-

task in 19 turns (*The Lead Team*) while the group who interacted least with the teacher talked off-task in 24 turns (*The Better Group*).

The teacher may have interacted more frequently with *The Lead Team* to monitor and encourage appropriate behaviour, indicated by the high frequency of coded obstacles (15) compared to other groups. This is supported by the high frequency of teacher interaction during students' independent work (59).

The highest frequency of *understanding* turns occurred in *The Superheroes* and *The* Business; however, understanding strategies may function differently in different groups. The Superheroes initiated a high frequency of leadership strategies compared with other groups. Despite the high frequency of understanding turns, no agreements were developed fully between participants. The only other group who failed to develop full agreement was The Lead Team, who initiated the highest frequency of leader strategies, by far. Another stark feature of this group is frequent obstacles and challenges, several of which were divergent. This group also achieved the fewest developed ideas in their talk. This suggests, as in School 1, that leader (or voting) strategies may suggest a group is struggling to engage collaboratively or to overcome disagreement. Linking leader strategies and understanding, passive agreement may be an outcome of voting; voting does not result in developed ideas and agreement. In contrast, The Business engaged in the highest frequency of understanding strategies, second to The Superheroes, and developed contributions, suggesting that seeking genuine understanding of each other's ideas can lead to the joint construction of ideas.

In this class, talk awareness is not always demonstrated more frequently by the group who interacts most frequently with the teacher. For instance, *The Business*

demonstrated talk awareness by making strategies for collaborative talk explicit, independent of the teacher. This group demonstrates most talk awareness and achieve the highest frequency of jointly constructed ideas. In this class therefore, talk awareness may support students' in their collaborative talk.

The data has shown that Vicky interacts frequently with students and consistently across groups. As suggested previously, the frequency of her interactions suggest the value she places on dialogue, a value which is likely perceived by students who in turn recognise the validity of collaborative talk. In this context, and when the teacher demonstrates what she espouses and demands, developing students' talk awareness may support the development of collaborative talk independent of the teacher.

6.5 Group Narratives

Drawing on field notes and qualitative descriptions written during preparatory and macro-analysis, group 'narratives' were formed and are presented here. The narratives support interpretations of the coding and foreground the micro-analysis presented in the following chapter. The tables present the group name, participants' names and their pre and post-implementation scores for the Interacting & Responding assessment for Speaking & Listening at GCSE (Edexcel, 2010).

6.5.1 School 1

Team Batman

Group Name	Group Number	Participants' Names	Pre-	Post-
			Implementation	Implementation
			Score	Score
Team Batman	1.1	Olivia	12	14
		Naomi	11	11
		Sarah	10	10
		Gemma	11	12

Table 6.27: Team Batman

Themes: Peers, Managing, Teacher, Relationships

Over the duration of the unit, *Team Batman* interacted only 3 times with the teacher during independent work, and 9 times during whole-class discussion. This group were, as a result, largely unmonitored and unsupervised during their collaborative activities. Observations suggest that, therefore, peer influence may have been particularly relevant in shaping and influencing the development of their collaborative talk.

Naomi was a particularly influential participant: she would frequently disrupt progress or initiate lengthy periods of off-task talk. However, as the unit progressed, relationships between participants developed and they became more focused on the goal of the unit. Instances of off-task talk decreased and, Olivia in particular, developed the ability to manage Naomi's behaviour without causing conflict. A notable changing point is during Lesson 5 (The X-Factor) when for the first time participants persevere with the collaborative task, despite Naomi having turned around to hold a conversation with the neighbouring group. Throughout this collaborative task, Olivia makes frequent references to the task's requirements in order to clarify her ideas and the decision-making process. Olivia continued to emerge as the 'manager', encouraging participants' contributions and making the purpose of tasks clear.

The development of Olivia's strategies may have been supported by opportunities for analysing examples of talk: Olivia's's role as 'manager' appears to be strengthened by an appropriation of Apprentice-style language (clips of The Apprentice were watched during lesson 7&8). However, the leader-like role she adopts then appears to challenge Naomi's authority, prompting her to engage and rival Olivia for the 'lead' position, resulting in more instances of genuine collaborative talk.

Observing *Team Batman* highlighted the challenges faced by students to juggle discourses and expectations within the classroom: those of the teacher, their peers and histories. However, as this group progress through the unit they become more cohesive, aligning their talk with the expectations and purpose of collaborative talk.

Team Gossip

Group Name	Group Number	Participants' Names	Pre-	Post-
			Implementation	Implementation
			Score	Score
Team Gossip	1.2	Willow	12	13
		Zoe	10	13
		Katie	12	14
		Lisa	9	11

Table 6.28: Team Gossip

Themes: Teacher, Expectations, Leadership, High ability

As noted earlier, Abigail interacted most frequently with *Team Gossip* during independent work and frequently during teacher-led discussion. Willow was most keen to respond to the teacher's questions during both episodes. Despite this, Willow appeared complacent about her collaborative talk ability, and the unit in general, though dominated the group's talk throughout.

The group initially appeared harmonious but this harmony appeared to deteriorate as the unit progressed, possibly in response to Willow's dominance. Willow appeared to be driven by her perception of the teacher's expectations, by a desire to complete tasks quickly and gain the teacher's recognition. In keeping with this, her talk during collaborative activities was focused on the goal but not the exploratory talk which should have preceded the decision. And her responses during teacher-led discussions were of greater quality than her contributions during collaborative talk.

As the unit progressed, Willow emerged as leader, using voting strategies to enforce her decisions. Though she appeared to develop in *Managing* and *Understanding* strategies, she used these in sophisticated ways to reinforce her decisions. At points, the group appeared less cohesive as participants were more passive in their responses.

There may be a link here between teacher expectations and leadership: driven by a desire for individual achievement and teacher recognition, Willow was unable to interact collaboratively.

The Talkers

Group Name	Group Number	Participants' Names	Pre-	Post-
			Implementation	Implementation
			Score	Score
The Talkers	1.5	Carla	13	15
		Ruth	13	15
		Eloise	11	11
		Millie	10	12

Table 6.29: The Talkers

Themes: Teacher, Leadership, High ability, Challenge, Individual achievement, Assessment, Self-evaluation, Talk awareness

The Talkers included two high achieving, confident participants and two less able, quieter participants. They were a motivated group, able to sustain their talk better than others, and took the *Reflect & Evaluate* task seriously. Together with *Team Gossip*, *The Talkers* interacted most frequently with the teacher, particularly Carla and Ruth who were keen to respond to her questions during whole-class discussion.

The Talkers demonstrated talk awareness during the first lesson: they evaluated their talk, using a specific example, to describe how they built upon ideas, were respectful but could have encouraged more contributions. Carla and Ruth emerge as the most dominant participants during the second lesson, both eager to promote personal preferences and challenge the other. Despite this, they evaluate their talk honestly, noting interruptions and agreeing on areas for improvement. In response to the teacher, Carla claims to have engaged in the talk more 'consciously' than before.

In the lessons that follow, tensions increase between Ruth and Carla when they sit next to each other, causing the group's talk to appear 'one-sided'. The frequency of challenges increase and few are resolved; contributions become detached as Ruth and Carla pursue their individual preferences. In the lesson which follows, Ruth and Carla amend their talk by listening carefully and trying to compromise. However, despite a reasoned discussion and apparent shared decision, at the very last moment, Eloise signals her disagreement. This resulted in a harsh set of written self-evaluations: participants state their failure in the task. This appeared to disrupt the 'equilibrium' of the group and in the following lesson, Carla and Ruth return more dominant than before. Carla initiates a vote on two occasions, once rejecting the outcome because it wasn't her preference. Carla sets obstacles for Ruth by diverting the talk or ignoring her input. Though there are moments of idea development, Carla emerges as leader. Participants' responses to her are indicative of this: *am I doing this Carla? Am I allowed...? Do you want me to..?*

After observing this group, I referred to the interview data to establish whether the group had reflected upon their participation. The group explained that in promoting individual ideas, and wanting what they perceived as the best idea to be accepted, that they were failing to achieve consensus: *'(we have) gone downhill...we interrupt each other more...such strong ideas that we're trying to push forward and they're clashing...conflict...so many ideas whizzing around...'* Millie described *'two teams within 1'* and this was developed further by a description of working individually as an *'awkward boundary'* which they tried to overcome but which was *'hard to when you really want your idea...we have strong minds... '* When asked to consider why they were driven to promote individual preference and reluctant to compromise, Ruth and Carla described the pressure of assessment as a factor.

Like *Team Gossip*, *The Talkers* include participants who are very driven for individual achievement and eager to respond to 'impress' the teacher. The teacher interacted most frequently with these two groups, though she may have made assumptions about the success of their collaborative talk. Though *The Talkers* develop in their talk awareness, and their talk is at its best when participants engage 'consciously', their talk and the cohesiveness of the group deteriorates as the unit progresses. Students very concerned with individual assessment may struggle to achieve genuine collaborative talk because its purpose undermines individual goals. Developing group identity and cohesiveness may therefore be important in order to reinforce shared responsibility and interest.

The Dream Team

Group Name	Group	Participants' Names	Post-	Pre-
	Number	Implementation		Implementation
			Score	Score
The Dream Team	1.6	Ariadne	9	13
		Mollie	10	16
		Kathryn	9	15
		Grace	8	14

Table 6.30: The Dream Team

Themes: Peers, Choice, Challenge, Managing

Like *Team Batman*, the teacher interacted infrequently with *The Dream Team*. This group included a 'challenging' student, Ariadne, who often behaved inappropriately and was rude to the teacher. Her attendance was erratic but as a result, the influence she had on the group's talk is stark. However, there are also episodes when the group achieve developed collaborative talk, challenging assumptions made about their engagement during implementation.

In the first lesson, Grace makes virtually no contribution to the talk and appears intimidated by Ariadne. During the second lesson, the group are able to identify several features in the 'effective talk' video; Ariadne is open to ideas and questions during the collaborative task, though they fail to take the *Reflect & Evaluate* task seriously, stating that they did 'everything well.' During the third lesson, Grace comments on how participants in the 'ineffective talk' video amended and developed an idea. Despite this good start, Kathryn 'can't be bothered' so they remain largely off-task. During the fifth lesson, Ariadne is absent and Grace becomes an active participant, often initiating the talk; participants analyse the script, recognising the use of questions for understanding. In the sixth lesson, Ariadne returns and is an obstacle to progress throughout. When Ariadne is absent in the seventh lesson, the remaining participants engage in sustained collaborative talk: they contribute reasoned suggestions, connect and develop ideas, question and ensure understanding, agree explicitly, review choices and check task requirements. During the final lessons the group must agree on a theme for their iPad App. Instead of using votes or other leadership strategies, Ariadne simply repeats her idea until it is accepted; however, the other participants do challenge and guestion Ariadne's idea. Accepting her idea may have been a means of managing her participation. During the ninth lesson, all participants engaged in developed collaborative talk.

The Dream Team provides examples of both the 'best' and 'worst', often challenging trends which emerge in other groups. There is clearly an issue of personal responsibility, motivation and choice in students' collaborative talk. However, like *Team Batman*, a lack of teacher intervention may have reinforced peer influence in this group. Nevertheless, participants did develop strategies to manage Ariadne,

Grace developed in confidence and the group engaged, though erratically, in periods of sustained collaborative talk.

This group raises an ethical concern about grouping students for prolonged periods. Ariadne's presence affected Grace's participation and though Katie and Mollie managed her well, she still hindered their progress. However, participating in the group had a positive impact on Ariadne, evident in her score increase. The difficulties encountered in this group may have been improved by closer teacher monitoring.

The Shoppers

Group Name	Group Number	Participants' Names	Pre-	Post-
			Implementation	Implementation
			Score	Score
The Shoppers	1.7	Miriam	13	14
		Krissy	11	16
		May	11	13
		Rose	8	12

Table 6.31: The Shoppers

Themes: Peers, Relationships, Understanding, Teacher, Task

Miriam, though not a dominant presence, is the biggest contributor and appears to influence May's engagement. Rose started the unit as a reluctant contributor and Krissy was new to the school.

During the second lesson, Miriam and Krissy are absent, which prompts an interesting episode of talk during the third lesson: in May's absence, Rose is relied upon to explain the task started in the previous lesson, serving as a platform for their talk as they question and challenge previous suggestions, making amendments

according to the agreements of this 'new' group. When tasks were connected or developed across lessons, participants would have to re-cap, review and amend previous decisions, prompting 'foundations' for effective talk, as observed within several groups.

During their analysis of the 'ineffective talk' video, an interesting misconception is expressed: organisation of a task is interpreted as a leadership strategy. During the fifth lesson, there is a change in their talk, affected by Miriam's 'bad mood'. Though Miriam doesn't create obstacles explicitly, she appears to control whether and when the group engage with the task. Despite her efforts, and although glimpses of Krissy's talk suggest her good ability, she is unable to manage Miriam, probably because of a lack of relationship history. As elsewhere, this group may challenge assumptions made by the teacher: Rose was regarded as a 'quiet' student but here she simply isn't given the opportunity to talk and isn't able to promote her opinion (though she goes on to develop in confidence and contributions).

During the final lessons, the group appear to have developed relationships, are more cohesive and engage in effective collaborative talk. Three members of the group suggest an idea for an iPad App but aware that Krissy is unfamiliar with the concept they get a laptop and explain the idea in detail so that Krissy is then able to contribute equally, with shared understanding. Achieving this shared understanding creates a platform on which they can develop the idea, challenge and question. They sustain their talk, seek agreement, clarify the task requirements, and manage the task well in order to reach the goal. The *Reflect & Evaluate* task is notable for its explicit management and planning of the task next lesson: Miriam suggests that they

all prepare their ideas so that they are able to start the next lesson with a 'clear understanding of each other's ideas and meanings.' Though Miriam is still an influential and significant participant, she has become less imposing as other participants are able to challenge and contribute confidently.

Like *Team Batman* and *The Dream Team*, the teacher's input is infrequent so peer influence is strong. However, as this group develop in their relationships, they develop in their talk, with a particular emphasis on understanding each other and their contributions.

6.5.2 Conclusion

Apparent in these groups is the inconsistency of their interactions with the teacher and their engagement with the unit. The teacher interacted most frequently with *Team Gossip* and *The Talkers*, both of whom included high ability students, highly concerned with individual achievement and GCSE assessment. For this reason, students within these groups were the most likely to interact with the teacher during whole-class discussion, driven by the need to provide a 'correct' response and demonstrate understanding. These students frequently provided responses to the teacher's questions that did not reflect the poor quality of their contributions to collaborative activities. Therefore, the students most eager to please the teacher, to gain praise and recognition also emerged as the most dominant during collaborative talk, the most likely to adopt leader strategies and enforce personal preferences, failing therefore to achieve genuine collaborative talk. However, *The Talkers* were also highly reflective and developed talk awareness which did at times support them in amending their approach to their talk. *The Talkers* were able to sustain their talk

for the longest periods, likely reinforced by their relationship with the teacher and her expectations. Nevertheless, the conflicting expectations of a transmissive teaching style and individual, assessment-driven classroom was likely too conflicting with the nature and purpose of collaborative talk.

More effective periods of collaborative talk occurred within groups who interacted less with the teacher. Participants developed the ability to better challenge and manage their peers. Over the duration of the unit, they were able to lessen the influence of dominating or difficult peers and adapt their discourse. Perhaps the absence of teacher discourse allowed participants to grapple with their peers, forcing and exposing effective forms of talk and individual responsibility. However, the unit's focus on collaborative talk may have challenged these students' perceptions of 'real' English work. Developing relationships within their groups ran alongside the development of a familiarity and understanding of the expectations of collaborative talk.

6.5.3 School 2 Groups

The Superheroes

Group Name	Group Number	Participants'	Pre-	Post-
		Names	Implementation	Implementation
			Score	Score
The Superheroes	2.1	Stephanie	11	13
		Dean	4	7
		Jude	10	12
		Harry	8	12

Table 6.32: The Superheroes

Themes: Leader Strategies, Peers, Self-Evaluation

The Superheroes, like all groups in School 2, interact frequently with the teacher during teacher-led, whole-class discussion, though they interact least with the teacher during independent work. The group included an able, confident and energetic student, Stephanie, and an EAL student, Dean, whose participation in the group likely altered their talk.

Initially their talk is fast-paced and their suggestions divergent, suggesting an eagerness to participate but a reluctance to listen. Increasingly, challenges and questions were raised which resulted in the formation of chained utterances, connecting ideas with reasoning. The group used questions and explanations frequently, likely to support Dean. And, the group improved in their efforts to encourage Dean's participation, recognising that asking specific questions secured his participation more effectively than simply asking: 'what do you think?' The group are likely supported by episodes of whole-class discussion, particularly an episode when other group participants challenged their response to the teacher's questions, engaging them and the class in a brief yet significant period of dialogic talk.

Throughout the unit Stephanie's talk is most dominant, initially serving to reinforce Jude and Dean's passive participation. Stephanie makes frequent requests for contributions and agreement, but encouraging conformity instead of challenge. The more passive the participants, the more frequent and 'false' Stephanie's requests become. During the seventh lesson, Stephanie appears most leader-like, having made Jude and Dean her allies against Harry, who is most likely to challenge ideas. There is a moment when Stephanie describes her use of a 'false' vote as 'democratic.' As a result of teacher input and their engagement with *Reflect & Evaluate* tasks, the group, particularly Harry, begins to challenge Stephanie who amends her talk in response. By the end of the unit, the group talk effectively, and Dean's contributions are notably improved. Stephanie appears to monitor her participation, as suggested by a few references to her 'over-talking.'

Periods of self-evaluation in this group are significant: they frequently related talk observed or analysed to their own. Participants avoided being critical but instead stated suggestions with the purpose of motivating and encouraging. This was observed elsewhere and appeared to reinforce group relationships, possibly a feature modelled by the teacher.

The Better Group

This group will be discussed in the micro-analysis chapter which follows.

The Business

Group Name	Group Number	Participants' Names	Pre-	Post-
			Implementation	Implementation
			Score	Score
The Business	2.4	Evie	12	14
		Joseph	8	12
		Liam	5	12
		Ryan	10	13

Table 6.33: The Business

Themes: Talk Awareness, Self-Evaluation, Emotional Engagement, Teacher

Ryan and Evie are particularly active members, often responsible for managing the task and encouraging participation. Joseph is a quiet student but does contribute, developing and challenging ideas. Liam is the most likely to challenge a suggestion or present a divergent idea; however, he is likely an important participant for this reason. He is however, less likely to engage in 'honest' evaluation and seems less motivated than others to please the teacher.

During the first lesson, Evie uses frequent questions to manage the task and check understanding. During the *Reflect & Evaluate* task, Liam complains that his idea (because it turns out to be the 'correct' one) wasn't listened to, revealing a misconception. During the second lesson, *The Business* recognise several features in their analysis of the 'effective talk' video, though they tend to focus on 'surface level' features like body language, rudeness etc. The group demonstrate that they are able to sustain their talk well: they are still talking when the task is stopped. A notable development in this group is the way in which they praise each other and the group's efforts, possibly reflecting the teacher's dialogue, and serving to forge positive relationships. During the fourth lesson, some of this group's misconceptions about collaborative talk may be challenged and subsequently adjusted. The group, in discussing the example of 'real' collaborative talk move beyond identifying surface level features to considering the language of talk. Following an intervention from the teacher during their collaborative task, the group appears to adopt more 'advanced' strategies: challenging, resolving, encouraging participation and managing the task explicitly. There is a moment during this lesson when the talk becomes 'heated' and in response, Liam suggests a vote (again suggesting the use of a vote when resolution can't be found); however, they overcome this and resolve the issue through talk. During the fifth lesson, the group continues to demonstrate developments in their talk awareness and appear more developed in their selfevaluation: they recognize how their reading and management of the task affected their engagement. During the sixth lesson, a strength of their talk emerges: they seek agreement explicitly but grapple with their agreement and avoid passive responses. Ryan is absent during the seventh lesson and Liam does not participate well; however, his divergent comments serve as an interesting contrast to Evie and Joseph's talk. In the final lesson, preceding the presentations, the group choose to merge and develop ideas. They listen carefully to each other, ask questions and manage the requirements of the task. Unlike other groups, participants tend to finish their utterances, suggesting that participants are listening carefully. They also buffer challenges and criticisms with praise, again, perhaps appropriating the teacher's emotional engagement.

The Business is made up of able students who are focused throughout the unit, clearly eager to do well and please the teacher. They begin the unit with effective collaborative talk skills but their conscious use of more 'advanced' strategies develops as the unit progresses. In particular, their analysis of collaborative talk examples develops as they identify and explore talk features, moving beyond surface level comments.

The Lead Team

Group Name	Group Number	Participants' Names	Pre-	Post-
			Implementation	Implementation
			Score	Score
The Lead Team	2.6	Jordan	6	*
		Charlie	10	12
		Lauren	6	9
		Anne	7	13

Table 6.34: The Lead Team*Jordan was absent for the post-implementation assessmentsThemes: Leader Strategies, Obstacles, Relationships

The Lead Team includes a 'difficult' student, Jordan, who is occasionally inappropriate or disruptive; although he is a keen contributor, he is unlike many students in that he finds compromise very difficult, as though it represents 'losing.'

In the first lesson, Jordan perseveres in his insistence that Whiskey is the most important item to ensure survival in a plane crash. The group's talk includes several divergent, unreasoned contributions and challenges. The decisions made are those 'won' by Jordan. However, during the *Reflect & Evaluate* task, they recognise the flaws in their talk. Interestingly, Jordan adopts the pronoun 'we' during this section, encouraging group responsibility for the failure of their talk, reluctant to take individual responsibility.

For the majority of the lessons, Jordan initiates several votes (this group accounts for 39/49 of the leader strategies coded across the class). Initially Jordan uses votes to enforce his preferences; however, at times the vote does prompt challenges or explicit agreement. There is a moment when Jordan refers to the group as 'Jordan's parliament.' However, as the lessons progress, the vote loses power as participants become more confident in challenging Jordan. There is even a moment when having 'lost' a vote, the other participants initiate a 'vote' against him and 'win.' The vote

appears to serve another function in this group: the vote scaffolds Jordan's participation. Votes were eventually replaced with better reasoned discussion.

Alongside these developments, the group develop in their talk awareness. There is a particularly interesting point when Charlie challenges an observation made by Jordan: Jordan notes that a person in the video had taken control and that this was a 'good' point. Charlie challenges this, pointing out that they weren't necessarily supposed to 'take control' but share responsibility. In the lesson which follows this, no votes are initiated, though Jordan reverts to using them later on in the unit.

In addition to enforcing personal preferences, the vote here serves another purpose: to support Jordan's integration into the group and his articulation of agreement and compromise. Initially the focus of their talk is on 'agreement', but as the unit progresses, the talk preceding their decisions becomes more reasoned and elaborated.

The Mean Team

Group Name	Group Number	Participants'	Pre-Implementation	Post-
		Names	Score	Implementation
				Score
The Mean	2.7	Will	6	11
Team		Lola	11	12
		Hannah	9	9
		Tom	12	12

Table 6.35: The Mean Team

Themes: Obstacles, Managing, Teacher

The Mean Team included Will, a student known for his misbehaviour and so forth. Lola initially takes on a 'manager' role, organising the tasks and encouraging Will's contribution. Hannah's attendance is erratic and as a result, her contributions aren't valued by other participants, whose relationships develop throughout. Initially, Will is highly preoccupied with finishing the task and getting the teacher's attention for having done so. During the fourth lesson, his poor behaviour results in the complete deterioration of the group's work. Lola and Tom attempt to manage Will's behaviour, with more or less success dependent upon Will's determination to cause disruption. However, Will's integration into the group and the development of his collaborative talk does improve with Lola and Tom's support and perseverance. Both Lola and Tom support Will's understanding and encourage his participation in collaborative tasks. Despite his capacity to influence the success of the group's talk, Will's role develops as he takes increasing responsibility for his participation. While other participants are successful in contributing and developing ideas, Will becomes an effective 'manager,' finding a way in which he can meaningfully contribute.

The participants' talk also develops with the support of the teacher's interactions: the teacher draws out self-evaluative comments which later become embedded in their dialogue: eg, 'Let's not go off-task...' This was observed elsewhere also.

When this group were interviewed, Will was in detention as a consequence of his behaviour on the school bus that morning. However, Lola and Tom commented at length that they believed the development of Will's collaborative talk and his increased sense of responsibility was having a positive impact on his participation in other classes.

6.5.4 Conclusion

For these groups, agreement is initially a priority, and it was also emphasised by the teacher. At first, this results in several participants' passive or unreasoned agreement. However, participants develop in their ability to question and challenge, supported by the improved management of tasks. While the vote appears, according

to the coding, to have been used more frequently in School 2, this was accounted for by Jordan in *The Lead Team*, for whom the vote may have served an important purpose. Though groups in School 2 were varied in terms of gender and ability, their approach and engagement with the unit was more consistent than School 1, likely supported by their positive relationship with the teacher and her expectations. Her monitoring of their work and interventions supports students in sustaining their independent talk. Frequent interactions which draw self-evaluative comments and talk analyses are appropriated by participants during their independent work. Furthermore, her emotional engagement of students may serve as a model to participants seeking to forge positive group relationships. Vicky, Teacher 2, will be the subject of further discussion in the micro-analysis chapter which follows.

6.6 Assessment Data: School 1 & 2

6.6.1 Individual Scores

The individual scores for each coded group were presented in section 6.4. Here, the scores for each class are considered briefly in order to support interpretations of the qualitative data. The table below presents the mean pre and post-implementation score of students in school 1 and 2.

	School 1	School 2
Pre-Intervention: Mean Score	10.5	9
Post-Intervention: Mean Score	13	12
Point Difference: Mean Score	2.5	3

Table 6.36: Mean GCSE scores for school 1 and 2

Students in School 2 started, unsurprisingly, at a 'lower' point than School 1. However, post-intervention, students in School 2 increased their score slightly more than students in School 1. Individual scores (see tables 6.27-6.35) suggest that lower ability students increased their scores more.

Some students began this unit with good collaborative talk skills and did not increase in score. This is because they were already 'good' and were at the 'top' of the grade boundary. However, it may be the case that these students developed in their talk awareness, which is not a factor in the GCSE assessment process. The unit was most beneficial for 'weaker' students who were perhaps less aware of the expectations or processes of collaborative talk. This may also account for the higher increase in the Year 9 class.

6.6.2 Group Scores

The table below presents each group's total post-intervention score in rank order.

G	<mark>1.6</mark>	<mark>1.7</mark>	<mark>1.1</mark>	<mark>1.2</mark>	<mark>1.5</mark>	1.3	1.4	1.8	<mark>2.4</mark>	<mark>2.6</mark>	<mark>2.2</mark>	<mark>2.1</mark>	2.3	2.5	<mark>2.7</mark>
Score	22	12	9	8	6	6	5	4	16	14	12	11	11	8	6

 Table 6.37: Post-implementation group scores presented in rank order

 Coded Groups

Standard Deviation School 1 = 5.45 Standard Deviation School 2 = 3.13

The range of scores is greater in School 1 than in School 2. Therefore, the score increases of groups in School 1 were more variable than in School 2.

The score difference between schools, groups, and of individuals, supports the interpretation that School 2 groups engaged 'better' with the unit than School 1. And the variation in School 1's scores, despite being a more homogeneous class in terms of gender and ability, supports the interpretation that groups were less consistent and more erratic in their talk than those in School 2. The greater variation in scores achieved in School 1 may have been as a result of the teacher's inconsistent interaction and monitoring of these groups.

While the assessments need to be treated cautiously, they do support and reinforce the 'background' analysis of group development and facilitate comparisons between schools. Assssing Speaking & Listening is a subjective process difficult to moderate; however, the scores allocated were agreed between me and the teachers. And while what makes S&L problematic is its fleeting and temporary nature, the video data enabled the moderation of assessments post-implementation. It is important to note that the scores may not represent the 'best' of what students are capable; or, may represent how a student can 'perform' when being observed rather than independent

of the teacher. It may have also been the case that Vicky assessed more 'kindly' than Abigail given her perhaps lower expectations for their talk at Year 9. However, Vicky is also an external S&L examiner and moderator so I would argue strengthened the 'accuracy' of our assessments.

*

This chapter has presented the findings which resulted from the macro-analysis coding process. To support discussion, references have been made to the preparatory analysis and case descriptions. The macro-analysis has shown the different ways teachers used talk during implementation and the implications of this for students' learning. Linked to this, the different ways student groups, as microcosms within the wider class, engaged in collaborative talk has been explored. The following chapter will present transcribed episodes of talk to support the findings presented here.

Chapter 7: The Micro-Analysis of Emergent Themes and Transcribed Episodes of Talk

This chapter presents a series of transcribed episodes of talk to support a rich discussion of themes which emerged in macro-analysis. Firstly, episodes of collaborative talk as it has been conceptualised within the *participating, understanding* and *managing* framework will be presented. The lesson tasks and their sequence are then explored for their potential to support collaborative talk and talk awareness. The development of talk awareness is then considered in more detail, and followed by an examination of the teacher's talk alongside discussion of its implications. Examples of talk which undermine collaboration are then presented to highlight strategies which teachers may promote to negative effect. Finally, the progress of a single group will be explored alongside descriptions of tasks as informed by the workplace, concluding the chapter with a discussion of a proposed framework for the development of groups' collaborative talk.

7.1 Conceptualising Collaborative Talk

Section 7.1 will describe episodes of collaborative talk as conceptualised within the *Participating, Understanding and Managing* framework. As discussed previously, participants' talk was coded within this framework; additionally, talk was coded to represent its 'cohesiveness.' Episodes of talk are presented to exemplify 'cohesiveness' as *divergent, connected and developed.* Section 7.1.3 will draw together these features in a description of collaborative talk, according to this study.

7.1.1 Participating, Understanding and Managing in Collaborative Talk

In order to support students in the analysis and development of collaborative talk, a three-strand framework was devised:

The *Participating* strand describes the contributions made by participants, including suggestions, ideas and challenges. *Understanding* describes the way in which participants ensure their understanding of the task, the ideas put forward, and how they partake in, seek or understand agreement. *Managing* describes the way in which participants encourage participation, manage obstacles and organise an approach to the task. As the following episodes demonstrate, the way in which participants *understand* and *manage* the talk shapes the development of contributions.

Episode 7.1

School 1, Group 1.7: The Shoppers Participants: Krissy, May, Miriam and Rose Lesson 8 Task: Agree upon and design a concept for either an App (for iPad or equivalent) or a Pet food brand in preparation for an end-of-unit presentation

Krissy:	So are we going to do an App or pet food?
May:	I'd like to do an App
Rose:	Yeah
Krissy:	So does everyone agree?
All:	Yes
May:	Who downloads Apps?
Krissy:	Not me
May:	l do
Krissy:	What kind of Apps do you download?

Miriam: They have Apps for everything!

Rose: Shall we think of a category...something for entertaining?

Miriam: I think it should be a game

Rose: If we were to do a game, what would it be about?

Krissy initiates the talk while also encouraging contributions from other participants; her turn serves to manage the talk, outlining the focus of the task. May states her preference, Rose agrees and Krissy seeks explicit agreement from all participants. Though participants provide no reasoning for their decision, they signal agreement, upon which their talk can be developed. May asks a question, establishing participants' varying experiences of Apps. Rose organises the talk by focusing their decision-making and, using the pronoun 'we', highlights the aim for a shared decision. Rose probes Miriam's suggestion, inviting her to develop her idea so that it may be better understood.

Rose:	I have this thing on my computer where you take pictures of a face
Miriam:	yeah?
Rose:	and you, like, their mouth and nose and eyes and then you type in something that it could say and it records someone's voice
May:	I'm confused?
Rose:	So, you have someone's face
Miriam:	we could incorporate the Camera-o-graphage! From photography
May:	No, you mean cinematography
Miriam:	Yeah, cinematographyshe has no idea what we're talking about (referring to Krissy who agrees by shaking her head). It's like this new thing in the photography and art world where, like,

you take a picture and then they'll...take one single move from the picture...it's like an animated picture but not everything moves

- Rose: You could, like, say that you take 5 pictures or something, of something moving...and it could speed it up
- May: Should we write some of this down?

Participants grapple to understand the ideas put forward by Rose and Miriam. Miriam encourages Rose to develop her explanation. May signals her lack of understanding and Rose attempts to clarify but is interrupted by Miriam who suggests the 'incorporation' of her idea. Though Miriam uses the word 'incorporate', this serves to 'buffer' a new suggestion. May shows an understanding of the suggestion by clarifying the term. Miriam notes Krissy's lack of understanding and provides an explanation. Rose then develops the idea, linking the concept to the task at hand.

Miriam:	So out of two options that we've really come up with are the cinematography and(inaudible)
May:	'Cause the cinematography thing's quite new so nobody's made an Appwe are
Miriam:	Yeah, we're making itbut which one do people prefer?
Rose:	I think the cinematography is quite a unique thing
May:	The (other) would be quite fun but it's more of a noveltyonce you've played it a few times, it'd be, like, yeah
Rose:	Whereas the other one you could use for different things
Miriam:	I think that one would appeal to more ages
May:	Yeah
Miriam:	People would take it seriously, even if you're an adult doing photography or children
Rose:	Yeah

Miriam:	But you'd have to make sure it's really simple
Rose:	I was thinking, how are we going to do it and how are we going to explain it?
May:	Well, we can show it and explain the central
Rose:	you could include a little step-by-step guide
Miriam:	Krissy, maybe you should google it when you get home so you know exactly what we're talking about
	(They get the teacher's laptop to research and explain the concept to Krissy)
Krissy:	I get what you mean nowit's like still pictures but with one thing moving
Miriam:	Yeah'cause these are obviously more adult ones but we could change itwe could do different ones so that
Krissy:	yeah, for like, children just to mess around with

In the preceding episode, participants grapple with the two main ideas put forward by Rose and Miriam. Here, they narrow and review these ideas, creating a platform on which to make the next decision. They agree upon the Cinematography-themed App; however, Krissy can't share this agreement because she is clearly unfamiliar with the concept. Although retrospectively, they do note her lack of understanding and clarify the idea using the teacher's laptop. This then enables her to participate fully in the talk.

Miriam:	What would we call it?
May:	Cineworld?!
Krissy:	I think that's already an App
Rose:	something like Cinema-graphy
Miriam:	or Motion-Potion

Krissy:	I think we need something that's more for all ages
Miriam:	and it's got to be short as well
May:	Yeah, we can't exactly call it Cinematography because that'll just
Rose:	We almost need a word that isn'tlike a normal word
Krissy:	We could take the first four letters of cinema and then photo?
Miriam:	Or, like, Cine-Snap?
May:	Yeah!
Rose:	Sounds good

This episode represents the 'pinnacle' of the group's collaborative talk, during which participants jointly construct the name of their App. They grapple with different ideas, interjecting suggestions and challenges until Krissy and Miriam jointly create the name.

Miriam:	So next lesson, I think we're going to be focusing on the presentation. Is there anything else you think we should be focusing on?
May:	We'll have to start thinking about what we're going to say and what we're going to do
Miriam:	Maybe for, like, our own progress thingwe should come up with 3 ideas? To contribute when we come back? Just so we're not starting from a complete
Rose:	Well, we've got 3 things haven't weon our layout thing haven't we. So maybe each of us could talk about one of those things
Miriam:	Yeah, or maybe we should just draw a sketch of what we want the camera to look like
May:	Yeah

- Miriam: Maybe we could draw so we have an idea of what each other is visualising
- Krissy: So if we all draw a picture of, like, an App on a phone, then try and draw...to see what one would look better...

The series of episodes presented highlight the different 'platforms' created by the group, upon which their talk is developed. *The Shoppers* begin by establishing an understanding of the task and focus their talk by agreeing on the App. Upon this agreement, participants contribute suggestions which they grapple to understand. Having narrowed and reviewed their options, the group ensure Krissy's participation by clarifying her understanding. Finally, building upon a shared understanding of the concept, participants jointly construct the name of their App: Cine-Snap. To conclude their talk, participants manage the task by preparing for the following lesson. And Miriam's comment on 'visualising' signals an awareness of the importance of shared understanding.

Episodes have not been presented to distinguish between *Participating, Understanding* and *Managing* because these strands overlap and intertwine. Nevertheless, it is apparent here that *Managing* and *Understanding* precedes the joint construction of an idea. Considering collaborative talk within this framework enables an understanding of the way in which participants proceed in and shape collaborative talk.

7.1.2 Divergent, Connected and Developed Talk

The process of collaborative talk leads participants to jointly develop and construct an idea or decision which represents the contribution and understanding of all participants. These episodes of 'genuine collaborative talk' or 'joint construction' are

preceded by other talk 'platforms'. Building on decisions, agreements and understanding, joint construction appears as a 'flurry' within collaborative talk. Episode 7.4 is an example of such a 'flurry.' Because these flurries require participants to share understanding, the coherence and cohesiveness of their contributions reflect this and the 'attunement' of participants to one another.

To capture this 'attunement,' or lack of, participants' contributions (*Participating*) were considered on a scale from: *divergent, connected* to *developed*. An understanding of how participants achieve 'attunement', or *developed* talk, may serve to inform the teaching of collaborative talk, as will be discussed in the final section.

Episode 7.6: Divergent Talk

School 2, Group 2.6: The Mean Team Participants: Jordan, Charlie, Lauren and Anne Lesson 1 Task: From the list, rank the items that would be most helpful in ensuring your survival after a plane crash

Charlie:	A gun important, a small axe important
Jordan:	I would say the gun
Charlie:	The gun, a small axe to cut things down
Jordan:	No, how many objects do we need? Miss, how many objects do we need?
Charlie:	You need an empty metal tin to keep food in
Jordan:	no, first you'd need half a
Charlie:	newspapers, no
Jordan:	no, first you'd need half a bottle of whiskey
Charlie:	to keep spirits up
Jordan:	Five large chocolate bars (writing down decisions)
Lauren:	Jordan! We're meant to all agree on them Jordan

Jordan: To survive! To survive you need whiskey!

Charlie begins by stating his choice for two items; Jordan's following contribution appears to signal agreement. Charlie repeats his choice and provides brief reasoning for the axe. Checking the requirements of the task, Jordan seeks the teacher's guidance immediately instead of asking the group or checking the task details on the desk. Charlie and Jordan then interrupt each other to suggest different items. Lauren attempts to manage Jordan's talk by reminding him of the need to reach a shared agreement. Jordan ignores this and continues to promote his suggestion.

It is apparent in this episode that Jordan, in particular, creates an obstacle to the group's talk. This episode serves as an example of *divergent* talk, of contributions which, though relevant to the task, are not connected or developed by participants. Contributions, therefore, serve to 'divert' turns, failing to achieve cohesiveness. Charlie begins by stating his choice for two items: by stating them one after the other, his contribution is 'monologic' and doesn't allow 'space' for reasoning or challenge, as though he is seeking a quick decision and not the talk which should precede it. Though Charlie and Jordan 'take turns' to state their choices, their contributions are not in keeping with previous turns and do not anticipate subsequent ones. Drawing on her awareness of the purpose of collaborative talk, it is Lauren (Anne makes no contribution) who attempts to manage Jordan by reminding him of the need for shared agreement. Prior to this, the contributions made by Jordan and Charlie also represent interactions absent of *Understanding* and *Managing*.

Episode 7.7: Connected Talk

School 1, Group2.7: The Mean Team Participants: Will, Lola, Tom (Hannah is absent this lesson) Lesson 2 Task: Using the information provided, agree on your budget for the prom and discuss and decide on a venue, entertainment and catering

Will:	If it's a prom, it can't be, like, a fun ride
Lola:	You can, but
Will:	not at a prom
Lola:	It's not what you would think
Will:	I reckon it should be in a hall
Tom:	But then a village halldepends on the size of it because if it's going to be a large one
Lola:	Or a castle
Will:	But it's quite expensive
Lola:	And also, it's like a party so it might get trashed
Tom:	You can remember that we can go over our budget
Will:	What's the yearbook? What's the yearbook?

Will objects to a fun-ride at the prom but provides little reasoning; Lola challenges Will who prevents her from elaborating upon her point and diverts the talk by making a new suggestion. Tom challenges Will's suggestion for the hall and Lola initiates consideration of another venue.

Within a short period of time, participants have briefly considered several options and provided some reasoning. However, they fail to 'pick' up an option and explore it fully. Therefore, their 'connected' talk involves participants grappling with the options available to them and precedes the development of a suggestion or argument. When participants' talk is 'connected', their contributions are relevant and in keeping with

previous suggestions but lack development.

Episode 7.8: Developed Talk

School 1, Group 1.6: The Dream Team Participants: Grace, Mollie and Kathryn (Ariadne is absent) Task: From a list of 10, agree upon and rank the 5 most influential people in the world.

- Mollie: But then maybe, I know, like, that Justin Bieber is not very popular, he's very, yeah...(all laugh) but then maybe he has influence over, like, young people, to start with their career and even though he's had a lot of publicity in the paper...
- Grace:Yeah, negative...
- Kathryn: ...I agree with that because so many people have called him horrible things and he's just carried on and not let it get to him
- Mollie: Yeah, so I think people will be influenced by him even though...
- Kathryn: ... even though they don't want to show it
- Grace: And he has access to a really wide audience because he's so big in so many places...he has the space to influence people
- Mollie: And he's that age that he encourages young people to follow their dreams and forget about what everyone says...
- Kathryn: ...yeah, the publicity

Mollie: So are these three definites?

In this episode, Mollie challenges the group's prior decision to dismiss Justin Bieber. She provides an elaborated reason, to which Grace signals agreement. Kathryn agrees explicitly and develops Mollie's argument. Kathryn anticipates Mollie's point when they jointly construct a sentence. Grace and Mollie begin their subsequent turns with 'and', building upon the argument prior to agreement. Therefore, 'developed' talk describes contributions which are relevant, in keeping with previous turns and may anticipate participants' utterances. Furthermore, the object of participants' contributions is a shared one, an idea or argument 'adopted' by the group and jointly developed.

7.1.3 Collaborative talk: what is it and how is it achieved?

Divergent turns are disconnected from preceding or subsequent contributions. Connected turns present a series of linked ideas or suggestions but no single idea is 'adopted' and explored or developed. Collaborative Talk is a term which encompasses a process which can lead to *developed* talk, to the joint construction of an idea or argument. Building upon platforms of decisions, of agreements and understanding, 'flurries' of *developed* talk can occur, during which participants are 'attuned' to each other. In these 'flurries,' participants make contributions which are relevant to the task, are connected and in keeping with previous ones; an idea or argument is 'picked up' by the group and jointly *developed* by participants, creating a concept which belongs to all participants, a concept in which they all have a stake.

7.2 The Role of Analytical and Self-Evaluative Tasks in Supporting the

Development of Talk Awareness and Collaborative Talk

The previous episodes provide a snapshot of the variety of tasks involved in the unit. The sequence of each lesson's activities was designed to facilitate the development of students' talk awareness as a means of encouraging a 'conscious' approach towards participation in collaborative tasks, upon which participants could reflect. Earlier in the unit, collaborative tasks were concerned mainly with decision-making (eg, episode 7.6-7.8), while later tasks were concerned with idea development (eg, episodes 7.1-7.5). The following episodes from Lesson 5 demonstrate how tasks and

their sequence facilitated the development of students' talk awareness, which in turn, appeared to influence their participation in collaborative talk.

Episode 7.8

In Group Narratives (Chapter 6), the relationships between participants in *Team Batman* were described, as was their 'distant' relationship with the teacher. Olivia becomes the 'manager' of the group, perhaps in response to Naomi's frequent off-task, leading behaviour. However, as the unit progresses, Naomi appears to rival Olivia's role, resulting in better cooperation between them, as can be observed during this lesson.

School 1, Group 1.1: Team Batman Participants: Naomi, Olivia, Sarah (Gemma is absent this lesson) Warm-Up Task: How do you show respect to each other during talk? Discuss options A and B.

Olivia: (Reading question) How do you show respect to other people during a discussion? a) being rude, aggressive and not listening b) being soft, passive and agree with everything? Naomi: Neither Olivia: Does it have to be a or b, then I don't think it's either, you shouldn't be a at all, you shouldn't be rude or aggressive and not listening... Naomi: ...but you shouldn't just agree with everything someone says and not put any opinion in to it, so like, say, you were just doing all the talking and me and Sarah just sat here going yes yes yes yes_ Olivia: Yes, you shouldn't ever do that. Sarah? Sarah: Yeah? Olivia: Thoughts? Sarah: You said my thoughts, you basically said everything

Olivia:	Ok. So kind of neither, obviously you should be quite soft but you definitely shouldn't agree with everything but you shouldn't disagree with things in a rude way
Sarah:	I think showing respect is considering their, like, ideas
Olivia:	yeah
Sarah:	and building on it as well
Olivia:	building on ideas and kind of
Sarah:	respect doesn't just mean you just go along with it
Olivia:	yeah

Naomi provides a one-word response, prompting Olivia to clarify the question. She agrees with Naomi that being rude and aggressive is unacceptable. Naomi connects to Olivia's statement by stating her objection to the second option, and using a hypothetical example of talk, elaborates her point. Olivia encourages Sarah to contribute, though unsuccessfully. Sarah creates an obstacle to the development of the talk by stating that her ideas have already been said. Nevertheless, Olivia pursues their talk and Sarah does go on to contribute to the development of their argument.

Creating hypothetical or example utterances is a strategy used by several students to reinforce their arguments. The process of vocalising words which 'one might say if...' may support students in grappling with the language of talk, instead of its 'superficial' features. It is in this moment that participants may connect what has been learnt about talk to their own participation. In affirming, 'yes, you shouldn't ever do that', does Olivia create a ground rule for their group? Ironically, when Olivia invites Sarah to contribute, she demonstrates the disrespect that is the object of their talk. Momentarily, Sarah's response stalls their talk; however, Olivia's reformulation

of the decision serves to manage this obstacle and re-starts the talk. Sarah provides a response which serves to develop the reasoning of their argument. Does it occur to Sarah that she is demonstrating the behaviour being discussed? Or has she simply decided to listen and contribute?

Episode 7.9

Development & Analysis Task: Discuss and analyse the X Factor scripts with reference to the collaborative talk framework

Olivia:	We need to discuss it as a group
Sarah:	we don't have to
Naomi:	Yeah, we do. Discuss the questions as a group then write your answers below
Olivia:	How did the judges participate in the discussion? Think about whether they show respect for other people's opinions or build on each other's ideas. They don't build on each other's ideas
Naomi:	so, we need to look at this participating bit, not building on each others' ideas
Olivia:	they knock ideas aside straight away
Naomi:	so they're not showing respect for each other
Olivia:	they want their own opinion to be right. yeah
Naomi:	yeah, um(they begin writing)
Olivia:	So they don't build on each other's ideas
Naomi:	They don't build on each other's ideas
Olivia:	and they knock ideas aside, like straight away
Naomi:	they knock ideas to the side
Olivia:	Yeah
Naomi turns	to talk to the group behind; Olivia and Sarah continue

Olivia again initiates the talk by clarifying the task. Sarah signals her reluctance; Naomi supports Olivia. As before, Olivia reads out the question, creating a platform or starting point for their talk, ensuring that all participants understand the task. In the same turn, Olivia makes a suggestion. Naomi connects Olivia's suggestion to the collaborative talk framework and repeats Olivia's suggestion. Olivia and Naomi develop the suggestion in brief but connected utterances. Characteristic of talk during writing tasks, Olivia and Naomi repeat their suggestion as they write it down. Abruptly, Naomi turns around to talk to the neighbouring group. However, unlike previous lessons, and despite Sarah's earlier reluctance to contribute to this task, Olivia and Sarah continue, regardless of Naomi's off-task behaviour.

During this episode, Naomi demonstrates an awareness of the collaborative talk framework by recognising 'building ideas' as a feature of *Participating*. During the previous episode, Sarah developed the suggestion that respect in talk is to consider ideas put forward and to demonstrate this respect by building upon the idea. Though Sarah doesn't contribute in this episode, this suggestion is appropriated here as a critique of the X Factor script. Having discussed what a lack of respect might mean in talk, Olivia and Naomi identify what it might 'look' like in talk.

Episode 7.10

Collaborative Task: From the options provided, discuss and agree on 5 X Factor contestants to form a new group

- Olivia: Right, now, they're obviously the basis of our band (placing cards on the desk) because you need someone from every category and they're the only ones we have, yeah, so, um, I have to say...
- Naomi: I'd like a young band...
- Olivia: ...you have to choose someone from every category. She's better than him (pushing cards forward)

Sarah:	No he's not
Naomi:	Let's look at these things (information on cards)
Olivia:	She was
Sarah:	no she isn't
Olivia:	She's amazing, she's such a good singer
Sarah:	she's horrible
Naomi:	Let's think about(Sarah and Olivia continue to argue) Stop. Let's not think about the thing, let's look and see what they have

artist is Dave...

Olivia creates a platform for further decisions regarding their band. Naomi states a personal preference for the band but Olivia reminds her of the requirements of the task. Despite this, Olivia and Sarah go on to disagree about the band members based on their personal preferences. It is Naomi who manages their divergent talk and draws their attention back to the task and the information provided, on which they should make their decision.

in common with other people from these groups. So his favourite

The X Factor proved an interesting lesson across most groups because of the way in which students drew on knowledge external from the classroom. Participants were required to grapple with personal preferences and ensure that those unfamiliar with the programme weren't disadvantaged. Here we see the unreasoned challenges made by Olivia and Sarah based on personal preference and how it results in a repetitive, divergent form of talk which prevents development. In referring to the purpose of the task, Naomi is able to manage Olivia and Sarah's talk and organise their approach. These 'management' turns are important for the way in which they

focus and support participation, enabling participants to challenge behaviour by reference to task expectations.

In promoting personal preference, Olivia and Sarah do not participate 'consciously' and their rejections of each other's ideas are unreasoned. Despite having discussed how to demonstrate respect for ideas during the preceding tasks, they do not adhere to these principles here. However, Naomi's management of their talk draws Olivia and Sarah's divergent talk to a close and prompts them to more 'conscious' participation:

Olivia:	So he goes. JanetI think Amelia's more rocky (moving contestant cards to visualise bands)
Sarah:	Yeah
Naomi:	I think that
Sarah:	Yeah, I can see it
Naomi:	Yeah, I can see that, yeah
Olivia:	So that (moving cards) favourite music basically, she's into pop artists
Naomi:	I don't know
Sarah:	They both like Beyonce don't they?
Naomi:	Can we try the other one out? (swapping cards)
Olivia:	I think Kitty works better
Naomi:	I think she does as well
Olivia:	But look, she's in to Lady Gaga. Do you think that people like Beyonce, Nicky, pop artists now, she's into Pink, Stevie Wonder_
Sarah:	I think
Naomi:	But then we've only got one boy
Sarah:	It doesn't matter
Naomi:	Yes, I think this
Olivia:	It's like the reverse of the Black Eyed Peas

Sarah:	Yes, I can see it now
Olivia:	The reverse of the Black Eyed Peas. So this is our band
Naomi:	Yeah
Sarah:	Yeah

During this episode, the group makes a shared decision based on the information provided, in-line with the requirements of the task. This time they suggest alternatives and challenge suggestions. Resources for collaborative tasks were large and designed to ensure that all participants at the table could see them clearly. Though a seemingly minor point, in order for all participants to achieve an understanding of the task and engage fully, participants had to be able to see and share resources. Here, the group's talk is facilitated by the visual tools provided, allowing them all to 'see' their decision and signal their agreement and understanding.

Participants have moved beyond divergent talk and the promotion of personal preference. Though contributions lack elaboration, this episode represents the final stages of their decision-making.

These episodes represent more the 'reality' of the collaborative talk process, in contrast to the 'idealised' versions which were the object of participants' preceding discussions. Collaborative talk is a process which requires participants to grapple with the subject matter and each other's knowledge and experience before ideas or opinions can be consolidated and a decision made. Not only must participants develop 'platforms' upon which talk can be developed, they must also 'orientate' themselves to the subject matter and each other. How participants orientate to each

other, creating a 'space' for joint construction, will be considered further in the final section.

Episode 7.11

Reflect & Evaluate Task: Reflect upon and evaluate your group's collaborative talk

Olivia:	Participationeveryone spoke
Naomi:	Yeah
Sarah:	We all shared our ideas and helped build on them
Olivia:	Yeah, everyone spoke, we shared ideas and we built on each other's ideas
Naomi:	Everyone spoke, shared ideas and built on other's ideasand everybody also showed respect for everybody's ideas
Olivia:	How did weUnderstanding
Naomi:	We listened carefully to each other
Olivia:	I don't think we listened carefully so much as we listened with an open-mind
Naomi:	YeahI don't know what the difference is
Olivia:	Listen carefully isI say we listened with an open-mind and we questioned each other's ideas in a good way
Sarah:	we challenged them
Naomi:	Yeah, we challenged them and made sure everybody understood what we were saying
Sarah:	and gave reasons
Olivia :	So we listened with an open mind, we questioned and challenged ideas respectfullyand managed
Naomi:	We managed to keep the talk focused
Olivia:	we kept it on task and we met the goal and we resolved any, like, arguments we had
Naomi:	any conflicts
Sarah:	we used questions as well
Naomi:	Um, what you writing? Kept the talk focused on the task

Sarah: ...we used questions

Olivia: ...we didn't really...we encouraged others to contribute

Pause while teacher talks to class

Naomi: Yes

Olivia: Ah...um...you say yes, but...

Naomi: ...because...

Olivia: ...but we did conflict...but at the same time we resolved it so yes

Naomi: You're going to get conflict no matter what but the key is if you can resolve the conflict...

- Sarah: ...conflict challenges you and helps you to open your idea more, build on it...
- Naomi: ...overcome...
- Olivia: ...sometimes conflict can actually lead to a new idea...when we're fighting about something and one of you says something like, oh actually, if we...

Participants begin by stating that everyone contributed but develop this further, suggesting that ideas were shared and built upon, drawing on comments made during the Warm-Up and Development & Analysis task. Participants grapple briefly with what it means to listen with an open mind. Olivia prompts careful consideration of the role of challenge in talk, which leads her to refer to their talk experience as an example of conflict resulting in a new idea.

This episode is the most collaborative and *developed* of the lesson, also demonstrating talk awareness. In contrast to their earlier engagement with Reflect & Evaluate tasks, participants challenge and explore contributions, suggesting an active approach to the critique of their talk. The framework for collaborative talk supports them in structuring their talk.

Although their critique may not be an accurate representation of their talk, it is a fair one. By challenging evaluative comments, Olivia shows that she is attempting to align their evaluation with the 'reality' of their talk. This leads them to jointly construct a better understanding of the role of conflict, developing the thread which runs through the lesson: respect and idea development.

The Sequence of Analytical and Self-Evaluative Tasks

The macro-analysis revealed that despite demonstrating talk awareness, participants do not necessarily appropriate the principles espoused during collaborative tasks. Furthermore, participants' critique of their talk wasn't always aligned with the 'reality.' As groups develop in their awareness of what collaborative talk principles actually look like in talk, explored through Warm-Up and Development & Analysis tasks, groups may have been able to align their self-evaluations more accurately with their talk. The Reflect & Evaluate discussions sometimes serve as 'effective' examples of collaborative talk because they focus participants on a shared experience. Participants may become more 'attuned' to each other in collaborative talk but also more 'attuned' to the 'reality' of their talk, a position from which improvements can be made. The sequence of lesson activities was intended to facilitate this cycle of analysis, practice and reflection.

7.3 The Development of Collaborative Talk Awareness over a Series of

Lessons

The following episodes demonstrate how the introduction of the collaborative talk framework supported students in the development of their talk awareness.

Episode 7.12

School 2, Group 2.4: The Business Participants: Evie, Ryan, Liam and Joseph Lesson 3 Task: In your groups, analyse and identify 'effective' collaborative talk features in the video

Evie:	On the before video, when they were, like, bad, they had a
	really bad attitude.
Liam:	There was no slang
Evie:	Good attitude, no slang
Joseph:	Good language
Liam:	Listening to each other
Evie:	Yeah
Liam:	Thinking about what people say
Evie:	and they expanded on each other's ideasso, good attitude
Liam:	agreeing with each other
Evie:	listen to each other, didn't talk over each otherthey kept on task
Liam:	The achieved the goalthey kept, no
Evie:	They expanded on things?
Liam:	Yeah, expanded answershey, slow down guysno distractions
Evie:	If they didn't like someone's ideas they didn't snap back at them
Ryan:	didn't criticisedidn't shout

Characteristic of talk during group writing tasks, participants list suggestions and the scribe reviews and repeats before writing them down.

Listing here prevents 'space' to explore and challenge suggestions. Importantly, the suggestions students make are likely based on their assumptions about what makes 'good' talk and aren't necessarily grounded in the video observed. 'Good language, no slang, didn't criticise' are not features highlighted as important by the video or the teaching unit. These episodes highlight the potential problems in promoting 'rules' for talk if the gap between students' perceptions of 'good' talk and how it 'looks' in talk, and in their own contributions, isn't explored and closed.

Though turns are connected, participants' talk analysis is 'surface-level' and reveals misconceptions about collaborative talk. Participants' observations may echo 'rules' which are implicitly and explicitly promoted by teachers and parents: good attitude, no slang, interruption, criticism, shouting, distractions etc. These 'rules' were not promoted as features of collaborative talk during the lessons and therefore represent participants' preconceived ideas about 'correct' talk. In commenting on listening and expanding ideas, participants get closer to a consideration of collaborative talk, though still vague.

It is apparent in this episode that participants' perceptions of 'good' talk are mainly concerned with things outside of the talk: behaviour, conduct and cooperation. This group's (and others) perception of cooperation tended to concern 'no criticism' and agreement, suggesting a passive engagement in talk. The 'rules' promoted in the classroom, though critical for teachers' behaviour management, may promote a misconception of talk which may reinforce a complacency towards talk skills.

However, at this stage of the unit, participants lack a vocabulary with which to critique talk. As participants progress though the unit, misconceptions about talk are exposed and surface-level rules are replaced with a closer analysis of the language of talk.

Episode 7.13

Lesson 4 Task: In your groups, identify and discuss the positive and negative features of collaborative talk in the transcript. Refer to the collaborative talk framework.

Evie:	so a negative point should be that they went off-task
Ryan:	Went off-task with a Scottish accent
Joseph:	Not focused with the table
Liam:	Table?
Joseph:	You know, they're trying to move the table closer together
Evie:	What did you say?
Joseph:	They're trying to move the table, they're not focused
Liam:	A positive point was they started off on-task but they went off-task very quick. It was literally after a couple of linesthey started off on-task
Ryan:	and they did consolidate
Evie:	So which would that be? Would that be under participating, understanding or managing?
Ryan:	I know one for participating: they consolidated everyone in the group. When they go, 'I think we should do music. Anyone else agree with me?'
Evie:	So participating, involving everyone in the group.
Ryan:	So Liam, which one did you say a minute ago?
Liam:	I said they started on task but went off-task really quick
Teacher 2 (Vicky):	Yeah, so what's that lack of?
Liam:	Participating
Teacher 2:	Participating, is it participating?
Ryan:	I think it's managing

Teacher 2: I think it's managing

Ryan:

Participants begin the task by referring to 'surface-level' features like accent and distractions. However, Evie encourages participants to connect their suggestions to the framework. Though their connections are not necessarily 'accurate' (which is not the issue), participants are prompted to consider talk features in more detail. During this episode, participants note consolidation, encouraging participation, managing obstacles, and they refer to the text, providing an example of talk to support their point. Instead of superficial comments about staying on-task, the group recognise this as a feature of managing, and of the responsibility of the group to encourage participation and focus.

Preceding this episode, the teacher led a discussion on the collaborative talk framework. Importantly, by introducing the three-strand framework, the tendency for participants to list suggestions is disrupted and they are forced to question and challenge the role of talk features. This is an important element of consideration in task design: tasks need to be designed with consideration of the discourse pattern that they may encourage amongst students. By introducing the framework, the teacher supported the development of students' talk vocabulary and provided a structure or 'scaffold' for their analysis.

Because if you're managing then you stay on-task. There is a bit on the second page when he tries to get them to go back on task

Episode 7.14

Lesson 7 Task: Discuss and analyse the X Factor script with reference to the collaborative talk framework

Evie:	They don't say, yeah, 'I understandI see that they're good, <i>but</i> I don't think they're going to win.' They just say no.
Liam:	They just rubbish their ideas
Ryan:	They don't listen with an open-mind either, they just say no or yes, they don't expand on anything either
Liam:	Yeah, they just say no no no no, not why?
Evie:	So they don't build on each other's ideas
Liam:	They don't say why they don't agree they just say no
Evie:	I think on most of them I don't think they really agreed on it
Liam:	They obviously do after a while but they don't really
Evie:	And on this bit, when Kelly's saying, 'on a realistic note' no one's asking her, they didn't let her finish, they all just kept interrupting
Liam:	And they don't really come up with an answer on each person
Joseph:	They're just half-way through talking about it and just move on to someone else

In the same lesson discussed in Section 7.2, this group (*The Business*), demonstrates development in their talk awareness, and particularly in the elaboration of their points. Instead of listing features which are detached from the script, participants grapple with the language of the talk, embedding references and vocabulary related to the collaborative talk framework.

Similar to *Team Batman* (episode 7.11), participants challenge each other's observations, aligning their analysis with the reality of the talk. As noted in the previous episode, not only does talk awareness develop, but so does the pattern of

the group's discourse. This change in discourse pattern, particularly in lengthier utterances and fewer interruptions, was a development observed in several groups.

How does talk awareness develop?

During earlier lessons, participants were inclined to comment on 'surface-level' features of collaborative talk. As the unit progressed, participants recognise more 'advanced' features, commenting on the language of talk. Comments during collaborative tasks and teacher-led discussion exposed misconceptions while also supporting the development of a vocabulary with which to critique talk.

In the preceding episodes, the group's analytical comments developed with reference to the collaborative talk framework. Discourse patterns change as participants provide reasoning for their comments and challenge observations. Therefore, as the unit progresses, not only does participants' talk awareness develop, but so does the way in which they engage with each other.

Developing talk awareness and a vocabulary with which to analyse talk may serve to expose and challenge misconceptions of talk, while aligning participants' analysis with the 'reality' of the talk. This may in turn support students in commenting on the effectiveness of their own talk. By considering the role of contributions within the collaborative talk framework, students consider how the outcome of talk is shaped by participants. Simply practising talk will not facilitate the development of talk: talk itself need to become the object of analysis and tasks and teacher play an important role in this, as argued in the previous chapter.

7.4 The Role of the Teacher and Emotional Engagement in the Development of Talk Awareness and Collaborative Talk

As discussed in Section 6.2, the teacher, Vicky, reinforced expectations for talk, implicitly and explicitly, while modelling dialogic and collaborative forms of talk and engaging students emotionally, with implications for students' perceptions, learning and development.

7.4.1 Embedding Expectations

The following episode demonstrates how the teacher embeds her expectations in her interactions with students.

Episode 7.15

Lesson 4: The teacher (Vicky) elicits feedback following a reading of a transcribed episode of collaborative talk

- Teacher: Can we get first impressions...
- Ryan: It really wasn't very good collaborative talk because they didn't keep on task or didn't focus
- Teacher: So they didn't keep on task...so let's think, hmm...negatively, so it was hard to *manage* the talk, to make sure goals are met....Evie?
- Evie: They only like...if someone else did that, spent that much time they could do more than one thing, like sort more than one thing out 'cause they only did, the kind of venue, they would have sorted out bands and stuff
- Teacher: So they really weren't managing the talk were they, it was really poor management because you're right: they were only thinking about one venue. Charlotte?
- Charlotte: This is a question: why were they quacking?
- Teacher: Umm...because boys are silly...quack quack quack quack quack...just sitting there doing that...It's amazing what you see in here. Will?
- Will: But how did they go completely off-task? Because they stayed on task, they just went quack quack

- Teacher: Do you think that quacking is on-task?
- Will: No, but they were on task for most of it, they done most of it
- Teacher: Well that's a fair point, you can discuss that in your group. But I think I'm going to build on Evie's point and say actually, you are right in a way but don't you think they should have achieved more? Lola?
- Lola: They kept repeating the same question and they were all, like, ignoring it...
- Teacher: ...yes, there was a lot of ignoring...
- Lola: ...yes, and then they were saying, do you want to do this and then saying, no 'cause you want to do it
- Teacher: Yes, I think he might have been trying to be funny. The trouble with scripts...unfortunately we didn't have much intonation our script, it was like we were half-dead reading it (laughter)
- Charlotte: It wasn't really easy to, like, contribute, 'cause of the quacking
- Teacher: Brilliant, just like Oscar's not participating or contributing just right now; he thinks that tapping his fingers is an acceptable behaviour whilst you were making a very valid point. Right, I've got this bad-boy sheet in front of you...

The teacher begins by reformulating Ryan's suggestion to emphasise the word 'manage' and clarifies the purpose of *managing* in collaborative talk. Evie contributes an elaborated suggestion about what participants achieved and the teacher validates her point. Charlotte asks a question which prompts Will to challenge the assumption that participants were off-task. In response to Will, the teacher makes it explicit that she's 'going to build on Evie's point'. Lola and the teacher connect utterances to develop the argument that participants weren't productive. Charlotte develops her earlier point and the teacher draws attention to Oscar's disruptive behaviour, with emphasis on *participating* and contributions.

The teacher embeds her expectations for talk within her dialogue with students, demonstrating how to incorporate collaborative talk 'phrases' and vocabulary and reminding students of its principles.

7.5 Modelling Dialogic and Collaborative forms of talk

The following 3 episodes demonstrate how the teacher modelled dialogic and collaborative forms of talk during her interactions with students, while reinforcing her expectations.

Episode 7.16

Lesson 1: The teacher explores students' understanding of the terms 'collaboration' and 'collaborative talk' to support them in the subsequent written task

Teacher:	What is collaboration and collaborative talk? Does anyone know before we start what collaboration means? Go on
Ryan:	Isn't it when things come together, to collaborate with each other
Teacher:	to collaborate, very good. So, yeah, coming <i>together</i> So, collaborative <i>talk,</i> what might that mean?
Jordan:	To talk together
Teacher:	To talk togetherwhat might happen in it Nicky?
Nicky:	Like, if you, like talk together you get more than one idea
Teacher:	Who's listening over here?
Will:	I was, miss
Teacher:	What did she say?
Will:	About listening
Teacher:	Epic fail (laughter)Nicky made a really great point and you didn't hear
Will:	I was just getting my pen out
Teacher:	I know, but you didn't need to get it out then did you

Richard:	You get to an answer quicker	
----------	------------------------------	--

- Teacher: You get to an answer quicker. These are all great ideas...so I'm just going to leave it like that, just in case anyone goes collaboration...so we understand it...I mean there's a great song, not sung by me but 'Stop, collaborate and listen'...love that little number. Anyone know that little number?
- Several: Yeah
 Stephanie: I was just singing that
 Teacher: You were just singing that, we could have a bit of singing in here...
 Jordan: My favourite number is 4, and my lucky number (laughter)
 Teacher: Thanks Jordan, that's great...

The teacher begins by establishing students' existing understanding of 'collaboration' and 'collaborative talk.' She develops Ryan's description of *collaboration* and probes further by inviting comment on *collaborative talk*. She probes further again by encouraging a comment on the *features* of collaborative talk. Instead of reprimanding Will, she draws attention to the importance of listening.

Although the discourse here follows a 'typical' teacher-student pattern of interaction, the teacher chains together students' contributions, facilitating their connection and development. The interactions between the teacher and students serve to 'model' expectations for talk in groups. This episode provides a snapshot of the 'off-task' talk engaged in by teacher and students, revealing the 'natural' or relaxed dialogue between them.

Episode 7.17

Lesson 1: The teacher elicits feedback from Group 2.1 (The Superheroes) after they have completed the Collaborative Task (To agree on the most important items to ensure survival in a plane crash)

- Teacher: I'm just going to quickly come to Dean's group. Dean, do you want to read your order?
 Dean: First, the gun, second is the small axe, the third one is a bottle of whiskey, the fourth is the lighter, the fifth is...what's fifth?
 Harry: A large sheet of canvas
 Dean: A large sheet of canvas. Number 6 is newspaper, number 7 is
- jackets, number 8 is (inaudible), number 9 is tin, number 10, chocolate bars
- Will: Why do you have a gun first?
- Stephanie: Because we're lethal...(Jordan interrupts)
- Teacher: Sorry, that's a good question...no, sorry darling, there's no listening whatsoever to what just went on. Will, very good question. Ask it again.
- Will: Why was the gun first?
- Stephanie: Um, well...uh...(laughter) You tell them Dean
- Will: Go on Dean
- Teacher: Go on Steph
- Stephanie: For defence
- Teacher: Interesting, interesting, this is a point here, Hannah's, like, why have they put the lighter there when the lighter doesn't have anything in it...but it's interesting, there's different ideas...it's quite hard to come to a decision together
- Stephanie: The lighter was fourth because we thought, wasn't it, that whiskey can like, what is it, like light, flammable...so we thought that could like, that's why that one got to three
- Jordan: Yeah, but you can't just light it
- Stephanie: Yeah, but put it inside...
- Ryan: A lighter with no lighter fluid can still make sparks which will...
- Stephanie: Yeah, that's what I meant

Dean (an EAL student), supported by Harry, shares the group's decisions with the class. Without prompting, Will asks the group a question, challenging a decision. When Jordan interrupts, the teacher validates Will's question and asks him to repeat it. The teacher refers to a question raised by Hannah (inaudible) and Stephanie provides an elaborated response. This prompts a chain of interaction between students as they grapple with the role of the lighter and the whiskey.

The teacher does not dominate or control the talk here but facilitates it: she does not prompt questions from students but they ask them and challenge each other regardless. The teacher facilitates the talk by validating students' questions, implicitly reinforcing expectations for talk and supporting a space within which students can question each other.

Episode 7.18

Lesson 7: The teacher elicits feedback after students have watched a clip from The Apprentice

Teacher:	Charlotte, what did you guys see?
Charlotte:	They weren't willing to compromise, they had an idea but because it was his idea, they didn't want to go with it
Teacher:	Which is like, yes, I've made a decision andwe'll go with what I've decided
Charlotte:	Yeah. They could have just like put it in to one, and sort of compromised around some other ideas but they didn't
Teacher:	Brilliant. So what should they have done, Lauren, in order to make sure that every member of the team was involved in that decision?
Lauren:	They could havethey could have all agreed on one thing
Teacher:	Good, and how could they have done that darling?
Lauren:	each say something and then choose one

- Teacher: Maybe, yeah. And Jordan, what were you going to say?
- Jordan: They could, like, all meet up and discuss it with each other and their ideas
- Teacher: I think that there needed to be more communication. Evie?
- Evie: Um, when we talked about the lack of communication thing, we said that if they were all together then they...I think it was because they were two separate groups and on the phone...if they were all, like together then they would have compromised and talked through their ideas
- Teacher: That's a really good point...has anyone sent a text message that's been taken the wrong way?
- All: Yes!

This episode begins with an exchange between Charlotte and the teacher where they develop a critique of the video clip. Using this suggestion as a platform, the teacher encourages Lauren's contribution by asking her a related series of questions. Finally, the teacher relates Evie's point to the personal experience of the class.

The principles embedded within collaborative talk and dialogic talk: egalitarian participation, challenging and exploring ideas, are promoted explicitly by the teacher but also implicitly in her talk. The teacher models forms of dialogic and collaborative talk which may be appropriated by students: she encourages challenges, questions and reasoning. Therefore, the teacher encourages and supports students' perception of collaborative talk as a valid pursuit.

7.5.1 Appropriating the Teacher's Talk

The following brief episodes show how students managed or supported their peers by appropriating the teacher's words and referring to her expectations and the expectations of collaborative talk.

Episode 7.19

School 2, Group 2.6: The Lead Team Participants: Jordan, Anne, Charlie and Lauren Lesson 6 Warm- up task: Collaborate to draw a superhero. Students were given 10 seconds each to develop the drawing

Jordan:	Anne, you just ruined it!
Anne:	Superman!
Jordan:	She just ruined it!
Anne:	It has to fit the whole page
Charlie:	Jordan, support othersJordan, you should support others in your
	discussion
Anne:	You're doing exactly what miss told us not to do

In this episode, Charlie and Anne echo the teacher's expectations and make explicit their awareness of collaborative talk purposes in an attempt to manage Jordan's participation.

This brief episode is one of many in School 2 where participants echo the teacher's expectations in order to manage obstacles set by others. By appropriating her stance, participants are able to confront a difficult situation by reference to the expectations of the teacher. By setting expectations for collaborative talk and making its purpose explicit, the teacher equips participants with tools to manage their talk.

Episode 7.20

School 2, Group 2.7: The Mean Team Participants: Will, Lola, Tom (Hannah is absent this lesson) Lesson 1 Task: Write down what you think 'collaboration' and 'collaborative talk' means.

Lola:	Will
Will:	What, I don't know it
Lola:	Just read the question, what does it say?
Will:	Describe what you think the word collaboration means but I don't know
Tom:	Think of musical collaborations
Lola:	Yeah, think about
Teacher:	What did we just talk about?
Will:	When people pair up?
Teacher:	Yeah! Good, go, brilliant
Lola:	And you could write, like, an example, like in music when two artists go together and make a big song

In this episode, Tom and Lola support Will in answering the question: what does 'collaboration' mean? Instead of giving Will the answer, Tom asks him to think about musical collaborations, possibly with the intention of describing a concept familiar to Will, with which he can connect understanding of 'collaboration.' The teacher encourages and praises Will's suggestion (though it would have been interesting to have seen the outcome of this talk without teacher intervention). Lola develops Tom's suggestion while also prompting Will to elaborate upon his response.

This episode not only demonstrates the benefits of collaboration for mixed ability students but may represent how participants appropriate teaching strategies. Instead of just giving Will the answer, participants support him in developing his own response, characteristic of the teacher's interactions.

Episode 7.21

School 2, Group 2.4: The Business Participants: Evie, Ryan, Joseph and Harry Lesson 3 Task: Reflect upon and evaluate your talk during the Prom 2 Task

Evie:	We agreed well on stuff
Ryan:	We did very well, well done guys
Evie:	What did you guys write? I just put that we agreed well on things. Ryan, what did we do well?
Ryan:	I wrote that we agreed on everything and stayed on-task
Joseph:	Made good progress
Evie:	Well done guys

Episode 7.22

School 2, Group 2.7: The Mean Team Participants: Will, Lola, Tom and Hannah

Will:	This was actually pretty fun
Lola:	Think that was pretty good guys
Jordan:	I think we needed more money though but good
Lola:	Well done everyone

In the two preceding episodes, participants praise each other's and their group's efforts. The second episode took place after the lesson had finished.

Not only does participants' praise of their efforts serve to evaluate their talk, it serves to reinforce positive relationships amongst the group. Praise exchanges were frequent in School 2; Vicky used considerably more praise than Abigail so it is possible to surmise that students appropriated her use of praise and encouragement. However, this difference may also be attributable to the different ability and composition of each class. 7.6 What is the relationship between dialogic and collaborative forms of talk, and emotional engagement? And what are the implications for students' perceptions of the validity of talk?

The teacher described her motivation (Chapter 5) to forge positive relationships with students. This motivation is evident in her interactions with students. To emotionally engage students, Vicky asks personal questions and takes a genuine interest in responses. She invites students to share experiences external of the classroom and connects them to learning. She praises students' ideas and suggestions and validates them by building upon the contribution. She facilitates a safe space within which students can challenge her ideas. She shares her own stories and personal experiences and uses humour frequently to engage interest and enthusiasm.

Though driven by the motivation to emotionally engage students, her interactions are characteristic of dialogic and collaborative forms of talk (as described in section 2.3). In taking a genuine interest in a student's experience or opinion, the teacher does not imply the existence of a required or pre-determined response. By asking further questions, the teacher seeks understanding. By building upon the student's response, the teacher chains together and develops utterances, while encouraging further contributions. In praising effort instead of the quality of a response, the teacher develops a perception of knowledge as malleable, of all contributions and questions as valid. Vicky, through reciprocal dialogues, reinforces and models expectations while creating a safe 'space' in which students and teacher can engage.

Vicky was conscious of her attempts to emotionally engage students, but not of simultaneously modelling forms of dialogic and collaborative talk. Here, dialogic

forms of talk and emotional engagement were intrinsic and inter-twined, neither one preceding the other. Teachers who value a reciprocal student-teacher relationship (as far as that is possible) may inevitably model dialogic forms of talk, serving to reinforce students' perceptions of valid forms of interaction.

The relationships observed between the teacher and class were established prior to the unit's implementation. These relationships were a foundation upon which to explore, discuss and develop collaborative talk skills. As newly formed microcosms within the wider class, groups did not begin the unit from this well-established point. Initially, participants had to grapple with each other, their expectations and perceptions in order to develop the foundation upon which to engage in collaborative talk.

In modelling emotional engagement (and dialogic and collaborative forms of talk), the teacher also modelled ways in which participants could forge relationships within their groups. Group participants in this class may have appropriated the teacher's strategies for emotional engagement, particularly praise and encouragement, in order to develop relationships and group identity, through which their collaborative talk could develop.

Adopting a dialogic pedagogy is a challenge facing teachers in an educational climate which values individual achievement and promotes competition. And although Vicky's talk is characteristic of a dialogic pedagogy, she is still an authoritative voice who largely controls the dialogue. Nevertheless, Vicky demonstrates that dialogues which serve to emotionally engage students may also serve to model dialogic forms of talk which may in turn encourage these forms of talk in groups.

7.7 Participation which Undermines the Purpose of Collaborative Talk

A trend emerged in participants' talk: the initiation of a vote to dominate or control the outcome of collaborative talk. The following episodes reveal how the use of the vote can restrict the development of collaborative talk and undermine its purpose.

Episode 7.23

School 2, Group 2.1: The Superheroes Participants: Stephanie, Dean, Jude and Harry Lesson 6 Task: Rank the Superheroes and then agree on a new Superhero team of four

- Stephanie: I really dislike the idea about Iron Man being in the team at all, I really don't, look, who...look...we're going to have to do a vote on this. Right, who thinks that Iron Man should be in the team? (Harry puts his hand up)
- Dean: Who's Iron Man?
- Harry: This guy....
- Stephanie: ...Harry. Who thinks that he shouldn't be? (Jude and Dean put their hands up) Right, sorry Harry but you're out-voted. It's democracy.
- Harry: But, no...if we keep him it's still a maybe...
- Stephanie: ...No, I didn't get Frankie (referring to the X Factor task last lesson) so you don't get Iron Man

Stephanie states her objection to Iron Man being in their Superhero team and initiates a vote, allowing no 'space' for participants to object to the strategy. Harry signals his preference for Iron Man. Dean's question reveals his lack of understanding and therefore his inability to partake in genuine agreement. Stephanie interrupts Harry's attempt to explain and seeks agreement from Jude and Dean who passively agree. When Harry objects, Stephanie refers to a decision made last lesson as an argument for her right to 'win' this lesson.

This episode is an explicit example of how some participants used a vote to enforce personal preference. Stephanie justifies her vote as 'democratic', a principle of collaborative talk, but in fact uses it to manipulate and dominate the decision-making. However, some participants were more subtle in their manipulation of the vote:

Episode 7.24

School 1, Group 1.5: The Talkers Participants: Carla, Millie, Eloise and Ruth Lesson 8 Task: Agree upon and design a concept for either an App (for iPad or equivalent) or a Pet food brand in preparation for an end-of-unit presentation

- Carla: I think we've got three slogans and they're all quite good but I think we need to take a vote and see which one we like the best, so... Millie, are you listening?
- Millie: Yeah
- Carla: So, we've got: 'Vegan: your dog will be begging for it' Anybody? No, ok. We've got 'Begging for vegan' Who likes that?
- Eloise: I like that ...
- Carla: ...and then you've got: 'Vegan: A walk on the vegan side.'
- Eloise: I'm not sure about the first one but I like the second one
- Carla: We've got to go for what's catchy: 'begging for vegan' or a 'walk on the vegan side...'
- Ruth: I don't know, it was just a suggestion (referring to her suggested slogan: 'a walk on the vegan side') I don't really feel that...is it more related to dogs
- Carla: ...which one sticks in your head more? 'Begging for vegan' or a 'walk on the vegan side?'
- Ruth: You wouldn't have vegan would you? You would have a walk on the vegan side
- Eloise: I like the fact that people would walk on the vegan side...

Carla: ...but if you have a walk on the vegan side they're not going to know what we're talking about

Preceding this episode, Carla suggested the slogan 'begging for vegan'. Here, she initiates a vote and demonstrates some authority in demanding Millie's attention. Other participants do not respond automatically to Carla's request for a decision so she reformulates questions until her preference is accepted. This was typical of the group's discourse: if a vote wasn't won immediately, Carla would manipulate the talk until her preference was secured.

Episode 7.25

The following 3 episodes show how another group participant controlled the talk with the use of a vote, but also how participants challenged this authority as the unit progressed.

School 1, Group 1.2: Team Gossip Participants: Willow, Carrie, Lisa and Samantha Lesson 5 Task: Agree on X Factor contestants to form a new group

Willow:	Out of the boys, we have to decide on two boys. Ok, let's make	
	a vote. I vote Ryan	
Carrie:	I don't know, you guys go first	
Lisa:	Marcus	
Carrie:	I don't know! Ryan's a good singer, so's Marcus…	
Samantha:	They're really similar	
Willow:	Choose	
Samantha:	I'm going to go with Ryan	
Carrie:	Ok, I'll go with Ryan	
Willow:	So, two girls and two boys	

After a quick review of the task, Willow initiates a vote without prior discussion. She initiates the vote and allows no room for objection by stating her preference in the same turn. Carrie's hesitation suggests that she is not ready to make a decision but Willow pushes her to choose. Carrie then concedes and Willow's choice 'wins.'

This episode is characteristic of Willow's participation: she would initiate votes to promote her preference or to drive the talk towards a quick conclusion, after which she would seek the teacher's attention to validate their completion of the task.

However, as the unit progressed, participants in this group increasingly challenged Willow's authority:

Episode 7.26

Lesson 7 Task: From a list of 10, agree upon and rank the 5 most influential people in the world.

- Willow: Does everyone agree with what we've actually got? Are we all agreed the Barack Obama should be the highest?
- Samantha: But I think that Prince William and Kate are more influential than Michelle Obama
- Willow: Why do you think that?

Samantha:Well, because...think of all the people in America who watched their wedding

Willow: I see what you mean but if you think about it, she can actually, like, influence lots of people whereas...a lot of people like them and respect them but I don't see how they can do much to influence people

Samantha:Yeah, doesn't matter

Willow: Anyone else have any ideas?

Lisa: Samantha, stick by your ideas

Willow: To be honest, no one really cares that much anyway

In this episode, Willow begins by seeking agreement on their decision that Obama is the most influential person in the world. Samantha challenges this decision and Willow demands an explanation to which Samantha responds reasonably. Willow's tone is confrontational and assertive, making it difficult for Samantha to persevere with her reasoning. When Samantha says 'it doesn't matter,' Willow requests further contributions.

Willow appears to be encouraging contribution and seeking agreement but in fact maintains her control over the discourse and rejects challenges. Pleasingly, and demonstrating a development in their talk, Lisa encourages Samantha to 'stick by her ideas' and therefore challenges Willow's authority, who attempts to undermine the validity of Lisa and Samantha's challenge by stating that 'no one cares.'

Episode 7.27

Lesson 8 Task: Agree upon and design a concept for either an App or a Pet food brand in preparation for an end-of-unit presentation

Willow: Ok guys, we need to decide...basically we need to decide pet food or APP

Samantha: Pet food, definitely pet food

Carrie: Yeah...Pet food would be easier...

Samantha: So, pet food or App

Willow: I want to do an App

Carrie: I think an App would be better to do but harder

Willow: I think it would be better 'cause we would know what to do more

Samantha: I don't have Apps

Lisa: I don't

Samantha: My phone won't download them Carrie: Let's take a vote. Pet food? Willow: Ok

Again, Willow initiates the need to make a decision. Samantha and Carrie state their preference to which Willow objects. Having established that Samantha and Lisa also want to focus on pet food, Carrie, adopting Willow's strategy, initiates a vote, allowing them to 'defeat' Willow who must then concede.

During this and the previous episode, participants begin to challenge Willow's authority, supporting them in achieving more 'democratic' participation. The following 2 episodes show how participants in *The Lead Team* also developed their talk in order to diminish the authority of the vote:

Episode 7.28

Group 2.6: The Lead Team Participants: Jordan, Lauren, Anne and Charlie Lesson 2 Task: In your groups, analyse and identify 'ineffective' collaborative talk features in the video.

Teacher 2:	Jordan, can I just clarify with you that all agreeing doesn't mean that you just tell them
Jordan:	One could be not listening to each other. Agree?
Charlie:	Yeah
Jordan:	Raise your hands…I!
Charlie:	Tapping on the table
Jordan:	Ok, tapping on the table. Raise your hands in vote of tapping on the table
Teacher 2:	That's a lovely new theory you've gotJordan, I'm proud

Jordan:Talking over each other, raise your hands!Charlie:I!

Despite the teacher's reminder, Jordan controls the discourse in this episode (and throughout the task). Jordan states a suggestion and seeks passive agreement repeatedly.

Although the teacher praises this strategy, this way of seeking agreement prevents participants from challenging or exploring suggestions (note that Anne and Lauren do not contribute throughout). However, unlike other groups, Jordan's strategy may in fact serve to scaffold his participation. The reader will recall this group's divergent talk in Lesson 1 (episode 7.6) when participants' utterances lacked any coherence.

Episode 7.29

Lesson 6 Task: Rank the Superheroes and then agree on a new Superhero team of four

Charlie:	Have we decided on this order? Is there anything that's
	wrong?
Lauren:	I'm happy with this order
Jordan:	Yeah, I reckon that's a good order
Anne:	Actually, she's quite good
Charlie:	What does she do?
Jordan:	She can turn invisible
Charlie:	I think we should swap her for Ghostrider
Lauren:	Yeah. Do you agree?
Jordan:	Yeahwhat does Ghostrider do?
Lauren:	(Reads information from card)
Charlie:	maybe keep him there then.

Jordan: Ok, in favour of Iron Man first...!?! Charlie: Uh...I reckon we should maybe think about Batman first Jordan: Iron Man: he's got armour, he can fly, he's got guns, he's got weapons, he's brave Charlie: Yeah, I guess

This episode demonstrates a development in students' talk. Not only are Lauren and Anne active participants but reasons are provided and questions asked before decisions are made. Furthermore, Jordan's request for agreement: 'in favour of Iron Man...I!?' is challenged by Charlie who requests more consideration of the alternative, prompting Jordan to provide reasoning for his opinion.

Willow's use of the vote and Jordan's requests for passive agreement initially influenced the discourse and prevented exploratory discussion and genuine agreement. Over the course of the unit, participants challenged these strategies while also supporting Willow and Jordan in developing their understanding of the purpose of collaborative talk.

The Collaborative Challenge

Voting affected the potential of collaborative talk because a 'winning' decision can't represent shared input and understanding and can't subsequently be *developed*. Similarly, if participants seek passive agreement or conformity, the possibility of challenge and idea amendment is diminished.

Voting was not a strategy promoted by the unit but may be encouraged or adopted by students in other talk contexts. And as observed here, teachers may misinterpret the use of the vote as a democratic strategy in keeping with collaborative talk (as I did initially). The vote encourages passive agreement but as participants develop an understanding of the purpose and management of collaborative talk, they may become better equipped to challenge the authoritative participant. And in some cases, the vote may scaffold 'weak' students' participation in the decision-making process.

In engaging in collaborative talk, participants face the challenge to overcome concerns about individual achievement and embrace shared goals and responsibility. For some, the validity of collaborative talk must be questionable and therefore the scenarios presented by the unit seem false. The validity of the unit seemed particularly questionable for School 1, a class which included high achieving students and a teacher focused on individual assessment outcomes.

These findings suggest that teachers should re-consider the promotion of the vote as an effective strategy in collaborative activities and consider how 'democratic' strategies can be manipulated for non-democratic purposes.

7.8 Case Group: The Development of *The Better Group*

In the following section, episodes of School 2's *The Better Group's* talk during lessons 1, 3, 6 and 9 will be presented. Discussion will focus on the group's development and how their talk is facilitated by the tasks. The episodes presented will make more explicit the 'threads' that run through participants' interactions over the duration of the unit. The chapter will conclude by proposing a framework for the development of collaborative talk.

7.8.1 Assessment Data and Teacher Comments

The table presents *The Better Group* participants' predicted GCSE grades alongside their pre and post-implementation GCSE Speaking & Listening score. The highest score possible is 16.

Names	Predicted	Pre-		Post-		Score
	GCSE	Implementation	de Tt	Implementation	de Tt	Improvement
	English	Group	Grade alent	Group	Grade alent	
	Grade	Interaction	px Grad uivalent	Interaction		
		Score	Appx equiv	Score	Appx equiv	
Nicky	С	10	В	13	А	3
Charlotte	В	11	В	12	А	2
Johnny	D	5	E	8	С	3
Oscar	A	6	D	11	В	5

Table 7.1: The Better Group Assessments

Participants' predicted English GCSE grades show the group's mixed ability. According to these assessments, Oscar is the most able and Johnny the least. Despite Oscar's predicted A grade, his pre-implementation Speaking & Listening score is 6, only 1 point higher than Johnny's. Therefore, Oscar's Speaking & Listening is considered 'weak' in comparison to his reading and writing ability. Johnny's pre-implementation Speaking & Listening assessment is aligned with his broader ability in English.

Nicky	Is not very confident but can work well with others. Needs someone to help guide her in her conversations with others. If she is feeling good she can control the tone of conversation and be really perceptive. Is respectful and works in a team.
Charlotte	A confident student who works well with others but needs to develop her ideas more. She does enjoy group work and respects others' views. She is confident and is able to challenge others' ideas. Needs to manage her talk better.
Johnny	Not forthcoming at all but can speak in certain situations. Does make relevant contributions to discussion. He doesn't work well in a group or on his own. Does not offer much towards discussion. S&L is very hard for Johnny.
Oscar	Has real problems working with others. Can't contribute properly. Very controlling and dismissive. On his own he could be an A grade students but there are major problems with Oscar when he is around others. Not respectful, often rude, terrible body language.

Table 7.2: Pre-implementation teacher comments

The teacher identifies Nicky as a student lacking in confidence but suggests that she is bright. Charlotte is described as a confident student whose participation lacks control. Vicky describes Johnny's difficulty with group work while also suggesting his reluctance to participate. Oscar is described as being difficult to work with, despite his otherwise good ability.

7.8.2 The Macro-Analysis of The Better Group

The macro-analysis observations revealed Oscar's tendency to 'difficult' behaviour, in keeping with the teacher's comments. His body language was often and indeed, 'terrible.' However, observations also revealed Oscar's good vocabulary and creativity. Johnny was certainly shy and reluctant to contribute at first. Despite the teacher's observation that Nicky lacked confidence, she was probably the most conscientious and therefore tried hard to manage the group. Charlotte was more confident but her contributions, particularly early on, were often 'messy' and she was easily distracted.

Coding the data revealed that the teacher, second to *The Superheroes*, interacted least with *The Better Group* during independent work. The teacher may have

interacted with the group more infrequently because of their position at the back of the classroom. The teacher interacted least with this group during whole-class discussion. This is in part due to Johnny and Oscar's reluctance to volunteer responses. While Charlotte and Nicky frequently volunteered responses, Oscar and Johnny would contribute only when requested to do so.

Second to *The Mean Team*, the group's turns were coded most frequently as *off-task* and as *obstacles*. Particularly early on, Oscar was responsible for the majority of these turns. However, individual lesson codes indicate that the frequency of *off-task* talk peaked in lessons 3 and 4 but then occurred only 2 or fewer times in the lessons which followed. The frequency of *obstacles* peaked in lesson 2, followed by a small number of codes in lesson 4 and none after. This shows that the frequency of *off-task* talk and *obstacles* decreased as the unit progressed. Therefore, participants improved in cooperation and focus.

7.8.3 Lesson 1

This lesson was designed as an engaging introduction to collaboration and collaborative talk. It was intended to support students in developing relationships within their groups and to highlight features of collaborative talk. Humans have great potential for collaboration in emergency situations; the theme of the first lesson aimed to 'tap into' that instinct. The episodes presented here will include some interactions with the teacher to show how she supports the group's initial understanding.

Episode 7.30: Teacher Introduction

The teacher initiates a discussion about the topic of the unit and refers to the words of an oil rig engineer who describes the benefits of collaboration.

Teacher:	What is this unit about? Can we have some hands up? Can I just remind you before we start, we're going to try this out for todaywhat happens when I do this? (<i>puts</i> <i>hand up in the air</i>).
Jordan (The Lead Team):	We all be quiet
Charlotte:	We shut-up
Teacher:	Look! (<i>indicating that students should put hand up also</i>) Ok. So some of you, if you're in mid-conversation will have to move really fast, straight away. So let's try again, go. (<i>Puts hand up and students do the same</i>). ExcellentOk, so what is this unit about Miss Lane? (<i>Charlotte</i>)Miss Lane, loving it in the back since she got moved to the front(<i>laughter</i>)
Charlotte:	l don't know
Teacher:	Any ideas?
Charlotte:	No
Teacher:	Is it about the price of cheese? Is it about shopping? Is it about football? Is it about X Factor? No?
Oscar:	(<i>Aside</i>) Our group name should be the group that's better than the group that's better than everyone elsethat would be brilliant
Teacher:	Johnny, can you read this out?
Johnny:	In an emergency situation, you might be a one person survivorbut you've got a team brain
Teacher:	Thank you. Any ideas? Miss Lane?
Charlotte:	When you're like in an emergency situation there might be one person who thinks of the way out but when you're in a team you've all got to think of something, you've all got to like work together

In order to manage the groups the teacher, Vicky, sets expectations for a 'hands up' system to ensure a quick transition between group and teacher-led activity. Instead of explaining the focus of the unit straight away, Vicky provides an opportunity for students to make suggestions. When she gets no responses, she lists hypothetical topics. Students laugh in response and are put at ease. After Johnny reads out the

statement, Vicky returns to Charlotte and encourages her input. The teacher could have asked another student but by returning to Charlotte does not accept her earlier 'no' and prompts her to a better response. Drawing on the oil rig engineer's statement, Charlotte recognizes features of collaboration. In this episode, the teacher clarifies the purpose of the unit by building on students' input, on their own words. Her manner engages and reassures students so that they are confident in contributing.

Oscar's aside suggests his interpretation of the groupings as competitive. In order to encourage Johnny's participation, the teacher invites him to read out the statement. The teacher's use of 'Miss Lane' suggests their warm relationship, though a reference to her having being allowed to move to the back of the class suggests that she may previously have been disruptive. These interactions and their interpretations are in keeping with those drawn from the data presented in Section 7.8.1.

Episode 7.31: Warm-Up

Groups are divided into pairs to complete the 'Field of Mines' task. The participant providing verbal instructions should guide the other participant 'safely' through the mine field. The task is based on a team-building exercise used in the military and in preparatory training for oil drills. This task requires the blindfolded participants to trust the participant providing verbal instructions. The element of 'danger' in the task reinforces the importance of this trust. It also requires the blindfolded participants to listen very carefully, while the guiding participant must provide very clear, precise instructions.

Nicky:	So, basically you have to get to the finish without hitting the mines
Charlotte:	Ah, so I have to just draw a line
Nicky:	Yeah, blindfoldedI have to direct you.
Charlotte:	Can I use your pen?
Nicky:	So go two centimetres
Charlotte:	I don't know how big that is
Nicky:	So go up really slowly and I'll tell you when to stopstop, waitgo right
Charlotte:	Which way's that? That way?
Nicky:	yeahstop, go up againgo forward, keep on going upstop, stop, left, yeah, go slightly left, go down, leftah, you've gone through one!
Charlotte:	Oops!

Nicky and Charlotte begin by clarifying the requirements of the task. Nicky's first instruction to Charlotte is to move two centimetres. Charlotte doesn't understand this measurement so Nicky amends her instructions. Charlotte asks again for clarification. Nicky then guides Charlotte some way through the 'field' before she 'hits a mine.' After completion of the task, the teacher seeks feedback:

Teacher: Why do you think we might have done that? Do you think we did that because we...like, green paper? Go on Lola

Lola (The Lead Team): Teamwork

Connor (The Mean Team): Fun

Teacher: Teamwork, it was fun...ooh, there's some good words. I'm hoping that we might hear a lot of that over the next few weeks. Teamwork and fun. Now, in your packs you are going to start to answer questions, just 1-3. No, 1-4, I tell a lie. Now some of these...do not panic...if you don't know the answer. At this stage, I don't really want to give you too much help with the answers. I want to

	know what you know already. So, let me just say this because there might be a few of you who will struggle with the word, ok. So, what is collaboration and collaborative talk? Does anyone know before we start what collaboration means?		
Stephanie (The Superherc	pes): Is it when things come together? To collaborate		
Teacher:	To collaborate, very good. So, yeah, coming together. So collaborative talk?		
Harry (2.5: unnamed):	Talk together?		
Teacher:	Talk together. And then what might happen?		
Nicky:	Like, if you, like, talk together you might get more than one idea withinwhen talking together		

The teacher asks what they think the purpose of the task was; students say that it involved teamwork and fun. The teacher picks up on these points and goes on to set up the next task. To support their completion of the following task, the teacher first clarifies the terms *collaboration* and *collaborative talk*. Stephanie suggests that collaboration is 'coming together'; building on this, the teacher prompts consideration of collaborative *talk*. Harry suggests talking together; this is then developed by Nicky.

Although the teacher doesn't highlight the importance of the clarity and careful listening required for The Field of Mines task, she does emphasise its relevance. The teacher then chains together a sequence of questions which develop students' consideration of collaborative talk, building a platform on which students can complete the following task.

Episode 7.32: Development & Analysis

During this episode, participants completed a written self-evaluation in their booklets.

They were asked to describe their understanding of 'collaboration' and 'collaborative

talk' and then consider their own collaborative talk skills.

What are the benefits of collaboration?
Johnny: to have more chemistry between the group and to be more confident when
Speaking
Charlotte: you get to talk together with other people and listen/use their ideas as well as
your own
Nicky: If you collaborate with someone you can get to the answer quicker and
get better ideas because there is more than one brain
Oscar: You get to the answer quicker and get to find different answers or ideas
Do you think you are a good communicator?
Johnny: No because I'm not getting involved as much as I would like to and I'm not
sharing my ideas
Charlotte: I think I can sometimes be a good communicator – I tend to muffle when I
speak and therefore it's hard putting my ideas across
Nicky: I try to communicate within the group and I felt that my teammates
listened to me very well
Oscar: Maybe because I can use interesting words alongside valuable points but I can
also be quite rash and harsh

Table 7.3: Students' self-evaluation Lesson 1

Johnny uses the word 'chemistry', demonstrating an understanding that there should be positive relationships amongst group participants. His suggestion that developing confidence in speaking is a benefit of collaboration may be indicative of his own lack of confidence. His reflection on his communication skills supports this: he acknowledges his reluctance to participate. Without the written element of the unit, Johnny may not have communicated this lack of confidence. His entry does not suggest that he is unwilling, instead he says that he would 'like to' participate and that he does have 'ideas' that he could share. This self-assessment challenges some of the teacher's assessments, as presented in section 7.8.1. Charlotte recognizes the potential for collaboration to result in more ideas which can be shared. This statement echoes Nicky's response to the teacher's earlier question about collaborative talk. In reflecting on her skills, Charlotte describes how she 'muffles' and can therefore be unclear when expressing her ideas. Nicky reformulates her earlier response to the teacher (episode 7.31) in describing what collaboration is. She recognizes that working with others can make things 'better' or 'quicker'. Her reference to the 'brain' echoes discussion of the oil rig engineer's statement at the beginning of the lesson (episode 7.30). In reflecting on her own skills, Nicky in fact praises the way in which her teammates have listened. Oscar describes the benefit of sharing ideas and is honest in his reflection. He believes that his good vocabulary is a positive trait but acknowledges that he can be 'harsh.'

Students' written responses are interesting because they provide an insight into the perspective of participants who have not yet contributed verbally. In writing, students echo points made during discussion, allowing them to consolidate their understanding and express their views in a more confidential way. The importance of participant relationships is emphasized in Johnny's use of the word 'chemistry' and Nicky stresses listening to each other as a positive feature. Characteristic of other groups at this early stage, there is emphasis on clarity, vocabulary and confidence as features of collaborative talk. Oscar expands his self-evaluation in response to the teacher's request for feedback, which she then praises:

Teacher:	Ok, last one. Oscar?
Oscar:	I'm not very good at listening to other people's ideas or encouraging people to contribute
Teacher:	I think that's brilliant - honest.

Episode 7.32: Collaborative Task

The collaborative task requires participants to rank in order of importance items which would be useful in a plane crash. Resembling the warm-up task, this activity is used in the military for team-building purposes but was described to me by an oil-rig engineer as an activity used prior to boarding a rig for a lengthy period.

Oscar:	I want to read it.
Nicky:	Can everyone see it?
Charlotte:	Yeah
Oscar:	(<i>Talking over teacher as she continues to give instructions</i>) Ok, I would take the gun, I would take the axe, I would take the whiskey, the chocolate bars. Why would there be a gun?
Nicky:	Right, so there's a plane crash
Oscar:	I mean only in a presidential plane a pilot's allowed to carry a gun
Nicky:	I don't think that half a bottle of whiskey is going to be any help
Oscar:	it's very important. Yes it will
Charlotte:	It might be for
Nicky:	5 large chocolate bars. You can get energy from chocolate bars so if you're like stranded
Oscar:	Yeah I know but the whiskey's quite important because whiskey burns
Nicky:	Yeah so you could like light a fire or something. So you've got the chocolate bars for energy and thenmetal tin, you couldcan you like light the metal?
Oscar:	No
Charlotte:	No
Nicky:	What would you use that for then?
Charlotte:	A small axe you could like murder, go round going 'ra!'
Nicky:	You could cut down trees to make beds and stuff

In this episode, Oscar starts the task before the teacher has finished giving instructions. Similar to Jordan and Charlie in *The Lead Team* (episode 7.6), Oscar reels off a list of his preferences. Nicky attempts to set the scene for the task. However, Oscar continues by elaborating on the question he posed. Nicky states her opinion that the whiskey is unhelpful, challenging one of Oscar's preferences. Oscar disagrees but without reason. Nicky attempts to move the discussion on, making a reasoned argument for the chocolate bars. Oscar then provides a reason to reinforce his opinion that the whiskey is important. There is some development of this argument in Nicky's response. Nicky also attempts to reformulate Charlotte's suggestion regarding the axe.

In this episode, it is Nicky who attempts to manage the task and respond to other participants' ideas, however divergent they may be. Johnny does not contribute at all while Oscar perseveres with his argument in quite a 'monologic' style, dismissing objections to his opinions. On the whole, this is a divergent episode of talk where participants, with the exception of Nicky, fail to focus on the goal of the task. Despite Oscar and Johnny's recognition of their 'weaknesses' in the preceding written task, they do not amend their behaviour here, which is in keeping with the teacher's pre-implementation comments. Though predicted GCSE grades suggest that she is 'less able' than both Charlotte and Oscar, Nicky's contributions attempt to structure and focus the divergent talk.

7.8.4 Lesson 3

In Lesson 2, groups were asked to design their own prom. From a sheet of options, they had to calculate their budget and then select their choice of venue, food and entertainment. The teacher starts by asking them to reflect on their collaborative talk during this activity.

Episode 7.33: Teacher Introduction

Teacher:	Nicky?
Nicky:	We occasionally didn't support each other's ideas like someone would say something and we wouldn't think about how we would interpret it, we just moved on to something else
Teacher:	Very good, really reflective

In this episode, Nicky provides an elaborated critique of their talk. She says that ideas weren't listened to and that they 'just moved on,' suggesting that ideas were disconnected and undeveloped. In the first lesson, students spoke largely about collaborative talk involving the sharing of ideas. Nicky's contribution develops this by emphasizing the importance of supporting, listening and consolidating.

Episode 7.34: Warm-Up

The warm-up task required students to complete a tangram: putting together pieces of a picture, like a puzzle. This task requires students to collaborate physically and encourages students' participation. By physically taking and placing a piece of the puzzle, participants are able to contribute, perhaps without speaking. It also forces students to look at the same thing, encouraging a shared focus. They cannot place a piece without consideration of another participant's piece.

Oscar:	Oh I can do this
Johnny:	Come onso that goes down the bottom I reckon
Oscar:	You could just do that and say we've done itah no that doesn't fit
Charlotte:	Ha ha
Johnny:	That looks a bit of a square
Charlotte:	It's a big square
Oscar:	That'd be a rectangle
Charlotte:	Oh yeah
Oscar:	No, that won't work will it
Johnny:	Where do we put this bad boy?
Oscar:	No no no nokeep those there. Is that the one we just put it here?
Johnny:	Yeah
Nicky:	Does that one fit in there?
Charlotte:	No
Oscar:	No nowait wait
Charlotte:	But then
Johnny:	What is that?
Oscar:	That won't work, that won't work
Charlotte:	Support other people's ideas Oscar
Oscar:	Yeah but I can see that's not going to workI really don't want to do this
Charlotte:	Just try Oscar
Oscar:	Did try, failed, got bored
Charlotte:	You didn't try for very long did

Oscar begins by stating that 'he can do it'. Unlike the first lesson, Johnny is an active participant in this task. Oscar tries to 'cheat' by placing two triangles together but this doesn't work, to Charlotte's amusement. They place the pieces in various

arrangements. Oscar is most dominant throughout but is reminded by Charlotte to 'support other people's ideas.' In response to this, Oscar gives up, despite Charlotte's encouragement.

This episode reveals a development in Johnny's confidence. He is an active participant, placing pieces of the puzzle and asking questions. Oscar's initial assertion that he could do the task alone is challenged. Unlike the first lesson, participants pose a series of questions seeking confirmation from each other. There is a significant moment when Charlotte reminds Oscar that he must support others, echoing Nicky's response to the teacher during the introduction (episode 7.33). Though Oscar doesn't respond well to this, it does reveal Charlotte's willingness to challenge Oscar's behaviour by reinforcing the expectations of collaborative talk, thus attempting to manage the task.

Episode 7.35: Development & Analysis

As described elsewhere, the Development & Analysis task was designed to provide an opportunity for students to discuss collaborative talk meta-linguistically. By watching 'real' examples of talk students are encouraged to use their developing meta-linguistic vocabulary to analyse its effectiveness. In Lesson 2 students watched a 'bad' video of collaborative talk which was directed to exaggerate the 'bad' features. Identifying the 'good' features is more challenging because they are more subtle and require a closer analysis of language, moving away from off-task comments and interruptions, for instance. The topic of both videos is the prom, as is the topic of Lesson 2 and 3's collaborative tasks. In this episode, the group are discussing the video and writing down their ideas.

- Nicky: I think everyone was having an input so everyone was like speaking (*Oscar yawns*)
- Charlotte: Are we doing ...? Yeah, ok
- Johnny: They all agreed on things together

Oscar: I don't like the ginger one...I've got nothing against ginger people, that one just annoyed me

Charlotte: She is annoying, right...

(Oscar and Johnny talk off-task)

Nicky: Building on each other's ideas

Johnny: Got that

(The group talk off-task)

Charlotte: Ok guys, we're off-task

Nicky: Off-task guys

Charlotte: Ok, they listened to each other

Nicky: Yeah

Charlotte: Yeah, Ok, cool...wait my phone's vibrating, I think my dad's calling me

(The group talk off-task)

Charlotte: Off-task Nicky

(The group talk off-task)

Charlotte: Ok, right, what else do they do?

(Oscar talks off-task)

Charlotte: They were respecting other ideas

(The group talk off-task)

In this episode, participants make some suggestions, identifying some of the features of the 'good' collaborative talk seen in the video. Oscar makes divergent comments which Charlotte attempts to manage. There are several instances of off-

task talk at intervals but these are challenged by Charlotte and Nicky, though this fails to focus the group.

In this episode, we see a development in the vocabulary used to describe collaborative talk: building upon, respecting, agreement. It is a shame that the group fail to maintain their focus throughout. However, Charlotte and Nicky attempt to manage their diversions by noting that they are off-task, though Charlotte's commitment to this has be questioned given she is often responsible for distracting the talk.

Episode 7.36: Collaborative Task

Developing the collaborative task in lesson 2, students were presented with a 'problem' in lesson 3: due to unforeseen circumstances, their budget is cut and they must amend their choices. This time, they must also refine their choices for venue, food and entertainment according to a chosen theme. This task was deliberately designed to build upon the previous lesson. Students were required to review previous decisions and amend in the light of new task requirements. This meant that instead of every lesson involving a 'new' discussion, they were able to develop their discussion from the platform created in the previous lesson, facilitating a dialogue history. This is also highly characteristic of tasks in the workplace: teams or groups will work on projects for prolonged periods, requiring participants to keep up to date with changes and understand prior decisions.

Nicky: Theme?

- Charlotte: Didn't we all say Hawaiian? Are we all agreed on Hawaiian? Yes, yes...are we all agreeing on the Hawaiian theme? Yes...pardon?
- Oscar: Yeah
- Johnny: ... I don't really know...
- Oscar: It means all palm trees...
- Charlotte: ...and grass skirts and coconut bananas...
- Nicky:coconut bananas?
- Charlotte: Coconut bikinis...
- Oscar: ...and multi-coloured beanies
- Charlotte: I've worn coconut bikinis
- Oscar: I don't think those are actually proper things
- Charlotte: They are. There you go. Hawaiian
- Oscar: Edible bikini?
- Johnny: You're not going to eat the bikini are you?
- Nicky: I went to Spain and this man was like...
- Oscar: ...l've seen a monkey smash a coconut on another monkey's head in Spain. Quite funny really...
- Nicky: The most exotic place I've been is to Italy...

Go on to calculate their new choices; Johnny calculates for the group.

Charlotte: So how many people are coming?

Oscar: 144

Charlotte: What's 7 x 144?

Johnny: 1608

- Charlotte: I'm really confused. How did we do this yesterday?
- Oscar: Some of the stuff is still on there...we added all the stuff up, got our budget from that, worked out how many tickets we needed to sell

Johnny: So 600

Dean: and how much money we'd get from the dvds and drinksCharlotte: Weren't we going to do the Caribbean BBQ, like £7 a headGeorgia: How do you work that out?Oscar: that means how many people...

After the group have determined their new budget, Nicky prompts consideration of the theme. Hawaiian was suggested earlier in their talk; Charlotte seeks agreement on the theme, requesting specific confirmation from Oscar. Johnny expresses an uncertainty about what a Hawaiian theme means. Oscar, Charlotte and Nicky describe its features. The group then wander into talking about their holiday experiences. They go on to work out their budget and reflect on the processes they went through in the last lesson.

This episode represents an improvement in Oscar's participation and in Johnny's confidence. Johnny expresses his confusion about the Hawaiian theme and Oscar, along with Nicky and Charlotte, support his understanding. Johnny takes a management role in the talk by calculating the budget.

Episode 7.37: Reflect & Evaluate

Following the collaborative task, students were asked to write a self-evaluative comment:

How did your group engage in collaborative talk?
Johnny: I don't think we stayed on task, we listened to each other and we worked out
problems
Charlotte: Listened, stayed on task, contributed, worked out problems, came to decisions
Oscar: Stayed on task, listened well, worked out problems
Nicky: Listened, contributed, worked out problems

Table 7.4: Students' self-evaluation Lesson 3

Participants' evaluations reveal some discrepancies: Johnny says they went off-task when Charlotte and Oscar say that they stayed on-task. Participants' references to off-task talk were frequent and sometimes mechanical, possibly because it is the 'easiest' feature to recognize or because they are often reminded by teachers to stay 'on-task.' Johnny's observation that they did not stay on-task represents a closer, more honest analysis of their talk.

Though they engage in frequent off-task talk, participants demonstrate some development in their talk awareness. Their interactions during the collaborative task are more harmonious and supportive of each other. It is also important to stress that off-task talk does not always represent 'bad' talk and that it can in fact serve to strengthen the relationships amongst participants. Nicky's aside about her holiday in Spain was related to the topic of the activity and served to engage her peers' interest. These digressions into 'personal talk' resemble the interactions between the teacher and students described as 'emotionally engaging.'

7.8.5 Lesson 6

The theme of this lesson was *superheroes* and involved students in the analysis of a more ambiguous talk transcript, and in consideration of 'good' team qualities. Nicky was absent during this lesson.

Episode 7.38: Warm-Up Task

For this task, groups worked together to draw a superhero. The teacher allows each participant 10 seconds to contribute to a group drawing. This task involves collaborative talk for the development of a shared image, encouraging participants to make explicit 'pictures in the mind.' To contribute, individual participants must monitor their own understanding of other participants' 'moves.' As in previous warm-

up tasks, participants are required to physically 'collaborate' and focus on the same thing.

Charlotte:	So what we doing?
Oscar:	Superhero
Johnny:	What you thinking?
Oscar:	Superhero
Charlotte:	Yeah, what sort of superhero?
Oscar:	Um, muscly one
Charlotte:	Alright (laughter)
Teacher:	Change!
Charlotte:	Oh no
Johnny:	How should I do the legs?
Oscar:	Draw legs
Charlotte:	Draw stick man legs. Does it have to be artisty?
Oscar:	Um, no
Charlotte:	Here, I can do the head
Oscar:	You could just draw him with a
Teacher:	Change!
Oscar:	I thought that pen was purple!
Charlotte:	Ok, he can have
Johnny:	5 seconds!
Charlotte:	what kind of hair can he have? He can have flicky hair!
Oscar:	Ok, now finish his arms
Charlotte:	So how are you doing his arms?
Teacher:	Change!
Charlotte:	Give him a Superman thing
Johnny:	Ah, wow
Charlotte:	It's so coolgive him like a Superman
Oscar:	Shall II'll add feet

Teacher:Change!Johnny:What shall I draw?!Oscar:I'll do the logo...

In this episode, participants are forced to ask questions in order to 'pick up' the drawing and continue. Oscar starts and is prompted by Charlotte to be more specific about his intentions. The quick transition between participants creates a sense of urgency. Johnny manages the task by reminding the others of the time limit, while Charlotte seeks consensus on their character's hairstyle.

Although the nature of the task and its facilitation results in fast-paced interaction with little elaboration, participants are forced to ask questions in order to produce a coherent image. Participants need to ask questions in order to establish their own understanding of the process of the next 'drawer's' intentions and to seek consensus. They simultaneously monitor the time allowed and focus their attention 'physically' on the same thing. All participants are engaged and contribute throughout.

Episode 7.39: Teacher Feedback

In this episode, the teacher asks the group about their decisions during the warm-up task.

Teacher:	Ok, I'll look at them all!
Johnny:	Miss, us!
Teacher:	Ok, right. 'Bob, good at everything.' Aw, I like Bob. He's got some muscles; that's what muscles look like Ella!
Johnny:	Oscar did those
Oscar:	I did the body
Teacher:	Ok, who started?

Charlotte:	Oscar
Teacher:	And how was it working with each other?
Oscar:	We sort of didn't have to talk at all 'cause everyone sort of knew basically what we were doing
Teacher:	So that's quite good, so you were working together without talking?
Oscar:	Telec
Charlotte:	We were talking but we all sort of like knew what we wanted
Teacher:	That's good, the fact is nobody had a need to challenge each other so you were likethat's very interesting. RightOk, what was the most challenging thing about that?
Oscar:	The face
Oscar: Teacher:	The face Ok, you're saying the faceI'm actually thinking about things morehow was it working with each other?
	Ok, you're saying the faceI'm actually thinking about things
Teacher:	Ok, you're saying the faceI'm actually thinking about things morehow was it working with each other?
Teacher: Oscar:	Ok, you're saying the faceI'm actually thinking about things morehow was it working with each other? Oh
Teacher: Oscar: Charlotte:	Ok, you're saying the faceI'm actually thinking about things morehow was it working with each other? Oh
Teacher: Oscar: Charlotte: <i>(Aside)</i>	Ok, you're saying the faceI'm actually thinking about things morehow was it working with each other? Oh It was quite good
Teacher: Oscar: Charlotte: <i>(Aside)</i> Oscar:	Ok, you're saying the faceI'm actually thinking about things morehow was it working with each other? Oh It was quite good We need to change our name

Although Oscar says that they didn't really talk at all, he does say that everyone knew what they were doing, suggesting a shared understanding of the task and of their participation in the drawing. Charlotte corrects Oscar by saying that they were talking but reiterates his comment that they all knew what they were doing. Both students demonstrate an awareness of the shared understanding that was achieved during the task, though they don't recognize that it was through talk that this was achieved. However, Oscar and Charlotte's evaluations are in keeping and supportive of each other's. In the following aside, the participants agree that their group name

needs to be changed; this interaction and their use of 'we' suggests the development of a group identity.

Episode 7.40: Development & Analysis

In this episode, participants discuss and analyse a transcribed extract from the film, Ghostbusters.

Johnny:	Right, so, yeah
Charlotte:	Alright, we have to talk about
Johnny:	Right, so how do they share their
Charlotte:	Ok
Johnny:	What?
Charlotte:	They showed respect for each other
Johnny:	They listened to each other's ideas like when that man said don't cross the beams
Charlotte:	Yeah
Oscar:	They was being obedient
Charlotte:	Yeah, they were doing what they were told
Johnny:	What?
Oscar:	You tell a dog to sit, it sits, that's obedient
Johnny:	I don't understandso it listens?
Oscar:	yeah, listen and obeywithout doing anything
Charlotte:	Yeah
(teacher suggests they highlight extracts or phrases in the script)	
Johnny:	They all tried to catch the ghost
Charlotte:	Yeah, they all participated. None of them were standing around
Johnny:	What about 'don't cross the beams'
Oscar:	no, they give information and they like find out why they need to do it to like give them evidencelike <i>asking</i> l'm not sure how to say it but I know what I mean

- Charlotte: What about 'they nod obediently'. But then again that's not very collaborative talk because it means...
- Oscar: Yeah, like collaborative talk...this guy is saying 'don't cross the beams', instead of going ok, they'd go *why*?
- Charlotte: Yeah...so I'll highlight 'why not?'
- Oscar: So highlight 'don't cross the beams' and 'why not?'

Johnny and Charlotte begin by clarifying the task. Charlotte suggests that the participants in the video showed respect and Johnny note that they listened when they were told not to 'cross the beams.' Oscar describes participants' response to this command as 'obedient.' Johnny doesn't understand this word so Oscar provides an explanation; Johnny seeks further clarification. Johnny and Charlotte agree that they all participated and Johnny refers again to the command, 'don't cross the beams.' Oscar grapples with the phrase, appearing to recognise that it is a command given without reasons. Charlotte adopts Oscar's suggestion that they are obedient in their response to the command but then recognises that this command is not 'very collaborative talk.' Oscar develops Charlotte's point, reasoning that if it were collaborative talk then they would ask *why* they should avoid crossing the beams.

This episode represents development in the group's collaborative talk and in their talk awareness. All participants contribute, Johnny expresses a lack of understanding when necessary and Charlotte and Oscar support him with explanations. Johnny reiterates his reference to the phrase 'don't cross the beams' which is adopted by Oscar and Charlotte and developed.

The group begin by suggesting features like 'respect' and 'listening'. As in previous episodes, these suggestions at first seem somewhat detached from the transcript as participants list features which they know to be part of the collaborative talk

framework. However, during this activity, the uncertainty created by the Ghostbusters transcript prompts a deeper consideration of whether their talk is in fact collaborative. Although Charlotte and Johnny develop the argument that obedience is not a feature of collaborative talk, it is also Johnny who returns to the phrase, as though he recognises something significant in the line, which is then articulated by his peers.

Episode 7.41: Collaborative Task

This task required students to rank 10 superheroes in order, from 'best to worst.' They were then asked to form their own team of superheroes. By ranking superheroes, the group is required to provide reasons for their preferences. The ranking system facilitates some compromise because preferences do not have to be discounted. This process precedes their having to decide upon their superhero team, at which point earlier decisions may be amended. This task was designed to encourage students to make explicit the skills sets of the superheroes and to talk explicitly about what makes a good team.

Oscar:	I still kind of disagree with Superman though
Johnny:	Ok
Charlotte:	Ok
Johnny:	What would you prefer?
Charlotte:	Yeah, what should we do instead of Superman?
Oscar:	I just wouldn't have Superman
Charlotte:	Who would you replace him with? You haven't said
Oscar:	I know I've said before but (points at Wolverine) he can survive if he's just a skeleton
Charlotte:	He's really scarycan he?!
Oscar:	Yeah, 'cause he's got iron or something in his skeleton

Charlotte:	Ok
Johnny:	But Superman
(Charlotte reads inf	formation about Wolverine)
Johnny:	But everyone knows Superman though
Oscar:	I know but everyone knows everyone else
Charlotte:	I didn't know them
Johnny:	I reckon we should stick with Superman
Oscar:	But it's not based on popularity, it's based on who's the best
Johnny:	Yeah, I know but he's better than the rest
Charlotte:	He is quite cool
Oscar:	Yeah, but he's not evenhe's just an alienif someone was like, look it's kryptonite and he just dies
Charlotte:	Leave him alone
Oscar:	none of the others have anything like that
Johnny:	Just agree on it
Oscar:	No
Charlotte:	I do think he's cool
Johnny:	Alright then
Charlotte:	We in agreement? Yeah. So who do we have?
Johnny:	So we have Iron Man, Hellboy, Batman, Wolverine
Oscar:	So we've got two multi-billionaires and two animals

The group's talk begins in a divergent way, as they all contribute their preferences and grapple with the purpose of the task. They decide that their superhero team will include Superman. At the beginning of this episode, Oscar says that he's not sure about the decision to include Superman. Instead of dismissing this challenge, Johnny and Charlotte signal that they have listened by saying 'ok.' It is then Johnny who invites Oscar to state his preference. Charlotte reiterates and when Oscar fails to provide a reason for his objection, Charlotte prompts him to suggest the alternative. Oscar presents an argument for Wolverine; Charlotte is interested in Oscar's argument but Johnny continues to object. Johnny attempts to secure Oscar's agreement with Superman but eventually concedes and accepts Oscar's argument. Charlotte then seeks explicit agreement from Johnny and Oscar. Johnny and Oscar then consolidate their choices.

Although this episode isn't an example of developed talk, it does represent an improvement in the group's interactions, which are connected and relevant. Oscar's challenge is not dismissed but he is held accountable for it. On the basis of Oscar's argument, which he reinforces with reference to the task, the group agree explicitly to amend an earlier decision.

Episode 7.42: Reflect & Evaluate

During this episode, participants were required to reflect together on their collaborative talk and the write a brief individual evaluation in their booklets.

Charlotte:	Quite enjoyed that. Ok, after your group (reads self-evaluation question). I think we were very very collaborative talk
Oscar:	Yeah, so lots of constructive criticism
Charlotte:	Yeah
Oscar:	Superman is rubbish (laughter)
Charlotte:	Our group worked really well together
_	
Oscar:	There was lots of information exchanged, 'cause I like I had to explain to you who they were and stuff and what they didI should be a politician
Oscar: Charlotte:	explain to you who they were and stuff and what they didI
	explain to you who they were and stuff and what they didI should be a politician

Charlotte says that she enjoyed the task and praises the group for their collaborative talk. Oscar notes constructive criticism as a feature of their talk and jokes about Superman. Oscar then notes how his explanations supported understanding of superheroes and Charlotte notes their agreement.

Oscar's suggestion that their talk included constructive criticism suggests recognition of reasoned challenges, in contrast to the unreasoned challenges he presented previously. By suggesting this, he also 'buffers' his challenge to Superman, which is further 'softened' by joking that he was 'rubbish.' These utterances represent a development in their relationships as they laugh about previous disagreements. Charlotte's observation that there's 'a lot more agreeing now', like Oscar's contribution, nods at the more harmonious way in which they engage in collaborative talk, not that they are passive in their agreement. Their written comments mirrored the talk:

How did your group talk together?

Charlotte: Our group worked really well I thought. We all worked together with a lot of constructive criticism. People asked questions to try and get an understanding.

Johnny: We worked hard and well together. There was lots of constructive criticism but we all agreed on a decision

Oscar: Lots of constructive criticism and supportive opinions, lots of information exchanged

Table 7.5: Students' self-evaluation Lesson 6

7.8.6 Lesson 9

In the final lessons, groups worked independently on a brief: to design a concept for an iPad App or Pet food. In Lesson 8, the group started their discussion but Oscar was absent. This task was the culmination of the unit, requiring students to manage a task over a sustained period of time. The task required them to develop an idea and prepare to present it to the rest of the class. The class watched clips of *The Apprentice* where contestants were working on these particular briefs in the previous lesson.

Episode 7.43: Collaborative Task

Johnny:	Shall we start and come up with another idea?
Charlotte:	Um, yeahdo you know the idea?
Oscar:	Yup
Charlotte:	Yeah, the whole sort of snake thing and
Johnny:	we should try and come up with one more as a back up
Charlotte:	Yeah and not a game this time
Johnny:	Maybe something to do with
Charlotte:	something to do with Christmas? What do you think Oscar?
Oscar:	You know you've got the fat-booth thingwe could do Santa- booth
Nicky:	Santa-booththat is
Charlotte:	A Santa-booth gives you a beard
Nicky:	you could do the seasons for that as well
Charlotte:	You could do like a Easter bunny
Nicky:	Halloween-booth? It's a really good idea actually
Charlotte:	It's good, I like thatsnowman-booth

Johnny:	Yeah
Charlotte:	Well done Oscar, I'm impressed. So are we using that or the game?
Nicky:	We could combine them
Oscar:	How can you combine
Johnny:	When you finish you get to take a picture
Charlotte:	Yeah
Nicky:	with Santa or something
Charlotte:	Yeah
Oscar:	Ok, what do you want? You can't choose both, you have to choose one
Johnny:	Try and combine them
Oscar:	Ok
Nicky:	I think that would be really good if we could combine them
Charlotte:	but I don't know how we would do itI personally like the Santa- booth one
Nicky:	Yeah
Johnny:	Alright, let's go with Santa-booth
Charlotte:	So, what would be looking at
Nicky:	Yeah
Johnny:	I say we make a planwe've got til half 9
Charlotte:	We've got half an hour, okwell if we start making our poster
Johnny:	start making that
Charlotte:	Yeah
Johnny:	Come up with a nameis that all we're going to havethose two things in the centre?
Charlotte:	Yeah, like Santaand a snowman and a reindeer
Nicky:	Yeah and it could be like…like a Christmas package and a Halloween package

Johnny:	You could like do at like the bottomthe maps
Nicky:	Yeah
Charlotte:	and you could like make your face into an egg
Johnny:	and you could have like, you can change it
Nicky:	So the christmasy one's going to be Santa, snowman, reindeerthat's it yeah?
Charlotte:	A bauble?
Nicky:	A bauble (laughter) And that'll do yeah?
Charlotte:	Do you like that Oscar?
Oscar:	Yes, except the bauble (laughter)

In this episode, Johnny manages the talk by suggesting that the group come up with another idea, in addition to the one developed last lesson when Oscar was absent. Charlotte suggests that Christmas could be a theme and then encourages Oscar's input. Developing Charlotte's Christmas suggestion, Oscar proposes 'Santa-Booth,' which is adopted by the group and developed by Nicky and Charlotte. Nicky seeks Johnny's explicit approval of the concept. The group then consider whether they should combine Santa-Booth with the idea developed in the previous lesson. The group eventually decide to go with Santa-Booth alone. Johnny manages the time and moves the group forward. Once they have developed and agree upon a concept, they develop how it will be presented on a poster.

In contrast to the collaborative task during the first lesson, all participants contribute confidently to this task. Challenges are dealt with sensitively and consideration is given to alternatives. Ideas are developed by the contribution of participants, particularly Charlotte and Nicky, while Johnny has become the 'manager' of the group. While Oscar's suggestions are quite prominent, he is managed effectively by other participants who encourage his constructive participation. They frequently request explicit agreement or approval, monitoring who has or has not contributed.

Episode 7.44: Reflect & Evaluate

At the end of the 9th lesson, participants were asked to reflect on their participation and their group's progress in completing the brief.

Are you pleased with your group's concept and your contribution to collaborative talk?

Nicky: Yes, because although our other idea was good, when Oscar came back he contributed and made our idea stronger. I contributed throughout.

Johnny: We have an idea and got most things done. I came up with an idea and shared with others.

Charlotte: Yes, it's a simple but effective idea. I think the whole group contributed well – everyone got involved.

Oscar: Yes because it's simple but effective in a novel sort of way. I came up with an idea and also offered constructive criticism. I would ask people 'why' and 'how would you' and 'why do you think' it's a good idea but...

Table 7.6: Students' self-evaluation Lesson 9

Nicky notes that Oscar's participation strengthened their idea, recognizing Oscar's positive participation. Johnny, in contrast to the first lesson, notes how he came up with an idea and shared it. Charlotte again praises the group effort. In a more elaborated evaluation than previously, Oscar specifies how he encouraged participation and listened to others.

Not only do these brief written evaluation demonstrate a development in the way that the group are able to talk about talk but they suggest a sense of satisfaction. The group is pleased with their shared effort and the development of their idea. Their praise for each other and their joint idea represents a group cohesiveness that was not evident in the first lesson.

7.8.7 The Better Group: Final Evaluations

After completing the unit, participants were asked to reflect on their learning:

Oscar: I have learned to listen and be mindful of others' feelings and ideas

Nicky: You need to think more deeply about ideas, keep on-task in order to achieve goals. I have learnt that you have to consider other people's ideas and build on them to make it a better idea. You have to work together. Sometimes I take too much control and I need to let others contribute but I think that I have improved on this throughout the project. I have also learnt that putting people's ideas together makes a better outcome.

Charlotte: I have learnt to show more respect towards people and listen better to make sure I understand. I listen better so I can hear other ideas and can expand on them. I have learnt that I mumble a lot and therefore sometimes can't get my point across. I have also learnt that I need to make sure I don't interrupt others while they're talking.

Johnny: I have learnt to speak clearly and use my ideas, to listen with an open mind and expand on ideas. Keep focused on the goal. I felt more confident with the group. I have learnt that I can express my ideas to the people in my group and to be confident in speaking.

Table 7.7: Final evaluations

Oscar states that he is able to respond sensitively, while Johnny's evaluation is in complete contrast to the one completed during the first lesson. The written evaluations reveal a development in participants' talk awareness. The evaluations also show that participants have learnt something about themselves: they have become conscious of the way in which they participate and have responded.

Perhaps the least successful group. Oscar and Johnny were very unmotivated with the initial tasks. They are both very different, but they find it tough to work in a group environment. We had to work with this group to try and make them successful. They did improve throughout the project and I was pleased to see the girls stay on task and try to help the boys.

Teacher's final comment on The Better Group

Though the group may have been the 'least successful,' I would argue that this is an unfair reflection of their progress. Though Oscar and Johnny are very 'different' students in terms of character and ability, towards the end of the unit, they interact

confidently, Oscar often supporting Johnny's understandings. And while Johnny doesn't contribute as confidently to the development of ideas, he becomes the group manager, moving the group on and monitoring timings; he finds a role within the group. The boys' development was underestimated; however, as noted previously, Johnny would rarely contribute while the teacher was listening, possibly resulting in a misinterpretation of his participation.

Both boys developed in different ways, probably becoming conscious of different things. Although Oscar is disruptive and uncooperative early on in the unit, he later participates more consciously, perhaps in response to improved relationships in the group, possibly because he feels less awkward. Off-task talk changes: it tends to be a collaborative form off-task talk instead of talk intended to distract other participants. Johnny's confidence developed, perhaps as he learnt strategies to involve himself in the talk. He makes a clear progression from not participating at all, to finding a role by managing the task or calculating budgets, for instance, to making challenges and significant contributions. His final score should probably have been more. Charlotte's contributions become more controlled and less 'silly'; she encourages others to participate and develops ideas. Nicky remains the most conscientious throughout, managing and focusing participants' attention and supporting the development of contributions.

This group included a range of characters and abilities who by the end talk together collaboratively and effectively, having developed positive relationships and confidence in their interactions.

7.9 The Development of Collaborative Talk: Familiarisation, Orientation, Collaboration

The episodes presented in Section 7.1 (and elsewhere) show that the development of collaborative talk is not a linear process. The data does not suggest an incremental improvement in collaborative talk from lesson to lesson. However, it is possible to frame groups' developments within 3 phases of: *familiarization, orientation* and *collaboration*.

During *familiarization*, participants talk is often divergent as individuals interact, sometimes awkwardly, with their new group. This phase involves participants becoming familiar with their peers, as well as with the expectations of the teacher and of collaborative talk itself. 'Messy' or divergent talk may be characteristic of this phase, during which participants attempt to establish their place within the group as they create their own context, culture and discourse. As participants orient towards each other, forming this context, culture and discourse, they begin to adhere to the newly formed group, aligning their participation with its 'manner.' Off-task talk may form part of the orientation process, as students get to know each other, perhaps speaking 'normally.' Participants begin to develop a sense of responsibility towards the group, perceiving the group as a single unit instead of a collection of separate individuals. Participants begin to find a place within the group, perhaps becoming conscious of their potential to contribute. During collaboration, participants have become 'attuned' to each other, sensitive to their own participation and understanding as well of that of their peers. Contributions are cohesive as the group is able to focus their attention on a shared goal.

This 'micro-analysis' chapter has supported the findings presented in the preceding 'macro-analysis' chapter by exploring emergent themes alongside transcribed episodes of talk. In the following chapter, responses to the research questions and implications for existing and further research will be discussed.

Chapter 8: Discussion

8.1 Introduction

Grounded in a sociocultural framework, certain assumptions informed this study. In particular, it posits that a dialogic pedagogy, with particular emphasis on interaction, stimulates learning (Wells, 1999; Wegerif, 2007; Alexander, 2004; Hardman & Abd-Kadir, 2010; Freire, 2008). Though recognising the potential of 'asymmetrical' teacher-student dialogues for learning (Vygotsky, 1978), this study argues the potential for peers to support each other's learning through dialogue as equally valuable (Mercer, 2000; Wegerif, 2007; Tudge & Rogoff, 1989; Howe, 2010; Blatchford et al, 2003).

However, this study is less concerned with examining the individual gains or outcomes of peers' interactions and more with the process of talk itself. This thesis has explored the teaching of collaborative talk in the secondary English classroom, contributing to conceptualisations of collaborative talk and how it occurs amongst peers in groups. Through the implementation of a teaching unit designed for the purposes of this study, the development of students' collaborative talk and talk awareness has been explored. The teacher's role in supporting this development has been examined and has emerged as a significant area of interest.

8.1.1Summary of the Findings

By exploring collaboration in the workplace, it was possible to devise a framework for collaborative talk which expands notions of 'Speaking & Listening.' This framework provided a means of describing and analysing collaborative talk but also constituted a frame of reference for students and teachers, supporting them in their analysis and

evaluation of talk. By focusing the main analysis on the role of the teacher and the development of students' collaborative talk, differences in the participating classes were revealed. Within the classroom contexts explored, Vicky used talk to engage students in chains of interactions, while Abigail provided explanations to support students' talk analysis and describe the talk in which she wanted students to engage. In particular, Vicky's own talk *modelled* forms of collaborative talk and emotional engagement (and dialogic interactions as described in section 2.3). There were some identifiable differences in each class's collaborative talk, likely influenced by the difference to the framework, which informed a scheme for its development, intended to support the development of teachers' strategies.

8.1.2 Summary of Points for Discussion

Considering the role of the teaching unit, analysis tasks are discussed for their potential to engage students in meta-talk, encouraging shared referents and subsequent reflection on participation. Discussing the implications of the teacher's role, dialogic interactions are emphasised for their potential to engage students emotionally, supporting their participation and motivation but also modelling ways for students themselves to forge relationships as a foundation for their dialogues. Drawing together conceptualisations of collaborative talk, and their potential as teaching tools and analytical frameworks, this chapter concludes with a theoretical discussion, expanding the sociocultural paradigm.

8.2 Do teaching strategies informed by workplace collaborative scenarios support the development of collaborative talk?

Building on chapter 4, this section will consider the impact of the teaching materials, while recalling how the workplace and literature informed their development. The course of the emergent design diverted from the systematic analysis of the impact of specific tasks; however, the analysis facilitates some discussion of the observed effectiveness or usefulness of particular tasks which may also constitute areas for further research. This section also presents a discussion of how the workplace strand of this thesis has contributed to the development of conceptualisations of talk and approaches to its teaching.

The workplace informed:

- * The development of a framework for collaborative talk
- * Task design
- Task sequence

While the teaching materials were 'inspired' by scenarios observed in the workplace, the specific discourse of the workplace was not withdrawn from it (a methodological challenge anyway) and 'taught' as a means of 'giving' students language for an alien workplace context. The workplace 'theme' was more subtle, designed to connect with and expand existing knowledge of talk, encouraging an appreciation of its relevance and applicability and importantly, to encourage a 'conscious' approach to participation. Instead of teaching students the language of the workplace, it seemed far more relevant and useful to utilise existing skills, enhancing the skills and awareness students will need to engage in it, and in adapting to other contexts and demands (Fredrick, 2008).

8.2.1 Grounding the Framework for Collaborative Talk in the Workplace and utilising it as a Teaching Tool

Drawing on collaboration in the workplace, and descriptions in the literature, a framework for collaborative talk was developed as the basis for the teaching unit. As described elsewhere, this framework emphasised *participating, understanding and managing* as 'strands' of collaborative talk. The framework was intended as a means of making talk skills explicit and encouraging shared referents amongst teachers and students.

The 'management' strand was most relevant to the workplace and constituted a development in conceptualisations of collaborative talk and effective peer dialogues. In their recently published book, *Interthinking: Putting talk to work*, Littleton and Mercer (2013) explore examples of collective thinking in various everyday settings, including the workplace. This expansion of Littleton and Mercer's research is based on the belief shared by this thesis that 'skills in solving problems collaboratively will be useful ...in the rest of their (students') lives, and not least in the world of work' (p.23). Littleton and Mercer argue that there are few differences between the characteristics of effective workplace and classroom talk. However, this thesis argues that *managing* is a feature of workplace talk that is less emphasised in educational dialogues. Although reference is made to *managing* talk in the LINC materials (HMSO, 1990), with which the teaching unit designed for this thesis resonates, few references are made to it elsewhere, and even less so as an integral feature of productive educational dialogues.

Observational data in this study revealed that, supported by explicit reference to the framework, participants improved in their capacity to *manage* talk. In particular,

participants encouraged others to contribute, sought task clarification and managed off-task talk and 'obstacles' *explicitly*. In keeping with descriptions of *managing* in this thesis, Stokoe (2000) identified similar patterns in undergraduates' group talk: when getting 'down to the business' of talk, or engaging in 'topicality production,' students would seek clarification of task instructions and engage in 'reorientation' sequences which supported students in 'getting back on-task', revealing the way in which speakers monitored their talk. Encouraging students' awareness of these strategies is surely beneficial considering the emphasis placed upon efficient decision-making in the workplace.

The development of students' 'talk awareness', by reference to the collaborative talk framework, was considered important, supporting students in 'turning talk in on itself,' encouraging meta-cognitive and meta-linguistic awareness. Encouraging shared referents amongst participants provided an 'entry point' to social interaction (Vygotsky, 1978; Wertsch & Stone, 1985). Participants were able to refer to the framework as justification for asking a question or challenging an idea. And furthermore, sharing an understanding of linguistic devices may have enabled the achievement of intersubjectivity, allowing speakers to go beyond and comment on what was shared (Wertsch, 1979; Bruner, 1985). Supported by the framework, students expanded their perception of 'Speaking & Listening' by becoming more aware of the role of *understanding* and *managing* as features which shape participation and drive it forward.

Though resonating with some of Mercer's 'ground rules,' the framework is more fluid and flexible. The teaching unit was designed to build on students' perceptions and experiences of its strands. While features within these strands were eventually specified, students were encouraged to explore and interpret their role in the

effectiveness of 'real' talk. Students did indeed recognise the sometimes overlapping nature of the strands.

The framework served to align students' descriptions of collaborative talk, reinforcing its purpose while also developing a shared meta-language with which to evaluate it. It is argued that the framework shares characteristics with workplace talk and constitutes a supportive tool in the development of collaborative talk.

8.2.2 The Effectiveness of Tasks and their Sequence for Supporting the Development of Collaborative Talk

As described in Chapter 4 and 6, lessons were structured in a sequence of tasks: *warm-up, development & analysis, collaborative task, reflect & evaluate.* The sequence of tasks was designed as a means of supporting students' talk awareness while supporting the development of collaborative talk and the creation of a dialogue history (Mercer, 2008) amongst participants. The task sequence will be considered here, though, *development & analysis* and *reflect & evaluate* tasks will be considered jointly, and later in discussion.

Drawing on the work of the SPRinG project (Baines, Blatchford & Kutnick, 2009) which emphasises the development of social skills and relationships as a foundation for effective group work, and informed by the role of 'team-building' activities in the workplace, the 'warm-up' task was designed to support the development of participant relationships and highlight the value of collaboration. Tasks required students to physically orient to the task and each other. For example, the 'swimmers and sharks' tasks required all students to look carefully at a large sheet of paper, on which swimmers and sharks were illustrated; the goal was for students to separate the swimmers from the sharks. Each participant was given a piece of string to 'draw

a line', ensuring students' 'turns' in doing so. The warm-up tasks supported students' participation in active and engaging tasks, which may have helped participants in newly formed groups to forge relationships. However, these tasks quickly become a 'game' if the teacher did not highlight their purpose and elicit the strategies students used to come to a decision. Like other activities, if the teacher didn't 'glue' together the sequence of tasks into a purposeful, learning 'narrative' students did not perceive their relevance, reinforcing the importance of making the purpose of collaborative talk explicit (Forrestal, 1992; Norman, 1992; Corden, 2000; Fredrick, 2007; Lloyd & Beard, 1995; Cohen, 1994a; Sharan & Sharan, 1992).

Amongst the most 'successful' collaborative tasks were those which continued over a series of lessons. Having to recall previous decisions in order to continue the task appeared to encourage questions and explanations which connected prior and future talk. Engaging in a sequence of related tasks appeared to support the formation of a dialogue history amongst participants, enabling them to look 'backwards and forwards.' Arranging students in the same groups for the duration of the unit may also have changed relationships, supporting the creation a group culture (Blum-Kulka & Snow, 2004; Baines, Blatchford & Kutnick, 2009; Blatchford et al, 2003; Jones, 2002).

Collaborative tasks were designed to emulate authentic collaborative scenarios which provoke participants' *commitment* to a shared goal. Of course, collaborative tasks set by the teacher in the classroom are always inauthentic; however, some tasks did achieve participants' genuine *investment* and *engagement*. To discourage passive decision-making, some were designed deliberately to provoke the expression of personal preference. Lesson 5 (*X Factor*) is a particular example. In striving to reconcile personal preferences and come to an agreement (agreeing on

the best *X* Factor contestants to form a group), participants posed questions, challenges and elaborations (Sharan & Sharan, 1992; Piaget, 1932; Perret-Clermont, 1980; Howe 2010; Light & Littleton, 1999). During this lesson, several groups sustained their talk for prolonged periods and achieved frequent *developed* instances of talk, indicating their shared *engagement*.

These tasks (X Factor, Time 100, Superheroes, for example – see appendix Q) were probably more effective in evoking 'authentic' collaborative scenarios and engaging participants than 'non-zero' sum (Wright, 2000) tasks designed to 'tap into' an instinct for survival (such as the Survival task in Lesson 1). However, engagement aside, the format and scaffolding of these particular tasks may have supported students' talk more effectively: considerable information was provided alongside each option (contestant information for X Factor, for example) to support the decision-making process. This strategy encouraged students to put aside their personal preferences and base their decision on the information available to all of them (often facilitated by managing turns); instead of drawing from preferences external of the group, participants were able to establish agreement on the basis of their established shared knowledge of the topic. This served to scaffold participants' decision-making (Gillies & Khan, 2009; Wood, Bruner & Ross, 1978; Stone, 1998; Cazden, 1979), discouraging quick solutions. This may have supported students later in the unit when tasks provided less information, more ill-structured and ambiguous problems (Arvaja et al, 2002; Cohen, 1994) requiring students' independence in sharing and understanding knowledge as a basis for group decisions (the final Apprentice-style task, for example). It is also possible, however, that observed improvements in participants' sustained talk as the unit progressed

was supported by the development of relationships and awareness of talk expectations, encouraging a more conscientious approach.

Lefstein and Snell (2010) examined the impact of 'importing' popular culture genres into the classroom, specifically, the use of the *X Factor* as a format in the organisation of a Primary school literacy task. The authors argue that the discursive resources which make popular culture attractive as a means of motivating students' engagement may (in some cases) be counterproductive for meaningful and substantive academic learning. Observations in this study suggest that students may mimic the discursive resources of popular culture, regardless of whether it is referred to explicitly by the teacher or task. And it is argued that these discursive resources can be beneficial as a platform for critique. In this study, transcribed episodes from the *X Factor* served as effective prompts for analysis tasks: students identified the non-collaborative nature of judges' decision-making and may have amended their participation as a result, as discussed alongside transcribed episodes 7.9-7.11.

Like the *X* Factor example just described, dispersed throughout the lessons were opportunities for analysis and reflection. Analysis tasks engaged students in the examination of the features of collaborative talk, with reference to the collaborative talk framework. Building on students' analysis, *Reflect & Evaluate* tasks supported students' reflection on their talk. These tasks served to link two periods of explicit meta-talk: firstly in examining 'external' talk and then in 'turning that talk in on itself.' Students' booklets supported students' shared and individual evaluations, providing an opportunity for students to consolidate meta-linguistic understanding in writing, but also an opportunity to express views 'privately'. The argument is put forward later in this chapter that the use of analysis tasks in the teaching of collaborative talk

constitutes a development in approaches and is a useful one, particularly for secondary school students.

8.3 The teacher's role: How does the teacher support and influence the development of students' collaborative talk?

This section will explore the following sub-questions:

- How does the teacher use talk during the implementation of the teaching unit?
- What expectations do teachers make explicit (and implicit) through their talk?
- How do teachers' utterances serve to emotionally engage students?

8.3.1 The Teachers' use of Talk during Implementation of the Teaching Unit

The data analysis revealed that was used differently in each classroom to facilitate the lessons and support the development of students' collaborative talk. The talk which occurred in each classroom context reveals different cultures, priorites and expectations. The literature supports the argument presented here that, within these contexts, the differences in teachers' talk impacted students' engagement and the development of their collaborative talk.

A temporal analysis revealed that Abigail (Teacher 1) dedicated considerable time to *preparing* students for independent tasks by providing explanations, while Vicky dedicated considerable time to supporting students in *reflecting* on independent tasks. While both teachers allowed approximately the same time for students' collaborative activity, Vicky was more active during these periods, monitoring progress and intervening. Throughout the lessons, Abigail represented a more 'transmissive' voice than Vicky, whose interactions were more characteristic of a

dialogic pedagogy. However, though the analysis and representation of the teachers appears somewhat polarised, what have been described as 'transmissive' and 'dialogic' interactions featured in both teachers' talk. And, a limitation of the analysis of course, is that codes do not represent the 'quality' and length of their turns. The discussion here, and which follows, is therefore centred around what occurred *frequently in these contexts*, with the intention of *illuminating* strategies which were helpful for the development of collaborative talk.

During students' collaborative activity, Vicky was consistently active in monitoring groups' progress, ensuring they sustained their talk (Barnes & Todd, 1977). By probing explanations and asking questions, Vicky encouraged justifications, the elaboration of ideas, requesting that students uncover their problem-solving strategies (Webb, 2009; Webb, Farivar & Mastergeorge, 2002). Encouraging these particular discourse strategies is particularly valuable for their potential to 'snowball' amongst peers (Anderson et al, 2001).

During periods of reflection, Vicky placed particular emphasis on eliciting the outcome of groups' collaborative talk; in doing so, she validated the purpose of the task and its outcome (Black & Wiliam 1998). Throughout the lessons, Vicky's interactions were characteristic of a dialogic pedagogy: she used 'uptake' to explore and extend students' responses, a staple feature of 'collaborative dialogue' (Barnes & Todd, 1977, p.33). Vicky challenged and questioned students' decision-making processes, using cognitive and meta-cognitive questioning which may have promoted reasoned discourse in groups (Gillies & Khan, 2003). And, as will be

discussed later, Vicky modelled linguistic structures which students may then have applied (Barnes & Todd, 1977, 1995).

During task-setting in School 1, talk was often typical of the monological discourse commonly observed in the classroom (Alexander, 2000; Cazden, 2011; Nystrand, 1997; Myhill, 2006), which can result in a lack of opportunities for students to work together independently (Nystrand, 1997; Galton, Simon & Croll, 1980, 1999; Norman, 1992; Blatchford & Kutnick, 2003; Alexander, 2004, 2005; Dawes and Sams, 2004; Bennett & Dunne, 1994; Baines, Blatchford & Kutnick, 2003). In describing to students what they should do in their talk, Abigail modelled less how it could be done. However, Abigail expressed an eagerness to include opportunities for talk (see chapter 5), which was evident during observations of her trial lessons during the *development* stage of the research design. In this particular classroom context, Abigail's talk appeared restricted by the tremendous pressure to elicit toplevel individual GCSE Speaking & Listening grades from students who were somewhat complacent about their skills. Furthermore, interactions occurred differently because, perhaps as a result of Abigail's excellent knowledge in this area, expectations for students' responses and for their close analysis of talk were high. She may well have intervened less during independent work because she regarded this as appropriate for the research. However, as presented in the final chapter, Abigail describes an improvement in her relationship with the wider class as a result of implementing the teaching unit, which may result in more reciprocal dialogues with the wider class. It is interesting to consider not only how students' dialogues may develop over time, but how those between teacher and students may also.

8.3.2 The Expectations made Explicit (and Implicit) by Teachers through their Talk

The data analysis suggests that teachers' use of talk had implications for students' engagement with the teaching unit and their subsequent development. Vicky made explicit her expectations for talk, behaviour, responsibility and so forth, explicit in approximately double the turns of Abigail. Making expectations clear is beneficial for students' engagement in collaborative activity (Connell, 1990; Fredricks, Blumenfeld, Frodel & Paris, 2002).

The data analysis revealed that Abigail interacted inconsistently with groups in the class; the groups interacted with most also included students most likely to volunteer a response, often eagerly. Furthermore, it was these participants, who were most eager to ignore the process of collaborative talk, reach a decision and seek the teacher's approval. It is likely that the teacher's perception of 'good' students is of those willing to volunteer a response; while, students' eagerness to provide 'correct' answers mirrors this perception of what is desirable in their talk (Pratt, 2006; Black & Varley, 2008; Fisher & Larkin, 2008). It appeared that, for some, teacher-student dialogues affected appreciation of the tasks (Tartas, Baucalt, Perret-Clermont, 2010; Mercer & Littleton, 2007) and that the process of collaboration was sometimes perceived as an invalid one.

This suggests that teachers' talk has implications for what students perceive as valid in their own talk and in their learning. The hierarchical (Fredricks, 2008), individualistic and competitive (Dewey, 1990) nature of schooling is likely more in keeping with a transmissive pedagogy which encourages passivity. Encouraging passivity and compliance inhibits students' capacity for collaborative discussion

(Edwards & Mercer, 1987; Barnes & Todd, 1997, 1996; Mercer, 2000). In contrast, dialogic interactions promote knowledge as something malleable and constructed amongst speakers.

8.3.3 Teachers' Talk and Emotional Engagement

Coding teachers' interactions for emotional engagement is problematic; and, interpreting students' responses is even more so. However, the contrast between teachers' utterances are stark in this area; and furthermore, the interpretations drawn are reinforced by teachers' self-reports, as presented in Chapter 5.

In line with her self-report, Vicky's interactions suggested her concern with engaging students emotionally. Vicky used praise and humour frequently throughout her lessons. The video data shows students responding positively to 'banter' by laughing and, significantly, 'answering back.' Vicky's utterances served not only to validate students' efforts but to draw them in to talk about their experiences, enabling her to demonstrate a genuine interest in their lives and forge a personal connection. Despite this apparent 'informal' discourse, Vicky maintained control and facilitated smooth, focused transitions between activities. It appeared that students wanted to adhere to Vicky's expectations because of the mutual trust and respect inherent in her relationships with them. While this environment sounds *fun* for teacher and students, Vicky's ability to manage both the content of the lesson and social relations (Barnes, 2008) was central to her skill as a teacher. As will be discussed later, while students were likely more motivated and engaged as a result, the form of this discourse likely had implications for the development of students' collaborative talk.

8.3.4 Concluding Remarks

According to the coding of groups' collaborative talk, and supported by the GCSE Speaking & Listening assessments, Vicky's class engaged in more sustained, developed talk than Abigail 's. The different classroom contexts, and how these fostered talk and expectations, is a likely factor. In the following section, the research question regarding students' development of collaborative talk will be explored, confirming or challenging the conclusions drawn here.

8.4 How do students develop in their talk awareness and collaborative talk?

This section will explore the following sub-questions:

- How do students develop in their talk awareness?
- What were the differences in collaborative talk between classes?
- How did collaborative talk develop?

8.4.1 The Development of Students' Talk Awareness

The data analysis indicates that the development of students' talk awareness, in turn, has implications for the development of students' collaborative talk. Therefore, the opportunities provided by teachers for students to express or explore talk awareness are significant (Carter, 1990). The data allowed an examination of changes in the features of students' talk awareness, early data demonstrating students' existing knowledge and later lessons demonstrating a development of this, supported by their reference to the collaborative talk framework.

Early on, students were more likely to refer to features in keeping with the *participating* strand of the collaborative talk framework. Initially, comments were somewhat superficial in nature, emphasising the *social* rules of talk: on or off-task, taking it in turns to speak, pronunciation and so forth. These comments represented students' talk awareness at the beginning of the teaching unit. It is argued that students' existing talk awareness was shaped by a perception of the purpose of collaborative talk as getting along socially (Krechevsky & Stork, 2000), possibly reinforced by teachers' occasional regard for students' talk as disruptive and subversive (Mercer, 1995) and their consequent promotion of 'social' rules. While the 'social' aspects of talk are valid, they fail to do justice to the sophisticated strategies speakers use for joint-construction. Instead, they echo the 'rules' reinforced by teachers to maintain control of group work.

The voting strategy used frequently by students likely also represents a technique promoted by teachers as a 'democratic' means of resolving differences. Or, voting may indicate a strategy employed by peers, possibly encouraged by the format of popular competitive television shows (eg. *The X Factor*). Either way, its role in students' collaborative talk resulted largely in passivity and compliance, in 'asymmetrical' power relations which undermined reciprocity. As with the 'social' rules mentioned, these strategies are concerned more with individual participation than with collaborative responsibility, again echoing the individualistic features of a competitive education system.

By incorporating tasks for the analysis, self and peer-evaluation of talk, the teaching unit sought to move beyond these 'cognitively restrictive rituals' (Alexander, 2004).

Students developed a vocabulary with which to describe collaborative talk, supported by the collaborative talk framework. This supported an awareness of the different functions of talk. And some students made reference to specific linguistic choices in their analysis of talk. In particular, reference to and explanation of *understanding* and *managing* strategies increased and developed. By referring to the collaborative talk framework, the role of *understanding* and *managing* became more prominent in students' talk awareness, lessening emphasis on individual participation and stressing unity and reciprocity.

The teacher's role in supporting this awareness was of course critical. Vicky focused a significant proportion of her questions on eliciting or supporting the development of students' talk awareness. Inevitably then, students in her class expressed their talk awareness explicitly, more frequently. In addition, students in Vicky's class expressed talk awareness more frequently within their groups, independent of the teacher. Interestingly, Abigail's own talk awareness was more sophisticated than Vicky's; however, this was demonstrated in her lengthy explanations instead of 'drawn' from students' knowledge and experiences.

It is argued that talk awareness needs to become the object of examination in dialogic interaction. Furthermore, the need to teach collaborative talk explicitly is reinforced by the argument presented here that students' assumptions about the 'rules' of 'good' talk, need exploring and challenging. While collaborative talk remains un-taught, students' talk awareness may constitute social and behavioural rules.

8.4.2 The Notable Differences between the Collaborative Talk of each Class

Though avoiding generalisations of each class's talk, there were a few notable differences in students' engagement and development, likely influenced by the differences observed in teachers' implementation of the unit. The possibility that differences are attributable to the composition of each class is explored.

Students in Abigail's class were more inclined to prolonged periods of 'off-task' talk which was likely a result of a lack of monitoring during independent tasks. Students in Vicky's class were more likely to get their talk back 'on-task,' suggesting better *managing* skills. Some of Abigail's groups were more inclined to *challenge*, while students in Vicky's class were more likely to seek *understanding* and explicit agreement. Abigail's inconsistent interaction across groups allowed a perspective of groups working largely 'independent' of the teacher. These groups actually engaged somewhat 'better' than those who interacted more with the teacher. It is surmised that these groups functioned to an extent 'free' of the pressure to please the teacher, and therefore formed a stronger group identity, more independent of the broader class culture.

However, given the contrasting composition of the research classes, it is important to note the differences which may arise from varying the composition of groups. Findings suggest that the theoretical benefits of collaboration can only be realised in certain circumstances (Cohen, 1994a). Research argues that organising groups by gender (Swann, 1992; Bennett & Dune, 1992; Bullen, Trollope & Moore, 2002; Harskamp, Ding & Suhre, 2008; Gillies, 2003) or ability (Cohen, 1994b; Fawcett &

Garton, 2003; Schmitz & Winskel, 2008; Arvaya, Hakkinen, Etalapeton and Rasku-Puttonen, 2000; Bennett & Cass, 1998) affects the discourse and roles of participants, though findings are inconsistent and influenced by contextual factors. Broadly speaking, Vygotksian perspectives argue the benefit of mixed ability, that the more able peer can support the less able in asymmetrical roles, while Piagetian perspectives value the more symmetrical roles of peers.

However, forging contrived groups has implications (beyond impracticalities for classroom and teacher realities): Hardy et al (1998) argue that in the workplace, groups thrown together by external bodies are affected in their sense of membership and identity. It is possible to assert that all classes, and the groups within them, are contrived. Groups may need time to develop relationships and trust as a foundation for genuine conversation (Arvaja et al, 2000; Stone, 1998; Rogoff, 1990).

This thesis argues that the conditions for effective collaboration are better recognised as constituting the whole learning environment (Resnick, 1990) and should take account of the temporal dimension of collaborative talk development. It is possible that institutionalised in the mixed ability class in School 2 are principles which value collaboration and respect, which may be undermined in a class arrangement predicated on the notion of ability (particularly recalling that this was an unusual arrangement for School 1 – see chapter 5). But it has been argued that the contexts within which the teachers were operating affected the discourse, such as the reciprocity between students and teacher which research into group arrangements sometimes neglects. The analysis presented in this thesis suggests the dynamics of dialogue are shaped by factors including but beyond the composition of groups. Discourse is influenced by a complex interplay of perceptions and expectations of learning and talk. While consideration of group arrangements

may be relevant, this is one pedagogical strategy which needs to be regarded within the context of the whole. It remains that it is the quality of the discourse and how it is valued which matters (Alexander, 2004).

8.4.3 The Development of Collaborative Talk

While considerable research has explored and measured the outcome of collaboration (Mercer & Littleton, 2007), few have explored its development and form amongst students in the same groups in naturalistic settings over a period of time. It is clear from the data analysis that groups do not 'develop' in a uniform or linear manner and as a result it is difficult to discern a specific 'pattern' in development. However, it is possible, based on the data analysis, to comment on changes in its form, and, as a result, reflect on the conditions which supported positive developments over time.

Mirroring the features of talk awareness, students' turns were coded most frequently under strategies for *participating*. 'Divergent' talk, as it has been described and will be discussed later in the chapter, was a particular feature of students' talk early on in the unit. This is likely for several reasons: 'social' rules for talk emphasise 'taking part' above questioning or *understanding* what has been said; students were less aware of the expectations for collaborative talk; and, students had not forged group relationships which foster reciprocity. As relationships develop, students may preempt the need for assistance, becoming more tuned in to each other's needs (Gillies & Ashman, 1998).

Again, as described in Section 8.4.1 and mirroring developments in talk awareness, the management of tasks proved a particular improvement for most groups. Students became more conscious of the participation of others and encouraged contributions

as a result. Several groups began to take an explicit approach to the organisation of a task and drove talk toward a conclusion. As presented in Chapter 7, Johnny, a 'weaker' English student, contributed significantly through his management of the group's progress. *Understanding* strategies also changed: students quickly recognised when they had failed to understand a task. And explicit requests for agreement increased, though sometimes in tandem with passive compliance.

Changes in these features resulted in a greater sense of 'unity' amongst most groups. 'Unity' was perceived as the perseverance of groups to share understanding and jointly *develop* ideas and decisions. It is argued that the achievement of *developed* periods of talk were also dependent upon *shared engagement* in a particular task. In most groups, off-task talk and 'obstacle-setting' became less frequent (supported by increased management strategies), while the *developed* instances of talk and the explicit management of tasks became more frequent. This suggests that students became more 'attuned' (Rommetveit, 1985) to each other, having 'aligned' their expectations and established shared referents. By remaining in the same groups over a period of time and developing a dialogue history (Mercer, 2008), students constructed a foundation upon which to *develop* their talk.

8.4.4 Concluding Remarks

This study supports the position that peers can scaffold learning by sharing perspectives, negotiating strategies and sharing risk (Forman, 1981; Rogoff, 1990, Mercer, 2000) and particularly that peers provide social support which can ease anxiety (Brown & Palincsar, 1989). Students modelled and experimented 'ways with words', while making explicit requests for contributions, encouraging participants to

express and elaborate. By 'orientating' to one another, participants could achieve intersubjectivity, bringing about agreement (Habermas, 1979; Gadamer, 1989).

8.5 The Analysis of Talk

Including opportunities for analysis and reflection as an approach to the development of collaborative talk, is informed by Vygotsky's position that the acquisition of language is a paradigm for learning itself (1978). The teaching unit encouraged shared referents as an 'entry point' for intersubjectivity (Vygotsky, 1978; Rommetveit, 1985). It also aimed to harness the process of objectifying in language what we have thought, then turning around on it and reconsidering it in order to develop understanding (Bruner, 1986). Language is already something used by secondary school students (with varying degrees of 'competence') and therefore, the teaching unit aimed to connect and expand upon what existed. The analysis and reflection of talk was intended as a means of encouraging 'conscious' use of something which was previously used 'unconsciously', reflecting Vygotsky's theory of the acquisition of higher concepts (1978).

8.5.1 Analysing Collaborative Talk

As a result of the data analysis, this thesis argues the potential for the inspection of meta-language (Phillips, 1992; QCA, 2004; Carter, 1990) in examples of collaborative talk (video, transcripts and scripts) as an approach to the teaching of collaborative talk, and other educational dialogues. By presenting examples of authentic collaborative talk, grounded in authentic collaborative scenarios, students were able to draw out features of effective and ineffective collaborative talk. This approach makes explicit the features of naturally occurring talk, challenging

perceptions promoted by 'idealised' dialogue, and uses students' existing knowledge and experience as a springboard for analysis (Fredricks, 2008).

The teaching unit's emphasis on talk analysis and awareness supported the development of a vocabulary with which to critique and manage collaborative talk. The approach taken to the teaching of collaborative talk as outlined in the teaching unit, shares similarities with the principles of the LINC materials. The LINC materials (Carter, 1990; HMSO, 1990) were designed to support teachers' implementation of English in the National Curriculum in light of views of the importance of language as outlined in the Kingman and Cox reports (DES, 1988, 1989). LINC materials placed emphasis on *Knowledge about Language* (KAL) and therefore on the analysis of language in use. LINC believes 'that shared frames of reference are more important than terminologies *per se* but that some selected meta-language can enable us to talk about language more precisely and economically' (1990, p.4).

8.5.2 Challenging Approaches to 'Communication Training'

The analysis of 'real' talk as a 'teaching tool' is an approach increasingly recognised as valuable in the workplace. Communication skills are widely trained via role-play methods, across institutional settings, based on the assumption that role play scenarios adequately mimic real ones, allowing participants to practise and assess interactions (Stokoe, 2013). Stokoe (2013; 2011) challenges this assumption, arguing that it is our perception of linguistic norms which inform role-plays, not necessarily representing conversational realities. Stokoe examined the authenticity of simulated police investigative interviews and compared them to real ones and found that role-play was far more elaborated. As a result, Stokoe (see 2011) developed a training approach called 'conversation analytic role-play method'

(CARM) which uses actual interactions as a more effective and authentic basis for training. This thesis also recognises the potential for using 'real' dialogue: students were able to identify 'effective' and particularly 'ineffective' features of collaborative talk; and some, supported by the framework, began to describe these features in linguistic terms. This thesis argues the benefit of using 'idealised' dialogue as a point from which to critique talk (Lefstein, 2010) and particularly, the potential for using 'bad' examples of talk from which to identify improvements (*Dialogics Ltd*).

8.5.3 Self-Evaluation of Collaborative Talk

Furthermore, the analysis of talk supported students in reflecting on their own talk, encouraging explicit examination of the control exerted, emphasising the *process* of talk over the outcome (Fredrick, 2008). Involving students in analysing their own talk enabled them to identify positive and negative elements (Corden, 2000). Therefore, addressing meta-linguistic and meta-cognitive skills enabled students to 'turn talk in on itself' in self- evaluation, from which improvements could be made.

This suggests that self-evaluation of talk may encourage participants to monitor their contributions. Janis (1972, 1982 cited in Littleton & Mercer, 2013) argues the importance of this: avoiding *Groupthink* (a group which has come to reject criticism from outside its circle) is predicated upon 'vigilant decision-making', requiring group members to become meta-cognitively aware of its risks. *Groupthink* resonates with observations about the potential 'danger' of strong group identity described in Chapter 4 and reinforces the importance of participants' capacity to engage 'consciously.'

8.5.4 Concluding Remarks

This thesis draws together findings and theories to emphasise the potential of 'turning talk in on itself' for the development of students' collaborative talk, which in turn supports students' ability to harness the 'foundations of learning itself' (Halliday, 1993, p. 93). This approach represents a shift away from 'top-down' approaches which teach students the rules of engagement, and instead grounds itself in students' language and provides opportunities for its interrogation. Instead of amending behaviours in line with teachers' demands and perceptions, self-evaluation of talk may prompt the student to identify and initiate change, encouraging personal responsibility.

8.6 The Teacher's Role

This thesis argues that a dialogic pedagogy supports the development of students' collaborative talk, contributing to and developing existing research which recognises the value of dialogic instruction for learning. The data analysis shows that the expectations embedded in dialogic instruction are in keeping with the principles of collaborative talk. Therefore, dialogic interactions between teacher and students ensure continuity with expectations for collaborative talk in groups. In turn, dialogic interactions may serve as models of collaborative talk which are appropriated by students.

The suggestion that there may be a link between dialogic instruction and emotional engagement is expanded. It is argued that relationships are forged through dialogic interactions, creating a foundation upon which reciprocal dialogues are possible. And in modelling dialogic interactions, the teacher also models ways in which students can create these relationship 'foundations' in their groups. Expanding this discussion

further, emotional engagement as a precursor to interaction is explored, considering an alternative to the assumption that talk fosters good relationships.

8.6.1 Dialogic Pedagogy and the Teaching of Collaborative Talk

8.6.1.1 The Value of a Dialogic Pedagogy

Research has shown the value of dialogic education, and specifically interactions, for students' learning (Alexander, 2006; Mercer, Dawes, Wegerif & Sams, 2004; Mercer & Littleton, 2007; Nystrand, 1997). In keeping with the socio-cultural paradigm, a dialogic pedagogy recognizes knowledge as a joint possession and therefore emphasises the potential of combining mental capacities (Mercer, 1995). A dialogic pedagogy manifests itself in interactions between teachers and students and between peers. Dialogic interactions encourage openness, authentic questions, uptake and reciprocity (Nystrand, 1997; Wegerif, 2007). 'Openness' allows the possibility for alternatives and challenges, while 'authentic questions' do not require students guess at a predetermined answer. The teacher's 'uptake' of students' responses supports the development of the idea while validating it. 'Reciprocity' in dialogue implies an 'equal' relationship between speakers who are all able to ask questions, make challenges, and importantly, achieve understanding (ibid).

The principles underpinning collaborative talk are in keeping with those of dialogic interaction. As a result, a teacher's 'dialogic stance' (Boyd & Markarian, 2011) has implications for the development of students' collaborative talk.

8.6.1.2 Stance and Expectations

This thesis argues that the different 'stance' *conveyed* by both teachers likely influenced students' perceptions of learning and expectations, with broader implications for students' engagement in talk independent of the teacher.

The way in which a teacher responds to ideas and handles their suggestions, has implications for what students perceive as valid learning, achievement and importantly, talk (Boyd & Markarian, 2011; Fisher & Larkin, 2008; Pratt, 2006). A significant challenge facing the student is interpreting what the teacher and wider school requires, 'acclimatising' to different classroom contexts and their cultures (Howe, 2010). The teacher's talk is the mechanism through which expectations are communicated but, significantly, also implied. Vicky's use of uptake suggests that she takes students' responses seriously, treating knowledge as a social construction rather than possessed and 'given' by the teacher (Nystrand, 1997; Boyd & Markarian, 2011; Shor & Freire, 1987).

On the other hand, the expectations implicit in a transmissive pedagogy, which values correct answers and promotes individual achievement undermines the purpose of collaborative talk, deeming it an invalid task for students. Students may be more concerned with the teacher's approval of the final outcome than with the process of collaborative talk.

Embedded in a teacher's dialogic stance are implicit expectations for dialogue which are consistent with those for students' collaborative talk. To promote talk amongst peers as a valid learning activity, particularly given the 'Cinderella' status of Speaking & Listening (Alexander, 2004), requires consistency between the principles underpinning the teacher's talk. This is not to dismiss 'transmissive' styles completely but highlights that when teaching talk, how a teacher talks has great implications (Carter, 1990).

8.6.1.3 The Value of Dialogic Instruction for Teaching Collaborative Talk Not only are dialogic interactions between teacher and student beneficial for individual learning (Mercer, Dawes, Wegerif & Sams, 2004; Mercer & Littleton, 2007), this thesis argues that these dialogues serve to model collaborative forms of talk which students appropriate in discussion with their peers, independent of the teacher.

Vicky's frequent 'uptake' of students' responses involved asking further questions or developing the students' ideas in a chain of dialogue (Nystrand, 1997; Wegerif, 2007). By doing this, Vicky challenged students, supporting the expansion or elaboration of ideas. This process is beneficial for the student as reasoning is scaffolded, supporting the achievement of clearer, developed arguments or ideas (Van de Pol, Volman & Beishuizan, 2010). Though in this scenario it is the teacher who 'drives' the talk, the chain of interaction is reciprocal in nature because it resembles conversation; and in asking a series of questions, the teacher seeks understanding of the student's idea (Boyd & Markarian, 2011). This type of interaction promotes the validity of questions, challenges and the pursuit of understanding in talk; and in a classroom environment, this interaction is witnessed by other students who may be drawn in to the chain of dialogue.

In this scenario, several things may be happening: the dialogue between teacher and student supports understanding of the topic at hand; the dialogue supports the internalization of reasoning processes; furthermore, the teacher scaffolds students' participation in dialogue, supporting the appropriation of talk strategies. Vygotsky's ZPD suggests that 'asymmetrical' dialogues between teacher and student facilitates the internalization of mental processes which support the student in eventually completing tasks independently. Mercer and Littleton (2007) proposed that in

exploratory talk, students may internalize ways of reasoning with others, enabling the individual to 'talk it through' internally. By engaging students in 'reciprocal' dialogue, the teacher scaffolds participation while modelling forms of talk which may be appropriated by students in 'external' discussion. Though dialogues between teacher and student may never be considered entirely 'equal,' dialogic interactions do strive for reciprocity. It is this struggle, the process of *trying* to reach agreement which may be most important (Howe, 2010).

The role and expansion of socio-cultural theories will be considered in more detail in the final section.

8.6.2 Dialogic Instruction and Emotional Engagement

This thesis has argued that the expectations embedded in a dialogic pedagogy and dialogic instruction is crucial to promote the validity of collaborative talk and to model its forms for students. The findings suggest that ensuring students' ability to engage in collaborative talk, and therefore dialogues *for learning* is achieved through dialogic instruction.

However, *why* dialogic instruction stimulates learning is less understood. This thesis agrees with the suggestion that the potential of dialogic instruction to stimulate students' *engagement* is a possible explanation (Nystrand, 1997; Nystrand & Gamoran, 1990; Wegerif et al, 1999), though very little research has explored this link. This thesis offers a contribution to the suggestion that dialogic instruction fosters engagement and furthermore, that this has implications for the development of students' collaborative talk.

8.6.2.1 The Notion of Engagement

The concept of engagement has attracted attention in research because of declining motivation and achievement amongst students (Fredricks, Blumenfeld & Paris, 2004; Furlong & Christenson, 2008). Positive engagement is associated with positive learning outcomes, achievement and increased motivation (Fredricks, Blumenfeld & Paris, 2004; Furlong & Christenson, 2008).

Furlong and Christenson (2008) argue that engagement is a concept that requires psychological connections with the academic environment, such as a consideration of the relationships between teacher and students. In their review of research on engagement, Fredricks, Blumenfeld and Paris describe the construct as 'malleable, responsive to change and amenable to environmental change' (2004, p. 59). Although there are many over-lapping definitions, its three broad components are considered to be: behavioural, emotional and cognitive (ibid).

The findings of this study have drawn particular attention to the role of emotional engagement in the development of students' collaborative talk. Taking Fredricks' (2004) description, emotional engagement represents 'emotional reactions' such as boredom or happiness, and 'identification' as a process that involves identity development.

8.6.2.2 Emotional Engagement as it Emerged in this Study

The teacher's role, and more significantly, teachers' talk, was explored for its potential to influence the collaborative talk which occurred in groups. The case descriptions and observations led to an examination of emotional engagement. In this study, emotional engagement refers to the relationships between teacher and

students, students' reactions to the teacher's expectations, instruction and support, and how this appears to influence students' motivation and engagement in tasks independent of the teacher (Fredricks, Blumenfeld & Paris, 2004). Although the emphasis of discussion is on *emotional* engagement, this description also encompasses some behavioural and cognitive aspects, as defined in the literature.

Extending the focus of engagement research, and drawing on research on dialogic pedagogies, this thesis considers the dialogue between teacher and students as significant in the achievement of emotional engagement and the development of collaborative talk. However, it is important to note that the scope of emotional engagement as it is described in this thesis is constrained by the methodology used to explore it. Measuring emotional engagement is difficult and usually reliant on self-reporting (Fredricks, Blumenfeld & Paris, 2004). The data gathered in this study and the interpretations made relied on students' responses to the teachers. Therefore, the scope of this 'definition' is limited by the study's methodology, by how far it is possible to comment on the construct of emotional engagement as it is observed amongst students. In retrospect, a systematic analysis of the interview data collected during implementation would have further supported the arguments presented here.

8.6.2.3 Dialogic Instruction and Emotional Engagement

In particular, this thesis argues that there is a link between dialogic instruction and *emotional* engagement. Nystrand (1997; 1990) suggests that dialogic instruction may be the mechanism through which students become emotionally engaged in the lesson and in their learning. While this suggests that dialogic interaction precedes emotional engagement, this study argues that interactions which serve to

emotionally engage are *intrinsic* to dialogic instruction; and furthermore, that emotional engagement makes genuine dialogue possible.

From the research literature on engagement, it is possible to extrapolate characteristics and apply them to features of the two classrooms and teachers observed in this study. The characteristics described resonate in particular with the teachers' interactions. Vicky had particularly positive relationships with the class as a whole: students responded enthusiastically to her instructions and engaged confidently in dialogue with her, demonstrating their emotional engagement (Fredricks, Blumenfeld & Paris, 2004). Also beneficial for engagement, Vicky provided supportive, intellectually challenging instruction and pressed students for understanding (Blumenfeld, Puro & Hergendollar, 1992; Stipek, 2002), while making her expectations explicit (Fredricks, Blumenfeld, Frodel & Paris, 2002). The culture of her classroom supported autonomy and encouraged shared decision-making. Abigail, on the other hand, made frequent reference to external controls such as grades and assessments as reasons for doing work, which may have negatively affected some students' engagement (Connell, 1990).

In prioritising forging relationships with her students, Vicky may inevitably have engaged students in dialogues characteristic of a dialogic pedagogy. Vicky engaged students in dialogue which validated students as important sources of knowledge and experience (Nystrand, 1997). As noted, reciprocal dialogues were achieved through mutual respect and trust.

Research in this area has identified teacher-student and peer relationships, and instruction as a factor in engagement. However, the research does not go as far as to specify the forms of these interactions or position them within a particular

pedagogy. This study draws together research in these fields and argues that interactions characteristic of a dialogic pedagogy simultaneously stimulate students' emotional engagement and therefore, their identification with the teacher, their peers and their commitment to the task. As described by Hobson (2002), and discussed in section 3.2.1, intersubjectivity is achieved through the often intuitive interpersonal engagement of infant and caregiver. Dialogic instruction *strives* for intersubjectivity.

8.6.2.4 Students' Appropriation of Emotional Engagement for Dialogue

The dual aspect of Vicky's interactions serves as a model to students, not only of collaborative talk but of forging relationships. If students' appropriate dialogic interactions in groups, they also appropriate strategies for emotionally engaging their peers. As with emotional engagement, learning to talk collaboratively in a group requires identification with that group, a relationship on which dialogues can be built. Engagement is critical for collaborative talk because of the motivation and trust required for it to work. In appropriating strategies to emotionally engage their peers, relationships are forged, a foundation upon which reciprocal dialogues can be achieved.

8.6.2.5 Other Forms of Engagement

Although emotional engagement is the focus for discussion here, when reflecting on the findings through a cognitive engagement (Fredricks, Blumenfeld & Paris, 2004) 'lens,' other observations can be made of the data which support the argument that the teacher's interactions had an effect on groups' *commitment* to independent tasks.

Nystrand and Gamoran (1990) report on a study which showed that teachers' instruction can foster students' 'substantive' engagement with literature. 'Substantive' engagement describes students' active and prolonged engagement with a topic, not only maintaining focus on the task at hand but engaging with its content and meaning, overlapping with descriptions of 'cognitive' engagement (Fredricks, Blumenfeld & Paris, 2004). The frequency and clarity of Vicky's expectations for talk and conduct were considered a factor in her students' more sustained talk. However, challenging this assumption, it may be possible that dialogic instruction results in students' *cognitive* engagement and increased engagement *with* peers (Nystrand & Gamoran, 1990). Therefore, this thesis argues further that a dialogic pedagogy has positive implications for students' collaborative talk independent of the teacher.

8.6.2.6 Concluding Remarks

This section has explored the role of dialogic interaction and its implications for students' engagement in collaborative talk and the development of that talk. It is argued that a dialogic pedagogy has broad implications, beyond the development of students' communication skills to their engagement with school and learning.

8.7 Conceptualisations of Collaborative Talk and its Development

This thesis contributes to conceptualisations of collaborative talk by presenting a series of frameworks for pedagogical as well as analytical purposes.

8.7.1 Frameworks and Schemes

Informed by the literature and collaboration in the workplace, a framework was devised which would underpin the teaching unit and inform subsequent data

analysis. This first framework described the features of collaborative talk but when used for analytical coding, failed to capture adequately *changes* in those features or how participants' turns worked *together*. As a result, this first approach was developed to capture the *cohesiveness* of students' interactions. Emerging from this analysis were three 'forms' of collaborative talk: *divergent, connected and developed*. Having analysed the large data set, a third framework or 'scheme' is proposed as a means of describing and conceptualising the development of students' collaborative talk over time, which attempts to take account of the various factors which influence it.

8.7.1.1 Participating, Understanding and Managing in Collaborative Talk

For meta-cognitive and meta-linguistic purposes, it is important for teachers and students to share an awareness of what constitutes collaborative talk. As described extensively, the collaborative talk framework comprises 3 over-lapping strands: *participating, understanding and managing.* Significantly, instead of considering *managing* turns as unimportant, this study emphasizes their importance for driving talk towards a conclusion and for strengthening the management of talk and relationships amongst peers, while *understanding* is 'equalised' with *participating.*

8.7.1.2 Divergent, Connected and Developed Talk

While these 'categories' of talk bear some similarities with Mercer's 3 descriptors: disputational, cumulative and exploratory (Mercer, 1995), they capture features of collaborative talk in particular; and more significantly, capture the 'cohesiveness' of participants' contributions. *Divergent* talk represents contributions which fail to connect with preceding or subsequent contributions, while *connected* talk is more coherent but remains 'cooperative' over 'collaborative' because it fails in the joint

creation of something new. *Developed* talk represents participants' *attunement* to one another in this joint construction. Therefore, it might be said that *developed* talk represents an empirically grounded version of Rommetveit's intersubjectivity (1985), as Mercer's exploratory talk represents an empirically grounded version of Bakhtin's dialogism (Wegerif, 1999).

8.7.1.3 Familiarisation, Orientation and Collaboration

Based on the analysis, a scheme for the development of collaborative talk is proposed as a means of supporting teachers and drawing attention to the factors which help or hinder collaborative talk. Significantly, by describing the development of collaborative talk as a process of *familiarisation, orientation and collaboration*, the intrinsicality of talk and relationship is emphasized. The talk 'categories' appear in this development, highlighting the 'messy' nature of talk and understanding.

Familiarisation describes the early stages of a newly formed group's collaboration. Participants struggle to position themselves within the group, some using divergent talk to assert or claim ideas, while some remain passive observers. Participants are exposed to the discourses of their peers, and to the different perceptions their roles and of the purpose of their situation. In *orientation*, participants begin to align their perceptions and expectations, developing shared referents and a dialogue history. Participants begin to listen more carefully to each other, while encouraging contributions. A developing sense of group identity supports engagement with tasks and strengthens shared responsibility. When participants have oriented towards each other, achieving intersubjectivity in *developed* talk, they engage in genuine collaboration, demonstrating their 'attunement' to the generation of something new.

This final section will discuss how the identification and development of these descriptive and analytical frameworks draw together the complementary notions of Vygotsky and Bakhtin (Wertsch, 1991), making some small contribution to the 'deepening of the sociocultural paradigm' (Wegerif and Mercer, 1997).

8.7.2 Expanding the Socio-Cultural Paradigm

For Vygotsky, 'internalisation' did not simply mean the transformation of social participation into individual reasoning: 'individual' reasoning remains *inherently social.* And, despite less consideration given to the mediating means through which internalisation takes place in his work, Vygotsky still considered intrapsychological processes to be closely tied with the semiotic mediation through which they were acquired (Wertsch, 1991). These mediational means are *social*, particularly because they are products of sociocultural evolution (Wertsch, 1991).

Humans' psychological nature represents the aggregate of internalized social relations that have become functions for the individual and form the individual's structure (Vygotsky, 1981, p. 164).

Therefore, the genesis of reasoning is social *and* cultural: 'mind goes beyond the skin' (Wertsch, 1991). Complementing Vygotsky's theories, Bakhtin was primarily concerned with semiotic mediation, far over Vygotsky's psychological concerns. Bakhtin's analysis was particularly concerned with the utterance as a 'real unit of speech communication' (1986, p. 71). He argued that to separate utterance from voice is to extract utterances which 'belong to nobody and are addressed to nobody' (1986, p.99). At the core of Bakhtin's concerns, was how utterances are interrelated with others, the issue underlying dialogicality (Wertsch, 1991).

This study has focused on the *semiotic mediation of language*, but in particular, how utterances connect in the intersubjective achievement of *developed* collaborative talk, evoking Bakhtinian themes. It is argued that instances of *developed* talk exist in the tension between *participating* and *understanding*.

We know that people rarely understand exactly what we intend to mean. Mercer (2001) argues that *interpretations* are not always 'misunderstandings' but welcome *variations* in understandings. If *understanding* is ambiguous, is *intention* also? *Understanding* is better understood as a shared commodity, held in tension between speakers. And if 'individual', 'inner' or 'intrapsychological' processes (Vygotsky, 1978) are in fact *social* (Wertsch, 1991) then 'individual' *intention* also represents multiple voices (Bakthin, 1986). Therefore, *meaning* is not possessed by the individual, ready to be discovered and *understood*, but exists in tension between many voices. A moment of genuine developed collaborative talk occurs in the collision and fusion of participants' intentions and perceptions. The reciprocity of *participating and understanding* in collaborative talk challenges assumptions of speaking as *active* and listening as *passive*, as if they are *separate* components of dialogue. It is in the tension between *participating and understanding* that meaning is jointly constructed and developed.

We cannot rely on the spontaneous achievement of intersubjectivity in groups if we are to harness its learning potential (Tudge & Rogoff, 1990). Students clearly need guidance and support in their journey through *familiarisation* and *orientation* to the *collaborative construction of meaning*. The teacher can play a critical role in not only leading ahead (Vygotsky, 1978) of students' talk awareness and development but in drawing students into and supporting a space for dialogue. Vicky's perseverance in engaging students in prolonged, elaborated dialogues *modelled* ways of *striving* for

reciprocity and understanding, even if it wasn't genuinely achieved. By exploring talk strategies explicitly and encouraging shared referents, Vicky enabled students' participation and supported their *orientation* to each other and therefore, the *possibility* of intersubjectivity. This positions the teacher *within* a dialogic space, supporting students' contribution to its *expansion*. Instead of drawing students' responses in a particular direction, the dialogic teacher holds in suspense the possibility of infinite destinations.

Bakhtinian and Vygotskian themes are complementary in conceptualising collaborative talk and its teaching. Teachers and students can skilfully shift the 'symmetry' of their dialogues, negotiating different 'states' of intersubjectivity (Rommetveit, 1985) in the development of collaborative talk. The achievement of intersubjectivity may represent semiotic mediation of language that remains inherently social, constituting multiple voices, in its internalised form. Focusing on the development of students' talk, particularly in exploratory and collaborative ways, is critical for the development of students' capacity for reasoning and interpretation.

8.8 Final Remarks

This study makes a contribution to the arguments that collaborative talk is a means for dialogic engagement between learners, with positive implications for learning (Barnes & Todd, 1977; Rogoff, 1990; Mercer, 1995; Mercer & Littleton, 2007; Gillies, 2003; Nystrand, 1997).

Informed by collaboration in the workplace, this thesis has contributed to conceptualisations of collaborative talk. By analysing how utterances are connected by speakers, this study has contributed to understandings of how collaborative talk

develops amongst groups. It has also shown how talk can be more or less 'cohesive', suggesting speakers' 'atunement' to eachother.

The study has resulted in the production of materials for the teaching of collaborative talk through means more appropriate for older secondary school students. The potential of talk analysis for supporting students' meta-talk is reinforced, recognising the value of 'turning talk in on itself'. This thesis has shown that increased awareness of collaborative talk processes can impact students' participation in collaborative talk.

Grounded in the realities of the secondary classroom, this study has contributed to understanding of the significant role of the teacher in shaping collaborative talk. The research reveals the potential influence of a teacher's conveyed stance, style and expectations on students' learning and participation. Collaborative talk is better supported by teachers who model forms of dialogic talk themselves. Expanding its potential, this thesis argues that a dialogic pedagogy also fosters students' engagement.

Chapter 9: Conclusions

9.1 Introduction

In recent years, the importance of talk for learning has been emphasised (Mercer & Littleton; Alexander, 2004; QCA, 2003). Speaking & Listening or Oracy has held a strong position within the National Curriculum across the Key Stages, and has, until very recently, constituted an assessed element of English GCSE (QCA, 2007). This thesis has explored the teaching of collaborative talk, a component of a now *old* English GCSE syllabus (Edexcel, 2010). In doing so, it has examined the pursuit of understanding and the joint construction and development of ideas amongst teachers and students, recognising that examining language for learning is necessary for the appreciation of the potential for dialogic interaction (Cazden, 1988). While pointing at the broader implications for pedagogy and learning, the conclusions of this thesis challenge recent curriculum changes which have devalued the role of Speaking & Listening by arguing that teaching talk as a skill in its own right is a valid pursuit.

This study has drawn on collaboration in the workplace to inform the development of materials for the teaching of collaborative talk. A large data set was collected during the implementation of these teaching materials into two secondary English classrooms. The analysis of this data focused on the talk of the teacher and the talk amongst students in their groups, also facilitating an examination of the teachers' monitoring and interventions during students' collaborative talk. The styles or roles of the two teachers during implementation emerged differently in analysis and it has been argued that this influenced the talk observed amongst students. Based on Speaking & Listening assessments and the analysis of sustained and *developed*

talk, Vicky's class were considered to have engaged 'better' with the unit. Vicky took a more dialogic approach in her teaching and placed considerable importance on the relationships she forged with students. It is argued that the 'conditions' for effective collaborative talk therefore expand far beyond group composition and task design. The learning space, negotiated by the teacher, will influence students' engagement with each other and their perception of the validity of talk. The data analysis revealed that tasks which provoked conflict amongst participants but required a group decision on the basis of shared information were effective in engaging students in sustained collaborative talk. And the role of talk analysis tasks are considered important in engaging students in meta-talk, developing talk awareness and a 'conscious' approach to participation. The study examined the way collaborative talk occurred and developed over the duration of the teaching unit and proposes frameworks and schemes to support teachers, highlighting the *process* of developing collaborative talk.

9.2 Confronting the Changes and Challenges

The previous National Curriculum emphasised the role of Speaking & Listening and included the requirement for students to 'work purposefully in groups, negotiating and building on the contributions of others to complete tasks and reach consensus' (QCA, 2007, P. 6) Several publications were released to support the improvement of its teaching (QCA, 2003a; QCA, 2003B; DfES, 2003a; DfES, 2003b; DfES, 2001), and promote the analysis of *real* talk (QCA, 2004). The release of the new Curriculum in September 2013 (DfE, 2013a) indicated the de-valuing of Speaking & Listening which would follow. The new KS4 curriculum for spoken language encompasses Standard English, speeches and debates (DfE, 2013b; Ofqual, 2013), placing considerable emphasis on presentational over exploratory forms of talk. A

nod is made to the role of talk in learning, but to underpin reading and writing instead of a skill to be developed in its own right. This elitist notion of 'proper' talk (Coultas, 2013) resonates with assumptions about 'correct' grammar in writing, and likewise, misses the point that real interaction is complex and messy (QCA, 2004). At GCSE, the decision to abolish the formal assessment of Speaking & Listening was based on arguments that it is increasingly over-marked by teachers and difficult for examiners to moderate (Ofqual, 2013).

Speaking & Listening assessments *can* be inconsistent, are often based on teachers' pre-conceived judgement of the child, and *are* difficult to moderate. And there are further problems regarding broader classroom talk and its success: the IRF prevails in the teacher-student classroom and few opportunities are provided for students to work together; and when they do, it is often unproductive. Teachers avoid group work because it relinquishes their control and is potentially 'disruptive' or 'subversive'. This study itself inadvertently points at examples of 'bad' practice and highlights several challenges to the effective teaching of collaborative talk.

Nevertheless, downgrading Speaking & Listening in the Curriculum and at GCSE has broad implications which will only reinforce the 'bad' practice described and signals a return to rote learning. The role of talk in the new curriculum represents a political and ideological position which undermines the considerable evidence in favour of promoting dialogic interactions between teacher and students and exploratory talk amongst peers. And erasing the assessment of Speaking & Listening from GCSE does a disservice to students at a point in secondary school when they are considering and evaluating the skills they posses for further education or the workplace.

It is important not to 'idealise group discussion' (Barnes, 2008, p. 7): talk amongst peers is messy, often divergent and full of asides, even 'improper'; but it presents opportunities for teachers to harness and exploit experience and opinion, a 'valuable resource in the teacher's repertoire' (Barnes, 2008, p. 7). Instead of taking it away, we should be exploring ways of teaching and assessing Speaking & Listening *better*.

As well as making theoretical contributions to the field, this thesis suggests practical approaches for improving the teaching and development of collaborative talk, which aim to highlight its validity and applicability to wide-ranging contexts.

9.3 Planning for Collaborative Talk

To inform the teaching unit a number of workplaces were visited where employers and employees were asked about the collaborative scenarios they engage in on a day-to-day basis and what skills they require. Concerns were expressed about the communication skills of young people entering the workplace. Young people were described as being too scared to speak on the telephone or ask directions, apprentice hairdressers were described as making serious errors as a result of poor listening, as was the conversational behaviour of 'brick-throwers' and 'Ghandis.' There is virtually no workplace a young person will enter that does not require them to interact with others.

Informed by these observations, the teaching unit was designed to:

- support students in forging positive relationships within their groups
- support the development of shared referents for analysing examples of collaborative talk

- provide opportunities for student groups to engage in 'authentic' collaborative activities
- support students in reflecting upon and evaluating their own and their group's talk

Drawing on the workplace provided an additional dimension to the study and usefully informed the teaching of collaborative talk. The workplace component of the thesis supported the development of the framework for collaborative talk, providing a foundation for the materials and a shared focus for teachers and students. The tasks were equally informed by the workplace, and though they didn't mimic workplace scenarios, did emulate the expectations for the participation of workplace groups and the outcomes of their talk. As discussed in Chapter 8, the analysis of talk was drawn from approaches to communication training in Higher Education and the workplace, and formed an important element of the teaching approach. It has been argued that this constitutes a development in approaches to teaching talk in the classroom. At the time, this element was also considered useful for teachers because it tied with the analysis of spoken language at GCSE and A-level.

The materials developed constitute helpful resources which can support teachers in developing the collaborative talk of their students. They also emphasise the importance of planning for the teaching of talk, not simply providing opportunities for it, challenging assumptions that students already 'possess' communication skills which they can utilise on demand. Being 'able to talk' does not mean being able to communicate ideas clearly, to challenge and ask questions, negotiate and resolve differences. And young people do not automatically know the conversational 'rules' of the new contexts within which they will find themselves post school-life. Achieving

successful group work in the classroom requires preparation, guidance and supervision (Barnes, 2008). Teachers need to scaffold students' talk awareness and support their participation over a sequence of lessons. Allowing students to work in the same groups recognises the need for students to forge relationships, and that a strong group identity will support their engagement.

9.4 The Teacher's Role

This study has focused on the talk used by teachers to implement the teaching unit: both on their interactions with the whole class and with groups during their collaborative talk. From this analysis, it was possible to identify the prominence of particular features in the teachers' talk and and relate this to the observed engagement of their students. Groups in Vicky's class were more consistent in sustaining their talk and in their achievement of developed talk than in Abigail's class. It has been argued that this was likely connected to Vicky's more consistent interactions across groups and her close monitoring of their independent collaborative talk. The consistency between the expectations implicit in Vicky's dialogues, and those she made explicit in her expectations for collaborative talk was also a likely factor. But it has also been argued that Vicky's dialogues served to emotionally engage students, encouraging their motivation and commitment. Expanding this suggestion, it has been proposed that Vicky modelled ways in which peers could forge relationships within their groups, supporting the creation of a foundation of mutual trust and respect upon which challenging dialogues could be developed.

Based on this, this thesis reinforces the argument that 'a long tradition of research and polemic pitting of teacher versus student as the appropriate theoretical centre for

understanding curriculum and instruction has precluded our understanding that more basic than either teacher or student is the *relationship between them*' (Nystrand, 1997, p.6). When speakers share mutual trust and respect, they are committed to talking things through, to understanding alternative perspectives. These dialogues cannot occur between teacher and students in asymmetrical power relations. As Nystrand put it, without an 'ethos of mutual respect, the classroom atmosphere will tend towards monologism, no matter who is actually doing the talking' (1997, p. 88). If the potential for students' thinking and consequent learning is highly dependent upon teachers' talk (Carter, 1990), and avoiding constant monologism, then the relationships that teachers forge with their students are significant for pedagogical as well as pastoral reasons.

9.5 Theorising about Collaborative Talk

The frameworks and schemes developed have proved useful for the analysis of talk as it occurs and develops. However, these frameworks are nevertheless artificial abstractions and further 'categorisation' of talk should avoid reinforcing idealised notions of talk or resulting in a 'new kind of analytical "black box" in which the minutiae of talk and participants' concerns are side-lined' (Stokoe, 2000, p. 200). However, there is little guidance for teachers which describes what 'good' or 'effective' talk looks like. In fact, now that the assessed component of English GCSE has gone, there is even less. As suggested previously, there is a need to challenge perceptions of what constitutes 'good' talk. Supporting teachers in the development of their knowledge in turn supports the meta-language necessary for teaching collaborative talk. Making distinctions between 'cooperative' and 'collaborative' talk, for instance, highlights the value of conflict and resolution over 'social rules' which reinforce passive compliance. Therefore, despite arguments, the development of

frameworks which do not define the use of specific linguistic structures is a supportive measure which also highlights the complexity and subtleties of speakers' strategies. Furthermore, by proposing a scheme for development, the *process* of teaching collaborative talk is stressed, discouraging 'add-on' Speaking & Listening activities and recognising it as a topic to be taught in its own right.

The development of the collaborative talk framework constituted a first step in the data analysis. It underpinned the development of the teaching unit and became a point of reference for teachers and students, becoming the subject of their dialogic interaction, and revealing the important role of analysis and reflection in meta-talk. The principles underpinning this approach are in common with those of the LINC project, which argued for Knowledge about Language (KAL) through the introduction of meta-language:

A rich experience of using language should generally precede conscious reflection on or analysis of language. Language study can influence use but development of the relationship between learning about language and learning how to use it is not a linear but rather a recursive, cyclical and mutually informing relationship...understanding how language is used to manipulate and incapacitate, can empower pupils to see through language to the ways in which messages are mediated and ideologies encoded...teaching methodologies for KAL should promote experiential, exploratory, reflective encounters with language; transmissive methods are usually inappropriate for the study of language in schools (Carter, 1990, p 4-5).

9.6 Implications for Research and Teacher Education

The findings of this study suggest further avenues for research and teacher education. Crucially, it recommends that a close relationship between teacher and researcher is most beneficial.

Improving classroom dialogues requires studying these dialogues in the contexts in which they occur, considering the forces which often make discussion unproductive. It is unfair to blame students for failing to follow the 'rules' when expectations for talk are unclear. Instead of continuing to focus on the conditions which best support collaborative talk, research might focus on prolonged interventions which address pedagogy and support teachers in developing strategies for teaching and managing collaborative and other forms of talk. Including teachers in the research dialogue is crucial in understanding the forces at work in the classroom. And it is vital that children's talk and its development be examined within the everyday classroom context. More research also needs to be done in the secondary school, particularly at KS4. When GCSE pressure mounts, transmissive methods may be deemed more appropriate as teachers 'drill' students with knowledge in preparation for examinations. Understanding how teachers can utilise the potential of group work for learning will have positive implications. More research into analytical methods for teaching talk may also be useful, drawing together approaches in the workplace to reinforce the validity of these tasks.

Similarly, teacher training and professional development needs to address dialogic pedagogy. In fact, the materials developed for this study may be useful for teacher training, particularly considering their grounding in higher education and workplace settings. Further development and analysis of video and transcripts of teacher-student and group dialogues may support this development. As with students, it is necessary to align what teachers espouse with regards their use of talk and how it appears. Achieving effective dialogues is about more than planning opportunities for talk but about embracing a broader pedagogical approach.

We also need to challenge perceptions and expectations about talk as closely linked to behaviour. There needs to be a distinction between behaviour and the process and purpose of collaborative talk. As noted, forging positive relationships with students must be regarded as serving a pedagogical as well as pastoral role.

This thesis argues the benefit of researcher-teacher collaboration; or more so, shows the potentially inherent nature of these roles. Close links between research and practice is not only sensible and ethical, but maintaining the applicability of one to the other depends on dialogue between parties. The process of teacher-researcher collaboration itself creates a space for dialogue, within which different perspectives and concerns are exposed; there is much to be learnt from each other.

Participating in this project was valuable for both teachers, professionally and personally. And despite current changes to the English Curriculum and GCSE, their experience reinforces the important position of effective classroom dialogues.

I think the ethos of the class has improved during the term, and the project has been a positive experience. I don't bond very closely with individual pupils, I think perhaps I feel quite different from them? They don't remind me of how I was! Talking today has made me realise I should be using group talk more with them. I tended to view it as a 'GCSE module' and now we're on to the next CA task. Since project, some pupils have grown in confidence and they talk to me more openly and ask for help. I still don't find many are showing the hard work and going the extra mile that I'd expect from A or A*. I enjoyed the project and really thought the lesson study side of it (video – viewing and feedback with Ruth straight after, informing what we did next) very productive and effective. Think we found stuff (methods and processes

and resources) that should be used again/more and become basis for early secondary 'training' of all pupils, to enable learning in groups to happen (because it changes the way they collaborate and interact).

Abigail's written comments during post-implementation meeting

I really enjoyed the project. I found it very entertaining and immensely rewarding. I loved the dynamic nature of the lessons and it was great to spend so much time on Speaking & Listening. It has helped me to develop my understanding of talk and have realised how much we need to work and develop this in education. I am converted to the ethos of putting S&L at the forefront of my teaching and look forward to developing this skill. I want to develop it across the school, as I am in total agreement about the inability of some students to talk effectively. An excellent SoW – very well thought out and very eye-opening. So pleased I have been involved.

Vicky's written comments during post-implementation meeting

9.7 Final Remarks: The Place of Collaborative Talk in the National Curriculum

The teaching materials devised for this thesis resonate in some ways with those designed by Ronald Carter for the LINC project (HMSO, 1990). The LINC materials were quashed by the then Conservative government for their potential to disrupt the linguistic 'status quo'. History is repeating itself: despite significant strides in this field of research over the past 30 years, the value of talk has been explicitly downgraded and devalued in the new National Curriculum by the current Conservative-led

coalition government, who also advocate a return to rote learning and promote 'proper' talk. This has implications beyond the teaching and value of English GCSE but for the ways in which students will be taught. Being able to talk with others is not only a skill required by employers, it is a skill possessed by independent and proactive learners. Being able to talk in groups or engage in role-play provides opportunities to learn with and from others. Eroding the importance of talk in the classroom implies a preference for teachers as transmitters of knowledge and of students as passive recipients, instead of active participants and constructors of their own learning. As Alexander (2005) argues, pedagogy and curriculum are intrinsic: downgrading the role of talk will inevitably downgrade the value of a dialogic pedagogy.

Assessing Speaking & Listening at GCSE is one way to ensure that communication skills are addressed explicitly. Despite stressing the role of talk as underpinning reading and writing (DfE, 2013a), downgrading Speaking & Listening has negative implications for the role of language within English teaching and learning. Inevitably, fewer talk-based tasks will be incorporated into the exploration of texts or into the writing process, for instance. Talk and drama support students' empathy, the examination of different perspectives. As James Britton put it, "reading and writing float on a sea of talk" (1970, p.29). As noted earlier, instead of taking talk away, we should be exploring ways of teaching and assessing Speaking & Listening *better*.

Valuing the role of talk in the learning of young people represents an ideology, one which has been aggressively undermined by the current Conservative-led coalition government. Promoting collaborative and other forms of exploratory talk amongst peers, while shifting the 'traditional' dominant role of the teacher, places young people in positions of power. From which, they are able to question and challenge

the status quo. Instead of addressing the apparently increasing issue of young people's disengagement and disaffection by 'bringing them into line', by forcing their appreciation of the 'good knowledge' valued by an elite sector of society (Gove, 2011), perhaps we should be motivating young people by emphasising the power of their voices for good, and the power of their shared voices for learning.

To deny young people the opportunity to become skilled communicators is to ignore the challenges they face in the future. We frequently hear complaints that young people lack the communication skills required for the workplace (Alexander, 2011). Our global network society demands young people have the ability to communicate across cultures and continents (Castells, 2005). Equipping young people with creative, communicative and collaborative skills is a means of ensuring their integration into a world made increasingly unpredictable by the pace of change.

Glossary

App: a piece of software designed for a particular purpose and downloaded for use on a mobile device.

BT: British Telecom is a multi-national telecommunications services company.

CASE: Collaboration Awards in Science and Engineering. Students undertaking a PhD CASE award will do so in collaboration with an industrial partner.

Connexions: provides services to a wide range of young people and adult customers who are looking for help with their career.

CPD: Career and Professional Development. Teachers are required to engage in CPD to ensure continuing professional development.

Dialogics Ltd: A company which specialises in communication training and educational resources.

Edexcel:The UK's largest awarding body, offering academic and vocational qualifications and testing, including GCSEs.

EABD: Emotional and Behavioural Difficulties experienced by children that can interfere with education and therefore require support or intervention.

EAL: Indicates the students for whom English is an additional language.

GCSE: General Certificate of Secondary Education (GCSE) is an academic qualification awarded in a specified subject, generally taken in a number of subjects by students aged 14-16 in secondary education in England, Wales and Northern Ireland.

HoD: The Head of Department is a title normally given to the person who leads a subject team in secondary school.

iPad: a tablet computer designed, developed and marketed by Apple Inc.

KS3: Key Stage 3 is the term for the three years of schooling in maintained schools in England and Wales normally known as Year 7, Year 8 and Year 9, when pupils are aged between 11 and 14.

KS4: Key Stage 4 is the term for the two years of school education which incorporate GCSEs, and other exams, in maintained schools in England, Wales, and Northern Ireland normally known as Year 10 and Year 11 in England and Wales, when pupils are aged between 14 and 16.

NATE: The National Association for the Teaching of English is a UK professional subject association.

NQT: Newly qualified teacher (NQT) is a label attached to teachers in the United Kingdom who have been qualified for less than twelve months

Ofsted: The Office for Standards in Education, Children's Services and Skills is the non-ministerial government department of Her Majesty's Chief Inspector of Schools in England

Primary school: For children normally aged between 5 and 11, spanning Key Stages 2 and 3.

Secondary school: For children normally aged between 11 and 18, spanning Key Stages 3, 4 and 5.

SEN: Indicates students with a special educational need which may require support and intervention.

SLCN: A Speech, Language and Communication need which may affect learning or full participation in society.

S&L: Speaking & Listening constitutes an assessed component of the English GCSE, though changes were made to its status in 2013.

TCT: The Communication Trust coalition of nearly 50 voluntary and community organisations with expertise in speech, language and communication.

The Children's Society: A UK children's society

Teaching unit or Scheme of Work (SoW): Outlines a long term plan for supporting students' achievement of specific learning objectives. Lesson plans outline the structure of activities and their objectives.

References

Abram, D. (1996). The Spell of the Sensuous. New York: Random House.

Alexander, R. (2001). *Culture and Pedagogy: International Comparisons in Primary Education.* Oxford and Boston: Blackwell.

Alexander, R. (2004). *Towards Dialogic Teaching: Rethinking Classroom Talk*. Cambridge: Dialogos.

Alexander, R. (2005). *Culture, dialogue and learning: Notes on an emerging pedagogy.* Paper presented at International Association for Cognitive Education and Psychology (IACEP), University of Durham, UK, 12th July, 2005, viewed January 2014, at <u>http://www.robinalexander.org.uk/docs/IACEP_paper_050612.pdf</u>

Alvesson, M., & Skoldberg, K. (2000). *Reflexive Methodology*. London: Sage.

Anderson, R., Ngyuen-Jahiel, K., McNurlen, B., Archodidou, A., Kim, A., Resntiskaya, A., Tillmans, M. and Gilbert, L. (2001). The snowball phenomenon: Spread of ways of talking and ways of thinking across groups of children. *Cognition and Instruction*, 19, 1-46.

Armstrong, J. L. (2004). Seven Keys for Small Group Success. *Adult Learning, 15* (1-2), 34-35.

Arvaja, M. 2005. *Collaborative knowledge construction in authentic school contexts*. Institute for educational research. University of Jyväskylä: University Printing House.

Asmu, B. and Svennnevig, J. (2009). Meeting talk: An introduction. *Journal of Business Communication*, 46 (1), 3-22.

Ayre, A. and Roulstone, S. (2009). *Transition to Secondary School: Supporting Pupils with Speech, Language and Communication Needs*. NAHT.

Azmitia, M. (1998). Peer interactive minds: developmental, theoretical, and methodological issues. In Faulkner, D., Littleton, K. and Woodhead, M. (eds). *Learning Relationships in the Classroom*. London: Routledge.

Azmitia, M. and Montgomery, R. (1993). Friendship transactive dialogues and the development of scientific reasoning. *Social Development*, 2, 202-221.

Baines, E., Blatchford, P. and Kutnick, P. (2003). Changes in grouping practices over primary and secondary school, *International Journal of Educational Research*, 39, 9-34.

Baines, E., Blatchford, P. and Kutnick, P. (2009). *Promoting Effective Group Work in the Primary Classroom: A Handbook for Teachers and Practitioners*. London: Routledge.

Baines, E., Rubie-Davies, C. and Blatchford, P. (2009). Improving pupil group work interaction and dialogue in primary classrooms: results from a year-long intervention study. *Cambridge Journal of Education*, 39 (1), 7-29.

Bakhtin, M.M. and Medvedev, P.N. (1978). *The Formal Method in Literary Scholarship: A Critical Introduction to Sociological Poetics.* Baltimore: The John Hopkins University Press.

Bakhtin, M.M. (1981). *The Dialogic Imagination: Four Essays*. Austin: University of Texas Press.

Bakhtin, M.M. (1986). *Speech Genres and Other Late Essays*. University of Texas Press.

Barnes, D. and Todd, F. (1977). *Communication and Learning in Small Groups*. London: Routledge and Kegan Paul.

Barnes, D., Britton, J. and Rosen, H. (1969). *Language, the Learner and the School*. Middlesex: Penguin.

Barnes, D. (1992). The role of talk in learning. In Norman, K. (ed). *Thinking Voices: The Work of the National Oracy Project.* London: Hodder & Stoughton.

Barnes, D. (2008). Exploratory talk for learning. In Mercer, N. and Hodgkinson, S. (eds). *Exploring Talk in School*. London: Sage.

Barnes, D. (1976). From Communication to Curriculum. London: Penguin

Barnes, D. and Todd, F. (1995). *Communication and Learning Revisited: Making Meaning through Talk* (2nd edition). Portsmouth, NH: Heinemann.

Barbieri, M. and Light, P. (1992). Interaction, gender and performance on a computer-based task. *Learning and Instruction*, 2, 199-213.

Bennett, N. and Cass, A. (1988). The effects of group composition on group interactive processes and pupil understanding. *British Educational Research Journal*, 15, 19-32.

Bennett, N. and Dunne, E. (1992). *Managing Classroom Groups*. Herts: Simon & Schuster

Bercow, J. (2008). *The Bercow Report: A Review of Services for Children and Young People (0-19) with Speech, Language and Communication Needs*. Nottingham: DCSF.

Bereiter, C. (1994). Implications of postmodernism for science, or, science as progressive discourse. *Educational Psychologist*, 29 (1), 3-12.

BERA. (2004). Revised Ethical Guidelines for Educational Research.

Black, L. and Varley, D. (2008). Young childrens' perspectives on whole class discussions. *Education 3-13*, 36 (3), 207-221.

Blatchford, P., Kutnick, P., Baines, E. and Galton, M. (2003). Toward a social pedagogy of classroom group work. *International Journal of Educational Research*, 39, 153-172.

Blatchford, P. and Baines, E. (2010). Peer relations in school. In Littleton, K., Wood, C. and Staarman, J.K. (eds). *International Handbook of Psychology in Education*. UK: Emerald.

Blatchford, P., Baines, E., Rubie-Davies, C., Bassett, P. and Chowne, A. (2006). The effect of a new approach to group work on pupil-pupil and teacher-pupil interactions. *Journal of Educational Psychology*, 98 (4), 750-765.

Blumenfeld, P. C., Puro, P. and Mergendoller, J. R. (1992). Translating motivation into thoughtfulness. In H. H. Marshall (Ed.), *Redefining Student Learning: Roots of Educational Change*, 207-239. Norwood, NJ: Ablex.

Blum-Kulka, S. and Snow, C. E. (2004). Introduction: The potential of peer talk. *Discourse Studies*, 6 (3), 291-306.

Bourdieu, P. (1992). Language and Symbolic Power. Cambridge: Polity Press.

Bridges, D. and Watts, M. (2008). Educational research and policy: epistemological considerations. *Journal of Philosophy of Education*, 42 (1).

Bryman, A. (2008). Social Research Methods. (3rd edition). Oxford University Press.

Boden, D. (1994). *The Business of Talk: Organization in Action.* Cambridge, UK: Polity.

Boyd, M. P. and Markarian, W. (2011). Dialogic teaching: Talk in service of a dialogic stance. *Language and Education*, *25* (6), 515-534.

Brierley, L., Cassar, I., Loader, P., Norman, K., Shantry, I., Wolfe, S., et al. (1992). No, we ask you questions. In Norman, K. (ed). *Thinking Voices: The Work of the National Oracy Project.* London: Hodder & Stoughton.

Brown, A.L. and Palincsar, A.S. (1989). Guided, cooperative learning and individual knowledge acquisition. In Resnick, L. (ed). *Knowing, Learning and Instruction: Essays in Honour of Robert Glaser.* New Jersey: Lawrence Erlbaum.

Bruner, J. (1975). The ontogenesis of speech acts. *Journal of Child Language*, 2, 1-19.

Bruner, J. (1985). Vygotsky: A historical and conceptual perspective. In Wertsch, J.V. (ed), *Culture, Communication and Cognition: Vygotskian Perspectives*. Cambridge University Press.

Bruner, J. (1986). Actual Minds, Possible Worlds. Harvard University Press.

Bullen, K., Trollope, J. and Moore, K. (2002). The influence of pupil-generated ground rules on collaborative learning in the classroom: a pilot study. *Evaluation and Research in Education, 16* (4), 202-217.

Bullock Report. (1975). A Language for Life. London: HMSO.

CACE (1967). Children and their Schools (Plowden Report). London: HMSO.

Cameron, D. (2011). *Metaphor and Reconciliation: The Discourse Dynamics of Empathy in Post-Conflict Conversations.* London: Routledge

Cappelen, H. and Lepore, E. (2007). *Language Turned on Itself: The Semantics and Pragmatics of Metalinguistic Discourse*. Oxford University Press.

Carr, W. and Kemmis, S. (1986). *Becoming Critical: Education, Knowledge and Action Research*. The Falmer Press.

Carter, R. (1990). *Knowledge about Language and the Curriculum: The LINC Reader.* London: Hodder & Stoughton.

Cazden, C.B. (2001). *Classroom Discourse: The Language of Teaching and Learning.* New Hampshire: Heinemann.

Cazden, C,B. (1979). Peekaboo as an instructional model: Discourse development at home and at school. *Papers and Reports on Child Development*, 17. Palo Alto, CA: Stanford University, Department of Linguistics.

Chaiklin, S. (2003). The zone of proximal development, In Vygotsky's analysis of learning and instruction. In Kozulin, A., Gindis, B., Ageyev, V. & Miller, S. (eds). *Vygotsky's Educational Theory in Cultural Context*. Cambridge University Press.

Chomsky, N. (1968). Language and Mind. New York: Harcourt Brace Jovanovich.

Christie, D., Tolmie, A., Thurston, A., Howe, C. and Topping, K. (2009). Supporting group work in Scottish primary classrooms: improving the quality of collaborative dialogue. *Cambridge Journal of Education*, 39 (1), 7-29.

Cobb, P. (1994). Where is the mind? Constructivist and sociocultural perspectives on mathematical development. *Educational Researcher*, 23, (7), 13-20.

Cohen, E. (1994a). *Designing Group Work: Strategies for the Heterogeneous Classroom. New York*: Teachers' College Press.

Cohen, E. (1994b). Restructuring the classroom: Conditions for productive small groups. *Review of Educational Research,* 64 (1), 1-35.

Cohen, L., Manion, L. and Morrison, K. (2007). *Research Methods in Education*. Routledge.

Cole, K. and Zuenglar, J. (2008) *The Research Process in Classroom Discourse Analysis*. New York: Taylor & Francis Group.

Corden, R. (2000). *Literacy and Learning through Talk: Strategies for the Primary Classroom.* Buckingham: Open University Press.

Coreen, F. (ed). (2007). *Interacting and Organizing: Analyses of a Management Meeting*. Mahwah, NJ: Lawrence Erlbaum.

Cornelissen, J.P. and Clarke, J.S. (2010). Imagining and rationalizing opportunities: Inductive reasoning, and the creation and justification of new ventures. *Academy of Management Review*, 35 (4), 539-557.

Coultas, V. (2013). English for the many or the few? In Allen, M. & Ainley, P. (eds). *Education Beyond the Coalition: Reclaiming the Agenda*. Radicled.

Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process.* London: SAGE Publications.

Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Sage.

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (3rd edition). Sage.

Csikentmihalyi, M. (1988). Motivation and creativity: Toward a synthesis of structural and energistic approaches to cognition. *New Ideas in Psychology*, 6, 2.

Daniels, H., Cole, M. and Wertsch, J.V. (2007). *The Cambridge Companion to Vygotsky*. Cambridge University Press. Cambridge University Online. 15th November, 2010.

Daniels, H. (2007). Pedagogy. In Daniels, H., Cole, M. and Wertsch, J.V. (eds). *The Cambridge Companion to Vygotsky.* Cambridge University Press.

Dawes, L. (2001). Interthinking – The power of productive discourse. In Goodwin, P. (ed). *The Articulate Classroom: Talking and Learning in the Primary School*. London: David Fulton.

Dawes, L., Mercer, N. and Wegerif, R. (2004). *Thinking Together: A programme of Activities for Developing Speaking, Listening and Thinking Skills for Children aged 8-11.* Imaginative Minds.

Dawes, L. and Sams, C. (2004). Developing the capacity to collaborate. In Littleton, K., Miell, D. and Faulkner, D (eds). *Learning to Collaborate: Collaborating to Learn*. Nova Science.

Del-Rio. and Alvarez, A. (2007). Inside and outside the zone of proximal development: An ecological reading of Vygotsky. In Daniels, H., Cole, M. and Wertsch, J.V. (eds). *The Cambridge Companion to Vygotsky*. Cambridge University Press.

Denzin, N. (2009). The elephant in the living room: or extending the conversation about politics of evidence. *Qualitative Research*, 9, 139.

Denzin, N. K. and Lincoln, Y. (2000). *The SAGE Handbook of Qualitative Research.* (3rd edition). London: Sage.

Des-Fountain, J. and Howe, A. (1992). Pupils working together on understanding. In Norman, K. (ed). *Thinking Voices: The Work of the National Oracy Project*. London: Hodder & Stoughton.

Dewey, J. (1900) *The School and Society* (combined edition, 1956). Chicago: The University of Chicago Press.

DES (1988) *The Report of the Committee of Enquiry into the Teaching of English* (The Kingman Report), London: Her Majesty's Stationery Office.

DES (1989) *English for Ages 5-16* (The Cox Report), London: Her Majesty's Stationery Office.

DfES (2003) Speaking, Listening and Learning: Working with Children in Key Stage 1 and 2. London: DfES.

DfES. (2001) Year 7 Speaking & Listening Bank. London: DfES.

DfES. (2003) Drama Objective Bank. London: DfES.

DfE. (2013) English Programme of Study for Key Stage 4. London: DfE.

Dillenbourg, P. (1999). Introduction: What do you mean by 'collaborative learning?' In Dillenbourg, P. *Collaborative Learning: Cognitive and Computational Approaches*. Amsterdam: Pergamon.

Doise, W. and Mugny, G. (1984). *The Social Development of the Intellect*. Oxford: Pergamon Press.

Doise, W., Mugny, G. and Perret-Clermont, A.N. (1976). Social interaction and cognitive interaction: Further evidence. *European Journal of Social Psychology*, 6, 245-247.

Donnellon, A. (1996). *Team Talk: The Power of Language in Team Dynamics*. Boston, Masachusetts: Harvard Buisness School Press.

Dong, T., Anderson, R.C., Lin, T-J. and Wu, X. (2009). Concurrent student-managed discussions in a large class. *International Journal of Educational Research*, 48, 352-367.

Edwards, D. and Mercer, N. (1987). *Common Knowledge: The Development of Understanding in the Classroom.* London: Routledge.

Edexcel. (2010). GCSE English Specification. Pearson.

Faulkner, D., Littleton, K. and Woodhead, M. (1998). *Learning Relationships in the Classroom.* London: Routledge.

Fernandez, M., Wegerif, R., Mercer, N. and Rojas-Drummond, S. (2001). Reconceptualizing "Scaffolding" and the Zone of Proximal Development in the context of symmetrical collaborative learning. *Journal of Classroom Instruction*, 36 (2).

Fisher, R. and Larkin, S. (2008). Pedagogy or ideological struggle? An examination of pupils' and teachers' expectations of classroom talk. *Language and Education*, 22 (1), 1-16.

Flick, U. (2007). Designing Qualitative Research. London: Sage.

Forman, E.A. and Cazden, C.B. (1985). Exploring Vygotskian perspectives in education: the cognitive value of peer interaction. In Wertsch, J.V. (ed). *Culture, Communication and Cognition: Vygotskian Perspectives.* Cambridge University Press.

Forman, E.A. (1981). *The Role of Collaboration in Problem-Solving in Children. Doctoral dissertation,* Harvard University.

Forrestal, P. (1992). Structuring the learning xperience. In Norman, K. (ed). *Thinking Voices: The Work of the National Oracy Project*. London: Hodder & Stoughton.

Fredrick, T.A. (2008). Facilitating better teamwork: Analyzing the challenges and strategies of classroom-based collaboration. *Business Communication Quarterly*, 71 (4), 439-455.

Fredricks, J., Blumenfeld, P. and Paris, A. (2004) School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74 (1), 59-109.

Freire, P. (2008). *Pedagogy of the Oppressed. (30th anniversary edition).* New York: Continuum International Publishing Group.

Fuchs, L. S., Fuchs, D., Bentz, J., Phillips, N. B., and C.L, H. (1994). The nature of student interactions during peer tutoring with and without prior training and experience. *American Educational Research Journal,* 31 (1), 75-103.

Fullan, M. (2007). *The New Meaning of Educational Change.* New York: Teachers' Press.

Furlong, M.J. and Christenson, S.L. (2008). Engaging students at school and with learning: A relevant construct for all students. *Psychology in the School*, 45 (5).

Gadamer, H-G. (1989). Truth and Method. Stagbooks.

Galton, M. and Hargreaves, L. (2009). Group work: Still a neglected art? *Cambridge Journal of Education*, 39 (1), 1-6.

Galton, M., Hargreaves, L. and Pell, T. (2009). Group work and whole-class teaching with 11-14 year olds compared. *Cambridge Journal of Education*, 39 (1), 7-29.

Garrick, J. (1999). Doubting the philosophical assumptions of interpretive research. *International Journal of Qualitative Studies in Education*, 12 (2), 147-156.

Galton, M. and WilJohnnyson, J. (1992) *Groupwork in the Primary Classroom*. London: Routledge.

Galton, M., Hargreaves, L., Comber, C., Pell, T. and Wall, D. (1999) *Inside the Primary Classroom: 20 Years On*, London: Routledge.

Gibbs, G. R. (2007). Analyzing Qualitative Data. London: Sage.

Gillies, R.M. and Khan, A. (2009). Promoting reasoned argumentation, problemsolving and learning during small-group work. *Cambridge Journal of Education*, 39 (1), 7-29.

Gillies, R. (2003). Structuring cooperative group work in classrooms. *International Journal of Educational Research*, 39 (1), 35-49.

Glasersfeld, E. (1989). Learning as constructive activity. In Murphy, P. & Moon, B. (eds) *Developments in Learning and Assessment*. London: Hodder & Stoughton.

Gombert, J.E. (1992). *Metalinguistic Development*. Harvester Wheatsheaf.

Gove, M. (2011). Speech at Cambridge University, 24th November 2011, available at <u>https://www.gov.uk/government/speeches/michael-gove-to-cambridge-university</u>

Grant, D., Hardy, C., Oswick, C. and Putnam, L. (eds). (2004). *The Sage Handbook of Organizational Discourse.* London: SAGE.

Graves, N. and Graves, T. (1990). *What is Cooperative Learning? Tips for Teachers and Trainers.* Santa Cruz: Cooperative college of California.

Griffiths, M. and Macleod, G. (2008). Personal narrative and policy: Never the twain? *Journal of Philosophy of Education*, 42 (1).

Grossen, M. and Bachmann, K. (2000). Learning to collaborate in a peer-tutoring situation: Who learns? What is being learnt? *European Journal of Psychology of Education*, 4, 491-508.

Guba, E. and Lincoln, Y. (1981). *Effective Evaluation*. Jossey-Bass Classics.

Habermas, J. (1979). *Communication and the Evolution of Society*. London: Heinemann.

Halliday, M. (1993). Towards a language-based theory of learning. *Linguistics and Education*, 5, 93-116.

Hammersley, M. (2007). The issue of quality in qualitative research. *International Journal of Research and Method in Education,* 30 (3), 287-305.

Hammersley, M. and Atkinson, P. (2007). *Ethnography: Principles in Practice.* (3rdedition). London: Routledge.

Hansen, H., Ramstead, T., Richer, S., Smith, S. and Sratton, M. (2001). Unpacking participatory research in education. *Interchange*, 32 (3).

Harskamp, E., Ding, N. and Suhre, C. (2008). Group composition and its effect on female and male problem-solving in science education. *Educational Research*, 50(4), 307-318.

Hardman, F. and Abd-Kadir, J. (2010). Classroom discourse: Towards a dialogic pedagogy. In Wise, D., Andrews, R. & Hoffman, J. (eds.). *The Routledge International Handbook of English, Language and Literacy Teaching.* London: Routledge.

Hardy, C., Lawrence, T.B. and Phillips, N. (1998). Talking action: Conversation, narrative and action in interorganizational collaboration. In Grant, D., Keenoy, T. and Oswick, C. (eds). *Discourse and Organization*. London: Sage.

Hatano, G. and Inagaki, K. (1991). Sharing cognition through collective comprehension activity. In Resnick, L.B., Levine, J.M. and Teasley, S.D. (eds) *Perspectives on Socially Shared Cognition*. Washington: American Psychological Association.

Hickmann, M. (1985). The implications of discourse skills in Vygotsky's developmental theory. In Wertsch, J.V. (ed), *Culture, Communication and Cognition: Vygotskian Perspectives*. Cambridge University Press.

Hobson, P. (2002). *The Cradle of Thought: Exploring the Origins of Thinking*. London: Macmillan.

Holliday, A. (2008). *Doing and Writing Qualitative Research.* (2nd edition). Los Angeles: Sage.

Holquist, M. (1990). Dialogism: Bakhtin and his World. London: Routledge.

Howe, C. (2010). Peer dialogue and cognitive development: two-way relationship? In Littleton, K. and Howe, C. (eds). *Educational Dialogues: Understanding and Promoting Productive Interaction.* London: Routledge.

Howe, C. (2010). Peer Groups and Children's Development. Wiley-Backwell.

Huss, J.A. (2007). Let's talk about talking: Accountable talk and participatory learning. *National Middle School Association*, 11 (1), 28-29.

Johnson, J. (1992). Some unanswered questions about the development and assessment of talk in secondary years. In Norman, K. (ed). *Thinking Voices: The Work of the National Oracy Project.* London: Hodder & Stoughton.

Jones, I. (2000). Social relationships, peer collaboration and children's oral language. *Educational Psychologist*, 22 (1), 63-73.

Jupp, V. (2006). *The SAGE Dictionary of Social Research Methods*. London: SAGE Publications.

Kangasharju, H. (2002). Alignment in disagreement: Forming oppositional alliances in committee meetings. *Journal of Pragmatics*, 34, 1447-1471.

Keiner, J. (1992). A brief history of the origins of the national oracy project. In Norman, K. (ed). *Thinking Voices: The Work of the National Oracy Project*. London: Hodder & Stoughton.

Klein, H. K. and Myers, M. D. (1999). A set of principles for conducting and evaluating interpretive field studies in information studies. *MIS Quarterly*, 23(1), 67-94.

Krechevksy, M. and Stork, J. (2000). Challenging educational assumptions: Lessons from an Italian-American collaboration. *Cambridge Journal of Education*, 30(1).

Kutnick, P. and Berdondini, L. (2009). Can the enhancement of group working in classroom provide a basis for effective communication in support of school-based cognitive achievement in classrooms of young learners? *Cambridge Journal of Education*, 39 (1), 7-29.

Lambirth, A. (2006). Challenging the laws of talk: Ground rules, social reproduction and the curriculum. *Curriculum Journal*, 17 (1), 59-71.

Lambirth, A. (2009). Ground rules for talk: The acceptable face of prescription. *Curriculum Journal*, 20 (4), 423-435.

Lefstein, A. (2010). More helpful as problem than solution: some implications of situating dialogue in classrooms. In Littleton, K. & Howe, C. (eds). *Understanding Dialogues: Understanding and Promoting Productive Interaction.* London: Routledge.

Lefstein, A. and Snell, J (2011). Promises and problems of teaching with popular culture: A linguistic ethnographic analysis of discourse genre mixing. *Reading Research Quarterly*, 46 (1), 40-69.

Levering, B. (2007). Epistemological issues in phenomenological research: How authoritative are people's accounts of their own perceptions? In Bridges, D. and Smith, R. (eds). *Philosophy, Methodology and Educational Research.* Malden: Blackwell.

Littleton, K. and Howe, C. (2010). *Educational Dialogues: Understanding and Promoting Productive Interaction.* London: Routledge.

Littleton, K. and Mercer, N. (2013). *Interthinking: Putting Talk to Work*. London: Routledge.

Light, P. and Littleton, K. (1999). *Social Processes in Children's Learning*. Cambridge: Cambridge University Press.

Lindfors, J. W. (1999). *Children's Inquiry: Using Language to Make Sense of the World*. New York: Teachers College Press.

Lloyd, C. and Beard, J. (1995). *Managing Classroom Collaboration*. London: Cassell.

Lyle, S. (2001). Sorting out learning through group talk. In Goodwin, P .(ed). *The Articulate Classroom: Talking and Learning in the Primary School.* London: David Fulton.

Merleau-Ponty, M. (1968). *The Visible and the Invisible.* Illinois: Northwestern University Press.

Mortimer, E.F. and Scott, P.H. (2004). *Meaning Making in Science Classrooms*. Maidenhead: Open University Press.

Marshall, C. and Rossman, B. (1999). *Designing Qualitative Research*. Sage.

Maxwell, J. A. (1996). *Qualitative Research Design: An Interactive Approach*. London: SAGE.

Maykut, P. and Morehouse, R. (1994). *Beginning Qualitative Research: A Philosophical and Practical Guide.* The Falmer Press Teachers' Library.

Maybin, J. (2009). A broader view of language in school: Research from linguistic ethnography. *Children and Society*, 23, 70-78.

Maybin, J. (1991). Children's informal talk and construction of meaning. *English in Education*, 25 (2), 34-49.

Maybin, J. (2006). *Children's Voices: Talk, Knowledge and Identity*. Basingstoke: Palgrave Macmillan.

McCallum, B., Hargreaves, E. and Gipps, C. (2000). Learning the pupils' voice. *Cambridge Journal of Education*, 30 (2), 275-289.

Mehan, H. (1979). *Learning Lessons: Social Organization in the Classroom*. Cambridge Masachusetts: Harvard University Press.

Mercer, N. (1995). *The Guided Construction of Knowledge*. Clevedon: Multilingual Matters.

Mercer, N. (1996). The quality of talk in children's collaborative activity in the classroom. *Learning and Instruction*, 6 (4), 359-377.

Mercer, N. (2000). Word and Minds. London: Routledge.

Mercer, N. and Fisher, B. (1998). How do teachers help children to learn? An analysis of teachers' interventions in computer-based activities. In Faulkner, D., Littleton, K. and Woodhead, M. (eds). *Learning Relationships in the Classroom*. London: Routledge.

Mercer, N., Wegerif, R., and Dawes, L. (1999). Children's talk and the development of reasoning in the classroom. *British Educational Research Journal*, 25 (1), 95-111.

Mercer, N. and Littleton, K. (2007). *Dialogue and the Development of Children's Thinking: A Sociocultural Approach.* London: Routledge.

Mercer, N. and Sams, C. (2006). Teaching children how to use language to solve maths problems. *Language and Education*, 20 (60), 507-528.

Mercer, N., Wegerif, R. and Dawes, L. (1999). Children's talk and the development of reasoning in the classroom. *British Educational Research Journal*, 25 (1), 95-111

Mercer, N. (2008). The seeds of time: Why classroom dialogue needs a temporal analysis. *Journal of the Learning Sciences*, 17 (1), 33-59.

Michaels, S., O-Connor, C. and Resnick, L.B. (2008). Deliberative discourse idealised and realised: Accountable talk in the classroom and civic life. *Studies in Philosophy of Education*, 27 (4), 283-297.

Moll, L. and Whitmore, K. (1998). Vygotsky in classroom practice: moving from individual transmission to social transaction. In Faulkner, D., Littleton, K. and Woodhead, M. (eds). *Learning Relationships in the Classroom*. London: Routledge.

Moll, L.C. (1990). Vygotsky and Education: Instructional Implications and Application of Sociohistorical Psychology. Cambridge University Press.

Moore, P. (2007). Team talk. NZ Marketing Magazine, April 2007, 26 (3), 38-40.

Mugny, G. and Doise, W. (1978). Socio-cognitive conflict and structure of individual and collective performances. *European Journal of Social Psychology*, 8, 181-192.

Murphy, S., and Faulkner, D. (2000). Learning to collaborate: Can young children develop better communication skills through collaboration with a more popular peer. *European Journal of Psychology of Education*, 4, 389-404.

Myhill, D., Jones, S. and Hopper, R. (2006). *Talking, Listening and Learning: Effective Talk in the Primary Classroom*. Berkshire: Open University Press.

Myhill, D. (2006). Talk, talk, talk: Teaching and learning in whole class discussion. *Research Papers in Education*, 21 (1), 19-41.

Newman, D., Griffin, P. and Cole, M. (1989). *The construction Zone: Working for Cognitive Change in School*. Cambridge University Press.

Newmann, F. (1991). Linking restructuring to authentic student achievement. *Phi Delta Kappan*, 72 (6).

Newmann, F. (1992). *Student Engagement and Achievement in American Secondary Schools.* New York: Teachers' College Press.

Nightingale, D.J. and Cromby, J. (1999). *Social Constructionist Psychology: A Critical Analysis of Theory and Practice.* Buckingham: Open University Press.

Norris, N. (1997). Error, bias and validity in qualitative research. *Educational Action Research*, 5 (1), 172-176.

Nystrand, M. and Gamoran, A. (1990). Instructional discourse, student engagement, and literature achievement. *Research in the Teaching of English*, 261-290.

Nystrand, M. (1997). *Opening Dialogue: Understanding the Dynamics of Language and Learning in the English Classroom*. New York: Teachers College Press.

Oancea, R. and Pring, R. (2008). The importance of being thorough: On systematic accumulations of 'what works' in educational research. *Journal of Philosophy of Education*, 42 (1).

Ofqual (2013) Review of Controlled Assessment in GCSEs. London: Ofqual.

Ofqual (2013) Reforms to GCSEs in England from 2015. London: Ofqual.

Oppenheim, A. N. (1992). *Questionnaire Design, Interviewing and Attitude Measurement*. New York: Pinter.

Packer, M. J. and Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist*, 35 (4), 227-241.

Palincsar, A.S. and Herrenkohl, L.R. (2002). Designing collaborative learning contexts. *Theory into Practice*, 41 (1).

Palincsar, A. and Brown, A.L. (1984). Reciprocal teaching of comprehensionfostering and comprehension-monitoring activities. *Cognition and Instruction*, 1 (2), 53-59.

Palincsar, A. and Brown, A.L. (1988). Teaching and practicing thinking skills to promote comprehension-monitoring activities in the context of group problem-solving. *Remedial and Special Education*, 9 (1), 53-59.

Parakyla, A. (2005). Analyzing talk and text. In Denzin, N. & Lincoln, Y.S. *The SAGE Handbook of Qualitative Research*. (3rd Edition). Sage.

Perret-Clermont, A-N. (1980). *Social Interaction and Cognitive Development*. London: Academic Press.

Perret-Clermont, A.-N., Perret, J.-F., amd Bell, N. (1991). The social construction of meaning and cognitive activity in elementary school children. In Resnick,L., Levine, J.M. and Teasley, S.D. (eds). *Perspectives on Socially Shared Cognition*. American psychological sssociation.

Perret-Clermont, A.N. (1980). Social Interaction and Cognitive Development in Children. New York: Academic Press.

Pell, T., Galton, M., Steward, S., Page, C. and Hargreaves, L. (2007). Promoting Group Work at Key Stage 3: Solving an attitudinal Crisis among young adolescents?' *Research Papers in Education*, 22 (3), 309-332.

Peshkin, A. (2000). The nature of interpretation in qualitative research. *Educational Researcher*, 29 (9), 5-9.

Phillips, T. (1992). Why? The neglected question in planning for small group discussion. In Norman, K. (ed). *Thinking Voices: The Work of the National Oracy Project.* London: Hodder & Stoughton.

Piaget, J. (1926). *The Language and Thought of the Child*. London: Routledge & Kegan Paul

Piaget, J. (1932). *The Moral Judgement of the Child.* London: Routledge & Kegan Paul

Piaget, J. (1967). Biology and Knowledge. Chicago: Chicago university press.

Ploetzner, R., Dillenbourg, P., Preier, M. & Traum, D. (1999). Learning by explaining to oneself and to others. In Dillenbourg, P. *Collaborative Learning: Cognitive and Computational Approaches.* Amsterdam: Pergamon.

Poundstone, W. (1992). The Prisoner's Dilemma. New York: Random House.

Pratt, N. (2006). 'Interactive' teaching in numeracy lessons: What do children have to say? *Cambridge Journal of Education*, 36 (2), 221-235.

Packer, M.J. and Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist*, 35 (4), 227-241.

Pring, R. Philosophy of Educational Research. London: Continuum.

Psaltis, C., Duveen, G. and Perret-Clermont, A.-N. (2009). The social and the psychological: Structure and context in intellectual development. *Human Development*, 52 (5), 291-312.

QCA. (2003a). *New Perspectives on Spoken English in the Classroom*. Londond: QCA.

QCA. (2003b) Giving a Voice. London: QCA.

QCA. (2004). Introducing the Grammar of Talk. London: QCA.

QCA (2007). English Programme of Study for Key Stage 4. London: QCA.

Reason, P. (1998). A Participatory Worldview. Resurgence, 168, 42-44.

Resnick, L.B. (1987). Learning in School and Out. *Educational Researcher*. 16, 13-20.

Resnitskaya, A., Kuo, L-J., Clark, A-M., Miller, B., Jadallah, M., Anderson, R.C. and Nguyen-Jahiel, K. (2009). Collaborative reasoning: A dialogic approach to group discussion. *Cambridge Journal of Education*, 39 (1), 29-48.

Rogoff, B. (1990). *Apprenticeship in Thinking: Cognitive Development in Social Context.* Oxford University Press.

Rogoff, B., Radziszewska, B. and Masiello, T. (1995). Analysis of developmental processes in sociocultural activity. In Martin, L.M.W., Nelson, K. and Tobach, E. (eds). *Sociocultural Psychology: Theory and Practice of Doing and Knowing*. Cambridge University Press.

Rojas-Drummond, S. and Mercer, N. (2003). Scaffolding the development of effective collaboration and learning. *International Journal of Educational Research*, 39, 99-111.

Rommetveit, R. (1979). On negative rationalism in scholary studies of verbal communication and dynamic residuals in the construction of human intersubjectivity. In Rommetveit, R. and Blakar, R.M. (Eds). *Studies of Language, Thought and Verbal Communication*. London: Academic.

Rommetveit, R. (1985). Language acquisition as increasing linguistic structuring of experience and symbolic behaviour control. . In Wertsch, J.V. (ed). *Culture,*

Communication and Cognition: Vygotskian Perspectives. Cambridge University Press.

Rommetveit, R. (1992). Outlines of a dialogicality based social-cognitive approach to human cognition and communication. In Wood, A.H. (ed). *The Dialogical Alternative: Towards a Theory of Language and Mind.* Oslo: Scandinavian University Press.

Roschelle, J. (1992). Learning by collaborating: Convergent conceptual change. *The Journal of the Learning Sciences*, 2 (3), 235-276.

Roschelle, J. and Teasley, S. (1995). The construction of shared knowledge in collaborative problem solving. In *Computer Supported Collaborative Learning*. Berlin: Springer.

Rudduck, J., and Flutter, J. (2000). Pupil participation and pupil perspective: 'Carving a new order of experience.' *Cambridge Journal of Education*, 30 (1), 75-89.

Ryan, A.M. (2000). Peer groups as a context for the socialization of adolescents, motivation, engagement and achievement in school. *Educational Psychologist*, 35, 101-111.

Silverman, D. (1993). Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction. Sage.

Schmitz, M. J. and Winskel, H. (2008). Towards effective partnerships in a collaborative problem-solving task. *The British Journal of Educational Psychology*, 78 (4), 581-596.

Schutz, A. (1967). Collected papers: Vol. 1. The problem of social reality. The Hague: Matrinus Nijhoff.

Scott, D. (1999). *Values and Educational Research*. Institute of Education University of London.

Schwartzman, H.B. (1989). *The Meeting: Gatherings in Organizations and Communities*. New York: Plenum.

Schwandt,T.A. (2000). Three epistemological stances for qualitative inquiry. In Denzin, N. and Lincoln, Y.S. (eds). *The SAGE Handbook of Qualitative Research*. (4th edition). Sage.

Searle, J.R. (2010). *Making the Social World: The Structure of Human Civilization*. Oxford: Oxford University Press.

Seymour, J.R. and Osana, H.P. (2003). Reciprocal teaching procedures and principles: Two teachers' developing understanding. *Teaching and Teacher Education*, 19, 325-244.

Sfard, A. (1998). On two metaphors for learning and the dangers of choosing just one. *Educational Researcher*, 27 (2), 4-13.

Shaw, G.B. (1916) *Pygmalion.* New York: Brentano.

Sharan, Y. and Sharan, S. (1992). Expanding Cooperative Learning through Group Investigation. New York: Teachers' College Press.

Shor, I. and Freire, P. (1987). What is the "dialogical method" of teaching? *Journal of Education, 169* (3), 11-31.

Siegal, M. (1991). A clash of conversational worlds: Interpreting cognitive development through communication. In Resnick,L., Levine, J.M. and Teasley, S.D. (eds.). *Perspectives on Socially Shared Cognition.* American Psychological Association.

Silverman, D. (2005). Doing Qualitative Research. Sage.

Skinner, E.A., Kinderman, T.A. and Furrer, C.A. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychologist Measurement*, 14.

Soter, A. O., Wilkinson, I. A., Murphy, K., Rudge, L., Reninger, K. and Edwards, M. (2008). What the discourse tells us: Talk and indicators of high level comprehension. *International Journal of Educational Research*, 47, 372-391.

Staarman, J. K. (2009). The joint negotiation of ground rules: establishing a shared collaborative practice with new educational technology. *Language and Education*, 23 (1), 79-95.

Stipek, D.J. (2002). *Motivation to Learn: From Theory to Practice*. Needham: MA Allyn & Bacon.

Stokoe, E.H. (2013). The (in)authenticity of simulated talk: Comparing roleplayed and actual conversation and the implications for communication training. *Research on Language and Social Interaction*, *46* (2), 1-21.

Stokoe, E.H. (2000). Constructing topicality in university students' smallgroup discussion: A conversation analytic approach. *Language & Education*, *14* (3), 184-203.

Stokoe, E.H. (2011). Simulated interaction and communication skills training: The 'Conversation Analytic Role-play Method'. In C. Antaki (Ed.), *Applied Conversation Analysis: Changing Institutional Practices*. Basingstoke: Palgrave Macmillan Stone, C.A. (1998). What is missing in the metaphor of scaffolding? In Faulkner, D., Littleton, K. and Woodhead, M. (eds). *Learning Relationships in the Classroom*. London: Routledge.

Sutherland, J. (2006). Promoting group talk and higher-order thinking in pupils by coaching secondary English trainee teachers. *Literacy, 40* (2), 106-114.

Surowiecki, J. (2004). *The Wisdom of Crowds: Why the Many are Smarter than the Few.* US: Anchor.

Tharp, R.G. (1993). Institutional and social context of educational practice and reform. In Forman, E.A., Minnick, N. and Stone, C.A. (eds). *Contexts for Learning: Sociocultural Dynamics in Children' Development.* Oxford University Press.

Tharp, R., and Gallimore, R. (1998). A theory of teaching as assisted performance. In Faulkner, D., Littleton, K. & Woodhead, M. (eds.). *Learning Relationships in the Classroom*. London: Routledge.

Tharp, R.G. and Gallimore, R. (1988b). *Rousing Minds to Life: Teaching, Learning and Schooling in Social Context.* Cambridge University Press.

Tharp, R. and Gallimore, R. (1998). A theory of teaching as assisted performance. In Faulkner, D., Littleton, K. and Woodhead, M. (eds). *Learning Relationships in the Classroom.* London: Routledge.

Tartas, V., Baucal, A., and Perret-Clermont, A.-N. (2010). Can you think with me? The social and cognitive conditions and the fruits of learning. In Littleton, K. & Howe, C. (eds.), *Educational Dialogues: Understanding and Promoting Productive Interaction.* London: Routledge.

TCT. (2009). Sentence Trouble. London: The Communication Trust.

Thomas, G., and Pring, R. (2004). *Evidence Based Practice in Education.* Open University Press.

Ting, D., Anderson, R.C., Hee, K-I. and Yuan, L. (2008). Collaborative reasoning in China and Korea. *Reading Research Quarterly*, 43 (4), 400-424.

Tomasello, M. (1995). Language is not an instinct. *Cognitive Development*, 10, 131-156.

Tomasello, M. (1999). *The Cultural Origins of Human Cognition*. Harvard University Press.

Tudge, J.R.H. and Rogoff, B. (1989). Peer influences on cognitive development: Piagetian and Vygotskian Perspectives. In Bornstein, M.H. and Bruner, J.S. (eds). *Interaction in Human Development*. Hillsdale, NJ: Lawrence Elbraum. Tudge, J. (1990). Vygotsky, the zone of proximal development, and peer collaboration: Implications for classroom practice. In Moll, L.C. (ed). *Vygotsky and Education.* Cambridge University Press.

Ulicsak, M. H. (2004). 'How did it know we weren't talking?': An investigation into the impact of self-assessments and feedback in a group activity. *Journal of Computer Assisted Learning*, 20 (3), 205-211.

Volosinov, V.N. (1973). *Marxism and the Philosophy of Language*. New York: Seminar Press.

Van de Pol, J., Volman, M. and Beishuizen, J.J. (2010) Scaffolding in teacher– student interaction: A decade of research. *Educational Psychology Review* 22 (3), 271-296.

Van de Veer, R. (2007). Vygotsky in Context: 1900-1935. In Daniels, H., Cole, M. and Wertsch, J.V. (eds). *The Cambridge Companion to Vygotsky. Cambridge University Press.* Cambridge University Press.

van Oers, B. and Hännikäinen, M (2001). Some thoughts about togetherness. *International Journal of Early Years Education*, 9 (2), 101-108.

Vass, E. and Littleton, K. (2010). Peer collaboration and learning in the classroom. In Littleton, K., Wood, C. and Staarman, J.K. (eds). *International Handbook of Psychology in Education.* UK: Emerald.

Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes.* Harvard University Press.

Vygotsy,L. (1986). Thought and Language. MIT Press.

Webb, N.M. & Palincsar, A.S. (1996). Group processes in the classroom. In Calfee, R.C. and Berliner, D.C (Eds). *Handbook of Educational Research*. New York: Simon Schuster Macmillan.

Webb, N.M., Franke, M.L., De, T., Chan, A., Freund, D., Shein, P. and Melkonian, D.K. (2009). 'Explain to your partner': Teachers' instructional practices and students' dialogue in small groups. *Cambridge Journal of Education*, 39 (1), 7-29.

Webb, N.M., Farivar, S.M. and Mastergeorge, A.M. (2002). Productive helping in small groups. *Theory into Practice*, 41 (1).

Webb, N.M. (2009). The teacher's role in promoting collaborative dialogue in the classroom. *British Journal of Educational Psychology*, 79, 1-28.

Wegerif, R. (2007). *Dialogic Education and Technology: Expanding the Space of Learning.* Springer.

Wegerif, R. (2008). Dialogic or dialectic? The significance of ontological assumptions in research on educational dialogue. *British Educational Research Journal*, 34 (3), 347-361.

Wegerif, R. (2001). Applying a dialogical model of reason in the classroom. In Joiner, R., Faulkner, D., Miell, D. and Littleton, K. (eds). *Rethinking Collaborative Learning*. Free Association Press.

Wegerif, R., Mercer, N. and Dawes, L. (1999). From social interaction to individual reasoning: An empirical investigation of a possible socio-cultural model of cognitive development. *Learning and Instruction*, 9, 493-516.

Wells, G. (1999). *Dialogic Inquiry: Towards a Sociocultural Practice and Theory of Education.* New York: Cambridge University Press.

Wells, G. and Mejia Arauz, R. (2006). Dialogue in the classroom. Journal of the Learning Sciences, 15 (3), 379-428.

Wells, G. (1986, 2009). *The Meaning Makers: Learning to Talk and Talking to Learn*. Bristol: Multilingual Matters.

Wertsch, J. V. (1991). A Sociocultural approach to socially shared cognition. In Resnick, L., Levine, J.M. and Teasley, S.D. (eds.). *Perspectives on Socially Shared Cognition*. Washington: American psychological association.

Wertsch, J. (1991). Voices of the Mind. New York: Harvester.

Wertsch, J. (1979). From social interaction to higher psychological processes. *Human Development*, 22 (1), 1-22.

Wertsch, J.V. and Stone, C.A. (1985). The concept of internalization in Vygostky's account of the genesis of higher mental functions. In Wertsch, J.V. (ed), *Culture, Communication and Cognition: Vygotskian Perspectives*. Cambridge University Press.

Wertsch, J.V. (1985). *Culture, Communication and Cognition: Vygotskian Perspectives.* Cambridge University Press.

Wertsch, J.V. (2007). Mediation. In Daniels, H., Cole, M. and Wertsch, J.V. (eds). *The Cambridge Companion to Vygotsky. Cambridge University Press*. Cambridge University Press.

Will, A. M. (1997). Group learning in workshops. *New Directions for Adult and Continuing Education*(76), 33-40.

Wright, R. (2001). Non-Zero: The Logic of Human Destiny. USA: Vintage Books.

Wood, D., Bruner, J.C. and Ross, G. (1976). The role of peer tutoring in problemsolving. *Journal of Child Psychology and Psychiatry*, 17, 89-100.

Appendix A: Literature Review Search

Search strategies:

- Taking account of socio-cultural, psychological and sociolinguistic discourses, search terms were devised for use in electronic searching
- Sections were determined for the literature review and each was subject to separate searches and organized accordingly in Endnote libraries
- The search strategy involved the use of keywords and Boolean operators
- The search made particular use of the British Education Index and the American Education Index, ERIC and Business Source Complete
- Contact was made with a lecturer at the Business school of Exeter University to seek advice on relevant research
- The university library catalogue was used to locate books
- A manual search of the following research journals since 1990 was conducted in the library:
 - Language and Education
 - Discourse Studies
 - o British Educational Research Journal
 - Learning and Instruction
 - Cambridge Journal of Education
 - Oxford Review of Education
- As relevant articles, books or reports were found and read, further relevant references cited were noted, and followed up, where available
- Google and Google Scholar were used
- Each piece of relevant literature was detailed in a word document

Appendix B: Workplace E-Mail







To whom it may concern,

I am a PhD researcher in the Graduate School of Education, University of Exeter. I'm exploring ways of teaching young people in secondary schools how to collaborate, with a particular concern for the way they talk together to reach agreements or solve problems. Because the research is concerned with preparing young people for the workplace, I'm interested in seeing examples of collaboration or team work in real-life workplace settings.

I'm hoping that I might be able to visit your place of work to observe such examples.

I'd like to see team work where:

- The purpose is to reach agreement, make joint decisions or solve problems
- People might have to compromise or negotiate
- Every person is involved, or able to be involved

I'm less concerned with meetings where:

- The meeting is led by someone in charge who makes the final decisions
- A formal agenda is followed
- People aren't invited to express their opinions

I would be very grateful if you were able to find an opportunity for me to come and see an example of collaboration. Any instance of collaboration would be great, but do get in touch if you're not sure.

As people in the workplace appreciate, it's important that young people are taught practical skills which are relevant to a variety of jobs; therefore, your input would be highly valuable for this research.

I look forward to hearing from you.

Yours Sincerely,

Appendix C: Consent form for workplace interviews

WORKPLACE INTERVIEW CONSENT FORM

I have been fully informed of the purpose of the interview.

I understand that:

there is no compulsion for me to participate in this interview and, I may at any stage withdraw my participation

any information which I give will be used solely for the purposes of this research project, which may include publications

all information I give will be treated as confidential

the researcher(s) will make every effort to preserve my anonymity

(Signature of participant)

(Date)

(Printed name of participant)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher

Contact e-mail of researcher: rmcn201@exeter.ac.uk

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

Appendix D: School briefing letter







Making Talk Work: Exploring the Teaching of Collaborative Talk

I'm a PhD researcher in the Graduate School of Education, University of Exeter. Funded by the ESRC and British Telecom, I'm exploring ways of teaching collaborative talk at KS4, with a particular focus on preparing young people for the workplace. I'm interested in working with two English teachers to develop a scheme of work which can be used to teach collaborative talk as part of the Speaking & Listening component of GCSE.

What will happen if I'm involved in the project?

The project will be arranged into four phases:

Phase 1: First of all, I will arrange a meeting where you will meet the other participating teacher. We will agree upon a timeline for the project which suits you and your departments. We will also schedule meetings which you are both able to attend outside of school. These meetings will provide an opportunity for all three of us to come together to develop the teaching materials and discuss progress. Before the second phase, I would like to interview you about your views on teaching Speaking & Listening skills.

Phase 2: Working with you and either your year 9 or 11 class, we will trial and evaluate the teaching materials. Students will be asked their views and interviewed in groups. We will then work together to finalise the materials for the following phase of the project.

Phase 3: The scheme of work will be implemented over a three week period in your year 10 class. Before and after the scheme of work is taught, I will need you to set aside time to complete a Speaking & Listening assessment with the class and to fill in a form for each student. A target group of students will be identified and interviewed. Each lesson throughout the scheme of work will be video-recorded.

Phase 4: When the scheme of work is finished, I would like to interview you about your views on the materials and on students' progress. I would then like to return to your classroom over the following months to observe a few year 10 lessons.

Suggested Timeline

Phase 1	April 26 th – May 27 th 2011
Phase 2	June 6 th – October 21 st 2011
Phase 3	October 31 st – February 10 th
	2012
Phase 4	February 20 th – March 30 th
	2012

What's in it for me? I hope that being involved in the project will be an enjoyable experience and serve as valuable professional development. Recognising your commitment to the project, a fee of £1,000 will be available to you. This fee is intended to compensate you for the time you will spend attending meetings outside of school (equivalent to 5 working days over the duration of the project). It can be used either for supply or can be paid directly to you if we can arrange meetings during your free time.

Full commitment throughout the project is needed.

Appendix E: Memorandum of Understanding







About the Project

This is a PhD CASE studentship funded by the ESRC and British Telecom (BT), looking at the teaching of collaborative talk. The project will involve developing materials to support the teaching of collaborative talk as part of the Speaking & Listening component of English GCSE. The teaching materials will draw on collaboration in the workplace and will be broadly disseminated at the end of the project. I'm interested in exploring how students' collaborative talk skills and their awareness of these processes develop. Successful research partnerships require not only the enthusiasm of the participating teacher but also the full support of the head of department and principal. Therefore, I have written this Memorandum of Understanding to clarify and cement this partnership.

1 This Memorandum of Understanding is between Clyst-Vale Community College and the University of Exeter in respect of the *Making Talk Work* project.

2 The Memorandum is designed to ensure clear understanding of the commitment involved in participation in this research project and to clarify the responsibilities of each party involved.

3 The University's responsibilities in the research partnership with schools.

The University will:

- guarantee that all research is conducted with full ethical consideration, complying with the highest expectations of the British Educational Research Association Ethical guidelines. This will ensure confidentiality and anonymity of all schools, teachers and students involved in the project. It will also seek informed consent for participation from teachers and students
- □ ensure that the researcher has been subject to an enhanced CRB check
- guarantee that participating schools benefit from the outcomes of the research through feedback provided during the study

4 The School's responsibilities in the research partnership with the university.

The school will:

- □ support the teacher in fulfilling the requirements of the project as outlined on the Project Briefing Sheet
- encourage the teacher involved to share project outcomes within the English department to inform subsequent departmental policy and practice
- assure commitment to the project for the duration of the research from June 2011 April 2012

I understand the commitment involved in this research partnership and I am happy to support it.

Signed	Date:
(Headteacher)	
Signed:	
(Head of Department)	School:

Appendix F: Teacher consent form

I have been fully informed and understand that the aims of the project are:

- To explore ways of teaching collaborative talk as part of the Speaking & Listening component of the English GCSE
- To develop materials for the teaching of collaborative talk which draw on collaboration in the workplace
- To involve students in the development of these materials
- To implement the resulting 3 week scheme of work and materials in a GCSE class
- To explore and examine how students' collaborative talk skills and their awareness of these processes develop
- To broadly disseminate the resulting teaching materials

I understand that:

- I don't have to have information about me published
- Any information I give will be used only for research purposes

I understand that in participating in the research project, I commit to:

- Taking part in interviews with the researcher
- Trialing and evaluating teaching materials with students
- Conducting 2 whole class Speaking & Listening assessments
- Implementing a 3 week scheme of work focused on collaborative talk, where lessons/groups will be video recorded
- Attending meetings amounting to 5 working days, for which I will receive £1,000

In consenting to being video-recorded, I consent to:

.....

.....

- Video recordings being used in research presentations for up to 5 years
- Video recordings being used as teaching resources, if applicable

(Teacher signature)

(Date)

(Printed name)

Thank you for filling in the form. One copy will be kept by me and another by you. If you have any questions or concerns about the project, please come and speak to me.

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

Appendix G: Student Presentation

We've developed a Scheme of Work focusing on Collaboration and Collaborative Talk... What is it? WHY does it matter?



We say determination, cheerfulness, team spirit, unselfishness...we don't want recruits who are selfish, who doesn't want to be part of a team...if we don't work as teams, it's not going to work at all...we fight, we work, we live in teams...'



'You might be a one person survivor...but you've got a team brain'



'The services that the public receive will be delivered by a single officer...but behind him or her is a whole team...' 'There is very little that a young person can do where there is not contact with colleagues, a team...working as part of a team'





Your participation is important!



We want to teach you the Scheme of Work and tell us what you think

We want to know what works for you and your learning

Understanding what works for you will help us improve teaching and learning

What's the research project going to involve?

- You'll be taught the Scheme of Work over 3 weeks after half term
- You will work in groups
- Lessons will be recorded and you and some friends may be asked to interview

Will the research project involve extra work or interfere with my GCSEs?

• No – the Scheme of Work is designed to fit into the GCSE and you will not be required to do anymore work than normal

What's in it for me?

- An opportunity to be taught something new
- An opportunity to have your say about the way you're taught
- An opportunity take part in a prestigious research project
- An opportunity to learn skills which will help your GCSEs and beyond...
- At the end of the project, you will be presented with a University of Exeter certificate to show that you've taken part and a letter of appreciation you could even put the experience on your CV



Appendix H: Student letter and consent form

Making Talk Work Sponsored by British Telecom and the ESRC



Dear student,

This is a prestigious research project that's being sponsored by British Telecom and the ESRC. Your involvement in the project is really important. By taking part in the research, you'll have the opportunity to say what works for your learning and what doesn't. Your opinions will be taken seriously and could make a difference to how you're taught in school.

As well as playing a valuable role in the research, you'll also learn skills which will be useful for the future, whether you choose to get a job or go to university when you leave school. Importantly, the lessons will help your English GCSE too.

At the end of the project, you'll be given a certificate and a letter from the University of Exeter to recognise and celebrate your role in the research. The experience of being involved in a research project could also go on your CV.

I really appreciate your involvement in the research and hope that you'll enjoy the opportunity to be involved in a big research project.

If you have any questions, please don't hesitate to ask.

Ruth Newman Graduate School of Education University of Exeter

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

Please read and fill in the following. Please ask if you have any questions.

I understand that:

I don't have to have information about me published All efforts will be made to keep what I say confidential Lessons will be recorded I may be asked to take part in an interview with other students and the researcher Any information I give will be used only for the research project

.....

(Student signature)

.....

(Printed name)

Thank you for filling in the form. If you have any questions or concerns about the project, please come and speak to me or your teacher.

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

Appendix I: Parent/ guardian letter and consent form

Making Talk Work

Sponsored by British Telecom and the ESRC



Dear parent or guardian,

This term, Year 9 English class will be involved in a University of Exeter research project. Today, the class was given information about the project and students were able to ask questions and discuss their involvement. It is also important that you are fully informed of the purpose of the research and what it will involve.

The research project is a prestigious one, sponsored by British Telecom and the ESRC. The aim of the project is to explore ways of teaching young people communication and collaboration skills. We know that it is important to employers, like BT, that young people entering the workplace or going on to further education have these skills.

The project will take place in English lessons over a 3 week period when the class will be taught a newly developed unit of work. Lessons will run as normal and no additional demands will be made of students' time. The unit of work is designed to fit into the existing English syllabus and will be good preparation for GCSE.

It is really important to us that students are involved in the research. We value what they have to say about what works for their learning. As well as playing a vital role in the research, each student will experience new approaches to teaching communication skills which will directly benefit their learning in English. In recognition of their participation, each student will be presented with a certificate and letter of appreciation from the University of Exeter.

Thank you for your time. Please fill in and return the form overleaf. If you have any queries, please do not hesitate to contact either myself or **example**.

Yours Sincerely,

School:

I have been informed about the aims of the *Making Talk Work* research project.

I understand that:

- The researcher will make every effort to preserve students' confidentiality
- Any information students give will be used only for research purposes

I **consent/do not consent** to.....

• Taking part in an interview with other students and the researcher

(Signature of parent or guardian)	(Printed name)
(Date)	

Data Protection Act: The University of Exeter is a data collector and is registered with the office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised form.

Appendix J: Consent form for use of data

Dear Student,

Several video recordings have been made throughout this project. These recordings will now be analysed to try and understand more about how we can teach collaborative talk. The recordings will be stored in a safe place and only the researcher will have access to them. However, with your consent, it may be useful to use the recordings in other ways. Recordings may be used when presenting research to other researchers or teachers, to share what has been learnt from the project. It may also be useful to use recordings of examples of collaborative talk to help other students. However, beyond analysing the recordings, it's not certain at this stage how the recordings will be used, if at all. But, just in case, it's important that I establish your consent.

Name	9:	
DOB:		

Please tick the boxes to indicate your consent below.

I consent to:

- $\hfill\square$ Video recordings being used in research presentations for up to five years
- Video recordings being used as resources to support teacher training and professional development
- □ Video recordings being used in teaching resources which may be used by other schools

(Student signature)

(Date)

(Printed name)

Thank you for filling in the form. If you have any questions or concerns, please come and speak to me or your teacher.

Data Protection Act: The University of Exeter is a data collector and is registered with the Office of the Data Protection Commissioner as required to do under the Data Protection Act 1998. The information you provide will be used for research purposes and will be processed in accordance with the University's registration and current data protection legislation. Data will be confidential to the researcher(s) and will not be disclosed to any unauthorised third parties without further agreement by the participant. Reports based on the data will be in anonymised for

Appendix K: Letter of appreciation and certificate



GRADUATE SCHOOL OF EDUCATION College of Social Sciences and International Studies

St Luke's Campus Heavitree Road Exeter EX1 2LU

 Telephone
 +44 (0)1392 264892

 Fax
 +44 (0)1392 264922

 Email
 education@exeter.ac.uk

 Web
 www.exeter.ac.uk/education

Dear

I would like to thank you for your participation in the *Making Talk Work* research project, sponsored by British Telecom and the ESRC. Your contribution to the project will help us understand more about how to teach collaborative talk.

As well as making a valuable contribution to research in education, during your participation you have gained skills which will be useful for the future:

- You have engaged in a number of collaborative scenarios which are drawn from the workplace
- You have developed the ability to work effectively in groups, to make decisions and reach goals
- You have developed an ability to analyse collaborative talk, to recognise what makes it effective and ineffective
- You have worked effectively within your group to manage a prolonged task , develop an original concept and present it to the class

I hope you have enjoyed participating in the project.

Best wishes for your future



This is to certify that:

has taken part in the *Making TalkWork* research project, sponsored by British Telecom and the ESRC.

Date: 21st November 2011

Best wishes for your future

Graduate School of Education University of Exeter





Appendix L: Semi-structured workplace observation schedule

Workplace Observation Schedule

Date:

Setting:

Participants:

Diagram of setting and participant positions:

Notes:

What were the aims of the collaborative meeting? Did its purpose appear clear to all participants?

Describe talk features, noting specific examples:

Note talk features. Was there a tendency to particularisation? Feature like reformulation? How did the talk carry forward?

Did anyone dominate or lead the talk? How? Was this helpful/unhelpful?

Were any tools used?

Immediate thoughts and reactions following observations:

How could what was observed be useful for teaching?

Appendix M: Workplace interview schedule

Can you describe how collaboration occurs in your workplace?

What communication skills are needed for collaboration in your workplace?

Section 1: About you

1. Can you tell me about your role?

Section 2: How collaboration occurs in your place of work

FOREGROUND 'COLLABORATION'

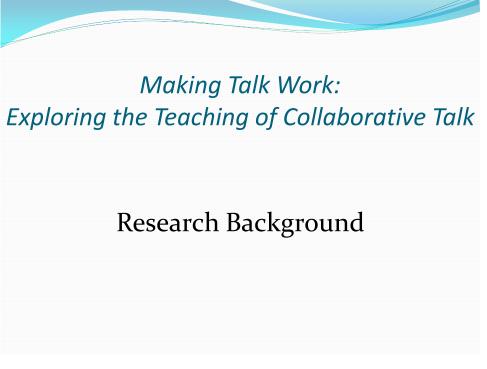
- 2. I'm interested in how teamwork, or collaboration, occurs in your place of work. Does teamwork or collaboration happen often?
- 3. Can you describe some examples or scenarios when you have to collaborate with others to achieve a goal? Example problems?
- 4. Can you think of a time when collaboration was particularly effective? Why?
- 5. Can you think of a time when collaboration didn't work? Why?
- 6. What sort of tasks usually require collaboration, or working in a team? What do you think are the best reasons for having to collaborate?

Section 3: The skills needed for collaboration in your place of work

FOREGROUND 'COMMUNICATION SKILLS'

- 7. I'm particularly interested in the way that people talk together during collaboration, in the communications skills that are needed for it to work well. What do you think are the communication skills needed for the teamwork which happens in your place of work?
- 8. When young people enter your place of work, are there any particular weaknesses in the way they communicate during teamwork?
- 9. If you were to describe the communication and teamwork skills that young people need to work here, what would they be?
- 10. Do you have any thoughts on how young people should be taught these communication skills, or prepared for the workplace?

Appendix N: Teacher presentation



• The Research Brief

Recently appointed Chair of the Commission for Employment and Skills and Chair of British Telecom (BT), Sir Michael Rake, has demonstrated a commitment, through BT's work with schools, to helping young people develop the skills required by the 21st century workplace. Whilst many foreground technology in thinking about education for the future, BT maintain that young people are often more technologically competent than adults in the workplace; what is missing are the human skills that make effective collaboration possible, independent of the technology.

- What do I mean by 'collaborative talk'?
- Speakers engage reciprocally to share and understand different perspectives, with a goal of decision-making or problem-solving.
 - Talk between speakers is inter-related, featuring joint sentence construction and reformulations.

- Participants work together to achieve intersubjectivity through which joint decisions can be constructed and understandings shared.
 - Speakers share cognitive responsibility but draw upon the expertise of individuals, weighing the validity of contributions.
- While individual cognitive advancement may be a product of engagement in collaborative talk, its main goal is the negotiation of perspectives and the construction of something new, featuring the contributions of many.
 - The 'togetherness' of the process is as important as its outcome.
- Collaborative talk is egalitarian participation; it is listening as well as speaking and results in reconciliation and convergence.
 - Why Collaborative Talk for Learning?

Successive research studies have argued the benefit of collaborative group interaction (eg Barnes 1977; Cohen 1994; Lyle 1996; Beverton and Hardman 1995; Mercer, 1995; Mercer & Littleton, 2007).

During students' collaborative talk, 'children bring together a range of perspectives or knowledge bases arising from the diversity of individual histories, experiences and personalities... to achieve a shared common learning goal' (Vass & Littleton, 2010, p. 106).

Gillies argues that 'when children work cooperatively together, they learn to give and receive help, share their ideas and listen to other students' perspectives, seek new ways of clarifying differences, resolving problems, and constructing new understandings and knowledge' (2003, p.35).

Peers' collaborative talk can help students to generalise and transfer ideas, build a foundation for communication, increase students' capacity for deeper understanding, self-regulation, self-determination, problem-solving, motivation and reasoning (Nystrand, 1997).

Barnes (1969) argues that 'group work allows students to move towards understandings through means not present in the teacher-directed classroom.'

- Does it happen in the classroom?
- Davies and Corson argued that 'classroom observation studies have shown that the benefits of collaborative talk promised by research do not materialise in school' (1997:197).
 - When Nystrand (1997) explored the classroom talk experience of 2400 students in 60 different classrooms, he found that typically, the classroom teacher spends under 3 minutes an hour letting students talk and that this reduced with students in low socio-economic schools.

 Research which has surveyed classroom activity has revealed that while students may often be arranged in groups, they rarely work as a group (Galton, Simon & Croll, 1980, 1999; Norman, 1992; Blatchford & Kutnick, 2003; Alexander, 2004, 2005: Dawes & Sams, 2004; Bennett & Dunne, 1992).

• Revealing a continuing trend, Alexander (2000) found that seating arrangements in primary schools in England, Michigan and France, disguised the fact that pupils worked individually or as a whole class by arranging tables in groups.

- Classroom talk continues to be dominated by the teacher and focused on correct answers (Myhill, 2006), reinforcing an image of the student as passive recipient of the teacher's knowledge, instead of active constructor of it.
- Students' perceptions of whether they are 'good' appear to be bound in their perception of what is desirable in their talk a correct answer (Pratt, 2006: Black & Varley, 2008). Even teachers' perceptions of a 'good' talker appear to be of those who offer 'correct' answers or speak in a manner perceived as appropriate (Fisher & Larkin, 2008).
- The ways teachers use talk in their classrooms shapes students' perceptions of what is desirable in their own talk. While common classroom discourse patterns may reinforce students' passivity, collaboration promotes egalitarian participation and emphasises the student role in the construction of knowledge.

• Furthermore, it appears that students are uncertain how to engage collaboratively in discussion (Mercer & Littleton, 2007). As a result, students' collaborative talk may become uncooperative and unproductive, fostering teachers' perceptions of student-student talk as subversive and disruptive (Mercer, 1995), possibly reinforcing concerns about control.

 Consequently, students may perceive getting along in the social sense as the purpose of collaborative activity, rather than as a means of building intellectual understanding (Krechevsky & Stork, 2000)

Obstacles?

Over the past few decades, concerns about the benefits of peer interaction have increased as educational theorising has shifted to recognise the child as an active, social learner. However, Edwards and Mercer (1987) blame the earlier Plowden Report's (1967) over-emphasis on teachers' responsibilities to cater to the learning of individuals, for making it difficult for teachers to move away from notions of the child as 'lone scientist' to 'social being'.

Group collaboration signals a move away from individualistic forms of education and assessment. As Dewey framed it years ago, schools may continue to undermine the social nature of community and its achievements by promoting competition and individualism (1900, 1956). It remains that individual talent is celebrated above that of collective effort, despite significant achievement almost always depending on the collaborative, communicative efforts of groups (Mercer, 2000).

- How has it been explored in research?
- Grouping arrangements: gender, ability...
 - Relationships
 - Ground rules
 - Research Design

Exploratory Phase Why draw on the workplace?

Resnick argued that, 'there is a broadly enabling role that schooling can play with respect to the economy – a role of preparing people to be adaptive to the various settings they may encounter over the course of their working lives' (1987, p. 18).

Cazden highlights the urgent need to address students' collaborative skills for this purpose: 'two of the abilities necessary to get good jobs in the changing economy are also necessary of participation in a changing society; effective oral and written communication and the ability to work in groups with persons from various backgrounds' (2001, p. 5).

And Lloyd and Beard echo this point: 'The process of education must be centred on the development of each individual and part of that development must

include the experiences of working collaboratively with as wide a range of peers as possible' (1995, p. 9).

- 'We say determination, cheerfulness, team spirit, unselfishness...we don't want recruits who are selfish, who doesn't want to be part of a team...if we don't work as teams, it's not going to work at all...we fight, we work, we live in teams...'
 - 'You might be a one person survivor...but you've got a team brain'
- 'The services that the public receive will be delivered by a single officer...but behind him or her is a whole team...'
- 'There is very little that a young person can do where there is not contact with colleagues, a team...working as part of a team'
 - Anticipated Outcomes
 - increased understanding by students and teachers of the significance of collaborative talk in the workplace
 - direct interfacing of research, school and business with a common goal
- an understanding of how best to prepare young people for the collaborative skills required by 21st century employment
 - a set of tested classroom materials which could be disseminated more broadly for use by other schools
- research articles contributing to theoretical understanding of collaborative discourse

Appendix O: Student evaluations for development phase

Date:

Name:

Activity:

What did you enjoy about the activity? Why?

How did you participate in the activity?

How did others in your group participate?

Did you use any particular reasoning words when you participated? Why?

What did you learn as a result of participating in the activity?

How does this activity and the way you participated compare to the other activities we've done?

How do you think the activity could be improved?

s	ome questions to help you answer:		
	Did all the members in the group participate?	Did you use reasoning words like 'because' to help you?	
	Did you get opportunities to speak?	Did you understand what everyone said?	
	Did you feel able to challenge others?	Did you reach a conclusion as a group?	
	Were you able to use language to shape your points?	Did the resource help make your group work more successful?	

Appendix P: Group interview schedule

Explore:

- Students' perceptions of talk skills and the purpose of the unit.
- Students' Learning what have they learnt? What do they understand the purpose of the lessons to be so far?
- > Materials how do they support students learning?
- > Teacher how has the teacher supported your learning?

PERCEPTIONS AND LEARNING

- 1. What do you think of the lessons so far?
- 2. What do you think the purpose of the lessons is? Do you think being taught talk skills is

important?

3. What have you learnt so far? Have you learnt anything about yourself as a talker? What

have you learnt about collaborative talk?

4. How well do you think you've worked as a group? Have you talked together collaboratively?

MATERIALS

- 5. What have you understood the purpose of the warm up tasks to be? What have you learnt from them?
- 6. Have the video resources helped your understanding of what make collaborative talk

effective and ineffective?

7. Have the collaborative tasks helped you engage in collaborative talk?

TEACHER SUPPORT

8. How has the teacher supported your learning so far? Explanations, instructions, questions, interventions?

Appendix Q: Teacher handbook and student booklet*

*All text and images sourced from the internet which featured in the original implemented materials have been removed here to avoid copyright issues. Unfortunately, this affects the coherence and aesthetic quality of the handbook as it is presented here.

MAKING TALK WORK

This scheme of work and accompanying resources is designed to support the development of collaborative talk in the Key Stage 4 English classroom. The teaching unit addresses the Interacting and Responding GCSE Speaking & Listening task (Edexcel, 2010), or equivalent. The unit has also been designed to overlap with the *Spoken Language* and *Writing for the Spoken Voice* tasks (Edexcel, 2010), and may also provide opportunities for other Speaking & Listening assessments.

The teaching unit has a workplace theme, drawing on collaborative scenarios observed or discussed in a variety of workplace settings. Building on and complementing existing research, discussions with employers and employees have revealed the communication skills required within collaboration.

The activities in this unit are designed to support the development of students' collaborative talk and an appreciation of its value. Tasks should stimulate constructive discussion while opportunities for evaluation and reflection should support students' increasing awareness of the language strategies employed during collaborative talk.

Theoretical Underpinnings

The strands outlined in the framework for effective collaborative talk are 'participating, understanding, managing and talk awareness.' The descriptors extend the traditional term, Speaking & Listening, which is considered an inadequate description of dialogue. Instead, 'participants' captures the dialogic nature of speaking, recognising that speaking is never monologic. Even when speakers are expressing an opinion or challenging another speaker, they do so in a way that responds to others, are perhaps encouraged to contribute by gestures or utterances, carrying forward the language of others.

'Understanding' is based on the belief that to reach genuine agreement or consensus, participants must persevere to understand each other, and to be understood. They might do this through questions, summary and clarification. Participants may demonstrate understanding by reformulating what's been said, carrying ideas forward. Although it may be difficult to establish whether individual understanding is achieved, aiming for group cohesion and avoiding passive agreement may signal attempts to achieve it.

'Managing' a discussion is a significant element of effective collaborative talk. Participants will buffer objections, keep the group focused on the group goal and manage obstacles to

discussion. Without this element, participants may be more inclined to spend too long on a task, finish it inadequately or enter into unconstructive conflict.

'Talk awareness' describes the meta-linguistic strand of students' learning. Being able to reflect, comment on and evaluate the contributions we make to discussion is an important element of the learning process. We should encourage students to talk about their talk, to become aware of their meanings, how they contribute to and shape discussion. This may develop students' self-regulation of their learning.

Pedagogical Principles

Dialogic Classrooms

This teaching unit is underpinned by a dialogic pedagogy. Dialogic teaching uses talk to engage students, stimulate and extend their thinking and advance learning and understanding (Alexander, 2004). Talk is humankind's principal means of communication and is central to an empowering pedagogy. Talk builds relationships and shapes identities. Not only does stimulating talk engage students' attention, it can improve motivation and contribute to learning gains. Thought and language cannot be separated; learning is a social process and high-quality talk supports students' developing understandings. Furthermore, dialogic teaching values citizens who can argue, reason, challenge and question, crucial for a democratic society.

In a Dialogic Classroom:

- Knowledge is treated as something to be discovered and constructed; teachers and students are regarded as active meaning makers
- Teachers make their expectations for talk clear and students can shift between different types of interaction
- Students are encouraged to articulate their ideas freely, without fear of embarrassment over 'wrong' answers
- Teachers and students build on their own and each other's knowledge and experience, chaining teacher-pupil and pupil-pupil exchanges into lines of enquiry
- Teachers and children listen to each other, share ideas and consider alternative viewpoints
- Teachers work with the students to develop a rich vocabulary and an ability to speak confidently
- Questions are structured to provoke thoughtful answers and answers provoke further questions
- Teacher feedback is informative, extending students' ideas, perhaps reformulating for clarification
- The teacher realises that sometimes the more marginal her position, the more dialogic students' discussion

The teacher intervenes effectively in students' group work, prompting students to ask questions or extend their ideas

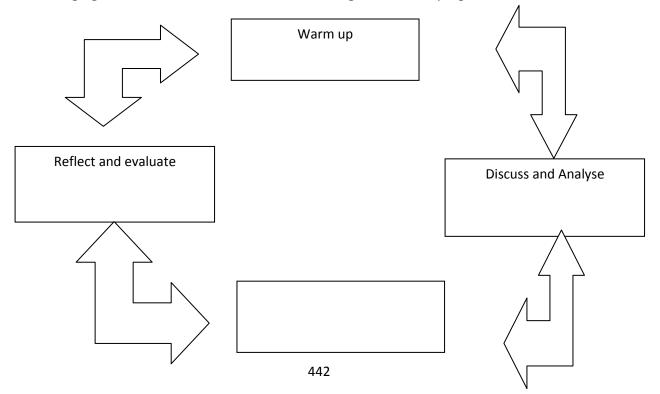
'A successful dialogue involves a willing partnership and cooperation in the face of likely disagreements, confusions, failures and misunderstandings. Persisting in this process requires a relation of mutual respect, trust and concern – and part of the dialogical interchange often must relate to the establishment and maintenance of these bonds' (Burbules, p. 19-20, 1993)

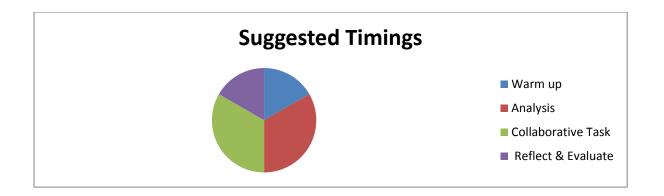
Arranging Groups for Collaborative Tasks

- It is important that students demonstrate respectful working relationships that enable them to challenge and support each other constructively; however, it is not essential for groups to be made up of friends
- Groups do not need to be carefully and deliberately composed of different genders or abilities. Teachers should compose groups with some character variation, but based on an assessment of who the teacher and students think work constructively together
- Tables arranged for groups to sit together facilitate discussion more effectively, allowing students to sit closely, hear each other and sustain eye contact
- Groups should be made up of a maximum of 6 students
- It is important that all members of the group can see any shared resources

Implementing the Teaching Unit

The teaching unit consists of ten lessons. Each lesson begins with a 'warm-up' activity designed to encourage group cohesion. This is followed by an analysis activity where students look at video or script and draw out features of collaborative talk. Students will then engage in a collaborative task. They will then evaluate their own collaborative talk. The lesson structure provides opportunities for students to practise collaborative talk while encouraging an awareness of its features, informing their developing skills.





The teaching unit is designed to facilitate teachers' gradual withdrawal of their regulative activity. The student booklet is designed to scaffold students' awareness of collaborative talk processes. Students should become more independent in their collaborative talk as the unit progresses. The teaching unit and resources are informed by a framework for collaborative talk which is intended to provide a common frame of reference for students and teachers, and may inform evaluative and assessment activities.

Throughout the teaching unit, students are likely to encounter unfamiliar vocabulary. Lessons should include opportunities for grappling with students' linguistic understanding and experience, ensuring students' understanding of anything unfamiliar.

Collaborative talk activities emphasise mutual benefit and should avoid fostering competition and individualism. During students' collaborative talk, it is useful for students to have access to paper and pens to help them establish understanding through diagrams and drawings. You may also choose to use talk cards and scaffolds to support their discussion. During collaborative talk activities, students should be encouraged to pace their talk to allow opportunities for consolidation, clarification and summary. While it is important to allow groups space to talk, the way teachers intervene during group work can make a difference to the success of a task. Prompting questions or encouraging students to extend ideas can be helpful.

Recognising the behavioural considerations of collaborative tasks, strategies should be developed to tackle potential problems. Providing a brief opportunity for students to focus individually at the start and end of a lesson may frame activities more productively. Establishing routine strategies to 'control' collaborative tasks may be helpful but must be adhered to.

Although the English GCSE requires individual grades for each student, collaborative groups should be assessed as groups and this should be emphasised in order to encourage team cohesion and support, possibly pushing students to 'lift' each other's grades. Teachers should try to give group praise.

Partici	patina
	Speakers will attempt to express their views, perspectives, questions or challenges with
	confidence and clarity
	Speakers will recognise the value of other people's contributions, demonstrating respect and
	empathy for others
-	By sharing perspectives, speakers will be able to trouble shoot
-	Speakers may use modal verbs to hypothesise, creating a non-threatening, non-hierarchical
	space for discussion
-	Speakers will consolidate, clarify and summarise ideas at intervals to ensure new platforms
	of understanding are created
-	Speakers will carry forward developed ideas, perhaps evident in the reformulation of similar
	words or the joint construction of sentences
•	Speakers may use particularisations which are relevant to group goals, understanding and
	empathy
Unders	tanding
•	Speakers will listen carefully in order to gain a genuine understanding of the opinions and
	perspectives of others
•	Speakers will use questions to ensure that understanding is achieved prior to decisions or
	agreement
•	Speakers will persevere to achieve understanding through questions, reformulations and
_	other strategies
•	Speakers may explore the meanings or experiences they ascribe to words in order to achieve
	a shared understanding
	Speakers will signal understanding or confusion through utterances and gesture
-	Speakers are responsible for monitoring their own understanding and may be conscious of the understanding of others
-	Speakers may use external mediators to support the discussion, explore and clarify
	understanding
-	Speakers will use questions in a variety of ways: to explore understanding, show genuine
	interest, hypothetically, rhetorically
Manag	
•	Speakers will co-manage collaborative talk to ensure that goals are met with pace and
	efficiency
	, Speakers will draw attention to the collaborative goal if discussion diverts, encouraging a
	sustained focus on the 'big picture'
•	Speakers will ensure opportunities for consolidation, clarification and summary
•	Speakers will attempt to manage reluctant contributors by encouraging participation –
	'Ghandi'
•	Speakers will attempt to manage obstacles to progress while avoiding unconstructive
	conflict – 'brick-throwers'
•	Speakers will manage challenges with sensitivity, perhaps using 'buffering'
	Speakers may encourage group cohesion, perhaps evident in the use of pronouns
Talk A	vareness
•	Speakers will be aware of the relevance and quantity of their contributions and able to
	comment on this in later evaluation
•	Speakers will be aware of how contributions shape discussion and carry ideas forward and
	will be able to comment on this in later evaluation
•	Speakers will be aware of their roles, their communication skills and when these are
	constructively contributed and will be able to comment on this in later evaluation

A Developing Framework for Collaborative Talk

COLLABORATIVE TALK SCAFFOLDS

Encouraging Participation

'Would anyone like to suggest?'

'What do you think?'

'Does anyone have any ideas about...'

Consolidating

'What we've agreed is...'

'What we're still disagreeing about is...

'Let's go through the main points we've agreed upon...'

'We've agreed that...'

ManagingTime

'We've only got 5 minutes left, we should...'

'I think we need to move on now...'

'We need to get back on task...'

Building Ideas

'Yes, that's a great idea. What about...'

'Yes, and...'

'I agree because...'

Understanding

'What was that again?'

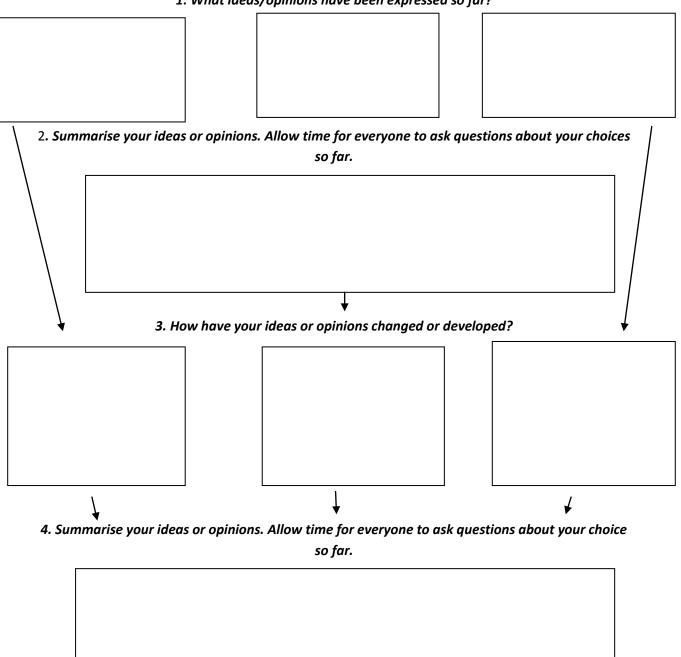
'Can I just check that I've got that right?'

'Can you explain that further?'

Build ideas	Introduce ideas	Challenge ideas	Encourage
	clearly	respectfully	others
		<i>//</i> / / .	
'And that idea		1 see what	
would work	'I have an idea.	you're saying,	'What do you
well if'	We couldThe reason I think	but I think'	think?'
'As well as that,	this might work	'I appreciate	'That's a great
we could'	is'	your	idea'
		perspective, but	
		if we think of it	
		another way'	
Consolidate	Questions for	Clarify ideas	Keep focused
ideas	understanding		
		'Can you	'Ok, let's get
'So, so far	'Can you tell me	explain that a	back to the
we've had	a little more	little more	task'
these ideas	about?'	slowly?'	
from'			'Good point,
	'Sorry, I'm not	ʻI'll try and	but how does
'So if we draw	sure what you	explain that	can we make
together the	meancan you	more clearly'	that fit with the
ideas so far'	explain that in		task?
	more detail?'		
Negotiate			
<i>'I like both</i>			
ideaswhat if			
we adapt			
them'			
'I think the			
majority of the			
group seem to			
prefer'			

Pacing Collaborative Talk

Use the following diagram to support you during your collaborative talk task. Think carefully about the time you have to complete the task and come to a decision. Fill in each section at intervals. For instance, if you have 25 minutes to complete a task, stop every 5 minutes to fill in each section. Although one person should fill in the sheet, you should all discuss what should be written.



1: What ideas/opinions have been expressed so far?

¥

5. What is your decision?

Overview of Teaching Unit

This week's lessons will focus on introducing the concept of collaboration and collaborative talk, developing students' capacity to talk about their talk and analyse others. Students will complete an analytical written task as homework.

1	What is 'collaboration' and 'collaborative talk'?		
Page 10	10		
2	2 What makes collaborative talk <i>ineffective</i> ?		
Page 18	Page 18		
3	What makes collaborative talk <i>effective</i> ?		
Page 24			
4	People in collaborative talk are Participating, Understanding and Managing – What		
Page 30	does this mean?		
This week's	lessons will focus on collaborative talk in drama or on TV. Using these resources,		
students wil	I further develop their capacity to analyse their talk in more detail, referring to how		
participants	manage, understand and participate in discussion. Students will write their own		
collaborative	e talk script for film or TV as homework.		
5	X Factor: How do participants make decisions in collaborative talk?		
Page 45			
6	Great Ideas: How do participants in collaborative talk develop ideas and coordinate		
Page 65 plans?			
7	Difficult Situations: How do participants in collaborative talk understand each other's		
Page 84	points of view and come to an agreement?		
The three fi	nal lessons will involve students in a more prolonged activity. They will continue to		
analyse and	discuss 'real-life' collaborative talk in The Apprentice but will be given a brief to		
complete by	the end of the week. The lessons will culminate in students giving a presentation on		
their brief, co	their brief, concluding their collaborative activity.		
8 Developing your own ideas in collaborative talk			
Page 95			
9	Continuing to develop your own ideas in collaborative talk		
Page 99			
10	Presenting your ideas and evaluating your learning		
Page 101			

Lesson 1: What is 'collaboration' and 'collaborative talk'?

Resources:

Field of Mines – large copies on A3

Student Booklet Pages 1-3

Surviving a Plane Crash – Large copy for groups

Aims:

To introduce and explore the concept of 'collaboration' and 'collaborative talk'

- To encourage group cohesion through various activities
- To encourage critical reflection of collaborative talk

Warm up:

In any lessons that involve different types of talk, whether between the teacher and whole class and groups, it is important that students understand when it is their turn to talk, when they need to listen to you, for instance. A focused start and end to the lesson is important when doing group work, making sure that the lesson opens and closes on a quiet and controlled note. If students don't already know where they're sitting, get them arranged quickly and try not to start the lesson until you have the quiet and focused attention of every student. You could use different coloured cards, one green to signal when it is the class's turn to speak together, and one red when it is time to pay close attention to you, for instance.

1. To start the lesson, write the following statement on the board:

'In an emergency, you might be a one person survivor...but together you've got a team brain.'

Oil rig engineer.

Ask students what they think the oil rig engineer means. Try to draw out comments about the effectiveness of teams, that in an emergency, for example, people might be able to contribute different skills which will help them in a crisis. Explain that the following lessons will focus on developing collaborative talk skills. Explain that the theme of this lesson is survival – not of the individual but of the team.

2. Field of Mines.

This can be completed in pairs or in a group of three. Although this and several of the other warm-up activities are game-like, they play an important role in the lesson. They should get students focused and highlight certain things that are important for effective collaborative talk, in this case, clarity and cooperation. However, they also play the important role of encouraging team cohesion, allowing students to become more 'tuned' into each other so that they can work well together over the following three weeks.

Throughout the student booklet, you'll see the following symbols to indicate whether the task or question is to be completed alone or as a group.

3. Optional: Team on a String

Another task, time allowing, is Team on a String. Ask students to line up on a piece of string. Then ask them to arrange themselves in either alphabetical order, or by birthday, or height. However, they must never take a foot of the string. Of course, be sensitive to your groups, this is quite physical so some mixed gender groups, for instance, may not be comfortable.

Development and Analysis

After all of the commotion of the group activities, get the groups quiet and focused again. It is important to allow a minute to reflect on the activities, asking students what worked and what didn't, drawing out comments about the need for clarity etc.

Ask students, individually, to complete questions 1-4 on the worksheet. They will be asked to described what they think is meant by collaboration, what they think the benefits might be, what they think the features of collaborative talk might be and to evaluate their own. You might want to talk through this with them first. It is really important that students are considering their own ideas, and their own experience of collaboration – don't worry about them getting 'right' answers or definitions, their understanding of collaboration and collaborative talk will develop over the lessons, as will their capacity to talk about their talk.

Collaborative Task

Students can then complete the Surviving a Plane Crash task. Don't feel you have to talk through every instruction with them – part of their being able to collaborate should involve them figuring out what's required of them. Be clear about the time that they have to understand the task, to work through it and come to a **decision**. Make sure you allow 20 minutes for them to have a full discussion about the task. Feel free to circulate and prompt students to ask questions etc.

At the end of the task, allow a little bit of time for students to feedback their ideas and to give them the suggested answer. Although emphasising that the process of collaborative talk is important for students, it can be frustrating for them to feel that it was all for nothing.

Reflect and Evaluate

This is a really important aspect of the lesson so it's vital that at least 10 minutes is allowed for students to reflect properly and critically on their participation.

Refer back to the worksheet, the final question, number 5. Ask students to evaluate their collaborative talk against the 12 features that are listed. Firstly, they must consider how the group performed and they must discuss and agree this together. Then, ask students for quiet to ensure an opportunity for students to think alone, and ask them to fill in the grid considering how they participated. They may feel that they did better in some things than the group or vice versa.

Ask students for some feedback to make sure that the lesson draws to a productive close. Remind students of the tasks completed this lesson, of the importance of working together to get things done and of the things they might improve next time.

Give each group a folder where they can keep their group work. They may want to come up with a group name to write on it.

Field of Mines

The purpose of this task is for one person to guide another person safely through a field of mines. It is important that you work together to speak clearly and listen carefully.

Read through the following instructions:

- In pairs, decide quickly who will be person **A** and who will be person **B**.
- A will be blindfolded while **B** will give instructions.
- Listening carefully to B's instructions, A needs to draw a route from the start to the finish without hitting a mine.
- If A hits a mine, the activity stops.
- If this happens, swap roles and try again.

FINISH	
	START

STUDENT BOOKLET PAGES 1-2

Lesson 1: What is 'collaboration' and 'collaborative talk'?

'In an emergency, you might be a one person survivor...but together you've got a team brain' Oil rig engineer

- 3. To collaborate effectively, we need to be skilled in 'collaborative talk.' Below are two of many possible features of effective collaborative talk. Add some ideas to the list.
- 1. Speak clearly

2.	Share experience and challenge ideas without conflict
3.	
4.	
5.	
6.	
7.	
8.	
10.	
11.	
12.	

In the grid below, you'll see 12 suggested features of collaborative talk. Are your ideas similar? Are there any features you would add to the list below?

4. Have a think about your collaborative talk skills and fill in the grid below.

Y = Yes, I feel able to do this all of the time

S = I feel able to do this some of the time

N = No, I'm not confident in my ability to do this

During collaborative talk, participants:	У	5	Ν
1. Speak clearly and concisely			
2. Share experiences and challenge ideas without conflict			
3. Show respect for other people's ideas			
4. Build on other people's ideas			
5. Listen carefully in order to understand what's being said			
6. Listen with an open mind			
7. Use questions to explore ideas and ensure understanding			
8. Make sure that they and everyone in the group understands			
9. Manage the talk to make sure that goals are met			
10. Keep the talk focused on the goal			
11. Manage challenges and objections with sensitivity			
12. Encourage others to contribute			

Surviving a Plane Crash

You and your companions have just survived a plane crash.

Information about your situation:

- The pilot and co-pilot were killed
- Several of the survivors will be in shock
- There are 5 of you and you are all dressed for a meeting
- It is January and you have crash landed in Canada
- The daily temperature is -25C® and the night temperature is -40C®
- There is snow on the ground, the surrounding countryside is wooded with several rivers
- A search and rescue operation will begin after the plane fails to land at the airport

You have found the following items:

- A small axe
- A gun
- An empty metal tin
- 5 Newspapers
- A lighter (without lighter fluid)
- 5 shirts and jackets
- A large sheet of canvas
- A compass
- 5 large chocolate bars
- Half a bottle of whiskey

In your group, rank the above items in order of importance for your survival. You must come to an agreement as a group.

STUDENT BOOKLET PAGE 3

5. After you've completed your first collaborative task, fill in the grid below. First, you must complete the '**we**' column as a group and then the '**I**' column on your own.

Y = Yes, most of the time S = Some of the time N = No, not at all

	Н	ow d	lid	Но	w di	d I	
			we			participat	
Did you	participat			e?			
		e?					
	У	S	Ν	У	S	Ν	
1. Speak clearly and concisely							
2. Share experiences and challenge ideas without conflict							
3. Show respect for other people's ideas							
4. Build on other people's ideas							
5. Listen carefully in order to understand what's being said							
6. Listen with an open mind							
7. Use questions to explore ideas and ensure understanding							
Make sure that they and everyone in the group understands							
9. Manage the talk to make sure that goals are met 10. Keep the talk focused on the goal							
11. Manage challenges and objections with sensitivity							
12. Encourage others to contribute							

Lesson 2: What makes collaborative talk ineffective?

Resources:

Sharks and Swimmers - large A3 copy per group and 9 pieces of string

Sharks and Swimmers PPT for teachers

Videos – Ineffective Talk 1 and Ineffective Talk Points

Student booklet page 4

Planning the prom, part 1 – copies for group with A3 grid

Aims:

- Begin to recognise what makes collaborative talk effective or ineffective, developing an ability to 'talk about talk'
- Recognise and evaluate features of your own collaborative talk

Warm up

Each group should have a large sheet of paper with sharks and swimmers on. Make sure they can all see the paper clearly. They should be given 9 pieces of string. The aim of the task is to separate all of the swimmers from the sharks so that all sharks and swimmers are isolated. How they negotiate the task is up to them. Each student will have one or two pieces of string to place, ensuring that each member contributes.

This task is designed to encourage team cohesion and dialogue between members of the group. If students do not communicate and simply place strings wherever they think best on the sheet, it will take longer and will be a messy, possibly argumentative process. Encourage students to think through how to complete the task, discouraging any potentially strong characters from taking over. When the task is complete, make sure that you allow a minute to ask students how they negotiated the task, how they communicated together.

Development and Analysis

Watch the video, Ineffective Talk 1. On student booklet page 4, students can make notes while watching. I would suggest letting students watch it through all at once, then asking for their thoughts, then perhaps watching it again. Although it's up to you, pausing the video draws students' attention to your ideas about the talk – try to have more of an open discussion about it at the end. Once you've drawn some ideas out after watching the video, ask students to list 12 things they thought were bad about the discussion. Make sure you allow them some time for feedback.

Once you've done this, watch Ineffective Talk Points to see if the students had any of the same suggestions.

The purpose of the task is to allow students to decide for themselves what didn't work. After watching and making notes, you might want to ask students what experience they've had of ineffective discussion, perhaps not being listened to or failing to listen to others.

Collaborative Task

Remind students that their aim is to avoid a discussion as ineffective as the one seen on the video!

In their groups, students should complete the Planning a Prom task, part 1. As before, you may not need to talk through the task in detail, allow them to figure it out themselves. Part of the process should be them all achieving an understanding of the task and its goal. Make sure that students are allowed 20 minutes to complete the task and that they are aware of the time limit. Give each group an A3 copy of the grid for them to make notes in.

When the students have finished the task, allow a moment to get some feedback on ideas.

Reflect and Evaluate

Ask students how they think their discussion went – were there any similarities to the video watched? Ask students to evaluate their talk together, using the 12 features they identified earlier. For a quieter end to the lesson, you could ask them to all write a comment individually in their booklets. This also allows us to see whether each member of the group is following the discussions or holding the same opinions.

STUDENT BOOKLET PAGE 4

Lesson 2: What makes collaborative talk ineffective?

1. As you watch the video, think about what makes this talk *ineffective*. Why does it end in an argument? How do they participate in the discussion? Is it a good example of collaborative talk?

Make some notes below.

2. In your groups, agree on 12 things that the participants did badly during the discussion.

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

3. After you've completed the collaborative talk task, evaluate your **group's** talk against the 12 features above. Did your group do any of the same things? List the things you think you did badly below.

Planning the Prom

Your task is to decide on a plan for the prom. Your group will have to consider finance, food, entertainment, marketing and venue.

Your aim is for the prom to be the most successful yet.

a. The school is contributing £300 to your budget. The remaining budget will be raised through ticket sales. Choose one of the ticket options below.

How much will your budget be?

All food and drinks to be included in ticket price.

OPTION 1	OPTION 2	OPTION 3
Tickets will be charged at £50 a head so that a generous budget can be raised. That way we will only need to sell tickets to a few rich kids.	Tickets will be charged at £5 a head so that we can get lots of people to attend. This means that our budget will be smaller.	Tickets will be charged at £15 a head.

b. Now, keeping within your budget, choose items from the list below. You will need to think about venue, entertainment and food and drink.

	bout venue, entertainine		
Caribbean BBQ	£7 a head	Hire of village hall	£100
Get someone's mum	£5 a head	Hire of Exeter Castle	£1,000
to deliver KFC			
Sandwich buffet	£3 a head	3 Fun fair rides	£1,000
3 course meal	£10 a head	Photographer	£500 for evening
Bouncy castle	£500	Candyfloss stall	£150
Chocolate fountain	£100 hire and £5 per	Year book	£10 per year book
	bag marshmallows		
Non-alcoholic cocktail	£300 for bar and £3	Camera crew and DVD	£500
bar	per drink	of event	£5 per DVD
Dj and Disco	£300	Drinks from local shop	£1 each
Fireworks	£400	Limousines for all	£3,000
		attendees	
Marquee for outdoors	£600	School cleaner and	£300
		caretaking staff	
Ice cream van	£100 and £1 per ice	Karaoke	£250
	cream		
Local band	£100	Security guards	£200
Decorations	£200	Posters to advertise	£50
		prom	

Use the grid below to make notes.

What's your budget?
, 0
Venue
Food
Drinks
Entertainment

Lesson 3: Effective Collaborative Talk

Resources

Puzzles – each puzzle cut up in envelopes

Video – Effective Talk 1 and Effective Talk Points

Student booklet page 5

Planning the Prom Part 2 – copies for group and A3 grid to make notes

Aims

- To further encourage group cohesion
- Develop the capacity to talk about collaborative talk, recognising effective and ineffective features
- Begin to develop an understanding of spoken language and how to analyse it
- Begin to implement effective features of collaborative talk in own talk
- Recognise, evaluate and learn from reflecting on own collaborative talk

Warm Up

There are various possible ways to use the puzzles. You could cut up each puzzle, write the name of the animal or shape on the envelope and give to students to solve one at a time. To ensure that students work collaboratively to solve the problems, it might work better to put a piece or two of the puzzle in an envelope for each student. Using their piece of the puzzle, students should collaborate to create the required image. To make it even harder, you could begin by not telling students what the image should be, perhaps that it's a shape or an animal. See how many they can get done in the time allowed. Again, allow a moment or two to consider how they communicated during the activity and how the task was negotiated, and of course, to show them the completed puzzles.

Development and Analysis

Watch the Effective Talk 1 video and allow students the opportunity to make notes as they watch (student booklet page 5). As in the last lesson, you may want to let students watch the whole thing through before discussing it or drawing their attention to things – don't worry if they don't spot everything at once.

Students can then, as groups or individually, write 12 things they thought worked well. You may want to refer their attention (afterwards) back to the 12 written in the booklet. Remember that the pre-determined list of 12, though a frame to guide our assessment of collaborative talk could be added to and therefore students' additional suggestions should be valued. Remember to allow some time for students to feedback and add some ideas if they haven't managed all 12.

If appropriate, watch Effective Talk Points to see if students spotted any of the same points.

Collaborative Task

This lesson's collaborative task is an extension of the last lesson. Groups should already have made decisions about the budget for their prom etc. Now they will be presented with a last minute problem – the school has withdrawn its £300 so changes will have to be made. Students will need to negotiate a new agreement.

Encourage students to consider the 12 effective features they have noted when engaging in the task – their aim is to talk productively and come to a joint decision. Remember to allow time for students to feedback their ideas and to discuss how they interacted.

The purpose of this twist in the task is to encourage students to deal with a problem productively. They have been faced with new information which they must accommodate.

Reflect and Evaluate

Allow students to talk together about how well they did. You might want to draw out some comments. Allow time for students to write a comment, against the effective criteria they devised earlier, on their progress during the talk today. Try and hear some comments or suggestions at the end to conclude the lesson, highlighting what has improved/ needs improving.

STUDENT BOOKLET PAGE 5

Lesson 3: What makes collaborative talk effective?

1. As you watch the video, think about the things that make this discussion *effective*. How do they come to an agreement? How do they deal with challenges? Is it a good example of collaborative talk?

Make some notes below.

2. In your groups, agree on 12 things that the participants did to make the discussion successful.

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10	
11.	
12	•

3. After your collaborative talk task, evaluate your **group's** talk against the effective features you've listed above. List the things you did well below.

Planning the Prom 2

Last lesson, you decided on a budget for the prom. You then chose options for venue, entertainment, food and drinks.

Sadly, due to unforeseen cuts to the school budget, the headmaster has announced that he has been forced to withdraw the school's contribution of £300 to the prom budget.

In you groups, discuss the following:

- 1. How can you change your evening?
 - What is your new budget?
 - What will you change about the evening to fit the reduced budget?
- 2. Are there any other ways to reduce costs?
 - Do any members of your group have any useful skills? Singing? Making posters?
 - What about the teachers Mr Jones is in a rock band and has offered to play for free
 - Mrs Smith, the cookery teacher, has offered to make canapés
 - The media teacher, Mr Man, has offered to record the event but DVDs will cost £2 each
- 3. On top of the other changes, there are rumours going around that the year group are really keen for a fancy dress theme.
 - What could the theme be?
 - Is it in keeping with decisions you've made about venue, food and entertainment?

Use the grid below to make notes.

How can you change your evening?
Are there any other ways to reduce costs?
Theme?

Lesson 4: People in collaborative talk are Participating, Understanding and Managing – What does this mean?

Resources

Letter mix – cut up, a word in each envelope, 3 words for each group

12 features of collaborative talk, cut up and stuck to board

Student booklet pages 6-16

A3 copies scripts and grids for groups

Homework

Aims

- To become familiar with participating, understanding and managing in collaborative talk
- To further develop an ability to 'talk about talk'
- To work together to analyse 'real' examples of collaborative talk
- To recognise that talk is a messy process

Warm up

Each group should have 3 envelopes, each with letters in. Their task is to make a word from the letters in the envelopes. The words are: participating, understanding and managing.

Once they have figured this out, write the three words on the board and ask students what they think they might have to do with the lesson or with collaborative talk.

Stick the 12 features of collaborative talk on the board, and as a class, connect each with one of the three words, noting that some will overlap.

Get students to write each word next to the four features in their booklet, page 6. Explain that this lesson will focus on identifying these features in real examples of collaborative talk.

Development and Analysis

As a class, read Script 1 (student booklet page 6). Discuss what makes it collaborative or not, referring to points made in the previous lessons. Draw out comments connected to participating, understanding and managing.

Participating will refer to comments about clarity, contributions, building on other's ideas. Understanding refers to the way in which participants ask questions and explain their ideas to ensure understanding is achieved. Managing refers to the way in which participants organise the discussion to make sure that decisions are made and the task gets done.

	During collaborative talk, participants:		
Participating	1. Speak clearly and concisely		
	2. Share experiences and challenge ideas without conflict		
	3. Show respect for other people's ideas		
	4. Build on other people's ideas		
Understanding	5. Listen carefully in order to understand what's being said		
	6. Listen with an open mind		
	7. Use questions to explore ideas and ensure understanding		
	8. Make sure that they and everyone in the group understands		
Managing	ng 9. Manage the talk to make sure that goals are met 10. Keep the talk focused on the goal		
	11. Manage challenges and objections with sensitivity		
	12. Encourage others to contribute		

Collaborative Task

In groups, students should continue to read and analyse Script 1 and then Script 2. They should agree on negative and positive points related to participating, understanding and managing for both scripts and write them in the A3 grid.

When students have finished, ask them for feedback. Draw out comments about how there are good and bad features in both scripts – the boys are argumentative but are the girls passive? Are all the boys unhelpful or do some try and manage the discussion? Are the girls better at trying to understand each other's points of view?

Reflect and Evaluate

To finish, students should answer the questions in the student booklet individually to compare and contrast the two scripts. Allow a little time to gather feedback.

Homework

The homework requires students to read two scripts and compare how well a problem was dealt with.

LETTER MIX

Р	Т	1	N	G
A	I	Р	Т	
R	С	A	Ι	

U	E	Т	D	G
Ν	R	A	1	
D	S	N	N	

Μ	А	Ν
A	G	G
N	Ι	

Speak clearly and concisely Share experiences and challenge ideas without conflict Show respect for other people's ideas Build on other people's ideas Listen carefully in order to understand what's being said Listen with an open mind Use questions to explore ideas and ensure understanding Make sure that they and everyone in the group understands Manage the talk to make sure that goals are met Keep the talk focused on the goal Manage challenges and objections with sensitivity Encourage others to contribute

STUDENT BOOKLET PAGE 6-16

Lesson 4: People in collaborative talk are **participating**, **understanding and managing** - *What does this mean?*

	During collaborative talk, participants:
	1. Speak clearly and concisely
	2. Share experiences and challenge ideas without conflict
	3. Show respect for other people's ideas
	4. Build on other people's ideas
	5. Listen carefully in order to understand what's being said
	6. Listen with an open mind
	7. Use questions to explore ideas and ensure understanding
	8. Make sure that they and everyone in the group understands
	9. Manage the talk to make sure that goals are met
	10. Keep the talk focused on the goal
	11. Manage challenges and objections with sensitivity
	12. Encourage others to contribute

Below is a real conversation between six boys. The group were given the task of coming up with a theme and venue for a festival. They were given a number of options for a venue, including Meadow Farm and Escot Park.

<u>Task 1</u>: As a group, read the text and think about how they participate in the talk, how they try to understand each other, and how they manage the talk. Annotate the script, picking out positive and negative points about their talk. Is this a good example of collaborative talk?

David: What do you want to do? I think we should do music? Anyone else?

Simon: Or a kind of arts festival thing, we can get bands, theatre...

Ollie: And I think it should be mainly Scottish...

Simon: (in Scottish accent)...just in Scottish?!

Kieran: I don't like this table. It's not close enough (moves tables to bring the group closer together)

David: Do you guys want to do the arts festival as well? (asks other members of group) Elliot:...and then we could, like, rave... Simon: ...sheep... Elliot: ...Glastonbury... Kieran: Stop people, stop people... David: So we're thinking of doing an Arts festival...do you want to do that? Jordan: What?! David: Do you want to do an Arts festival? Jordan: (making noises like a duck) David: You have a choice, like music... Jordan: (continues to guack) David:...and culture... Elliot: Music...who likes music...just shut up, shut up.... Simon: I think we should have music and stuff like that, and that we should set it in a farm so it's kind of more natural. Kieran: No, Escot Park because it's got a death slide... Simon: But Escot Park's not available in July and you want to kind of do it in July, June. Kieran: Why? Ollie: Because it's like summer holidays... Jordan: Did you not see the weather yesterday? Simon: I know Jordan: It was crap (lots of laughter/discussion falls apart...) David: So we're going to do what? Are we going to do music? (quacking continues) David: So are we ... are we going to do music? Jordan: In August? David: Guys? Simon: No, because you want to do it... I think we should go for Meadow Farm. Jordan: No, go Crealy. Crealy Park Kieran: But Crealy park's not an option! Jordan: It is now! (writes Crealy Park on task sheet)

David: So where are we doing it?

Simon: You don't want to be inside on a lovely hot day listening to music...

Jordan: What if it's a rainy day?

Kieran: I'd rather go to a leisure centre for a swim...

Simon: You want it a bit more like Glastonbury...

Jordan: No, you don't...

Ollie: No you don't, no you don't...

(arguing)

David: I think we should do it in like a...I think we should do it in like a field or

something...

(arguing and laughter)

Simon: What about Escot park then?

David: Escot park? Yeah?

David:...so, yeah, you just circle all of that...

(Antoni and David try to make the decisions while rest of group continue to talk, laugh and quack like ducks)

Participating	Understanding	Managing		
Positive points				
Negative points				

Below is a real conversation between five girls. They were given the task of deciding on a budget for their prom. Once they agreed on the budget, they decided on a venue, food, drinks and entertainment from a list of options and prices.

Task 2: As a group, read the text below and think about how they participate in the talk, how they try to understand each other, and how they manage the talk. Annotate the script, picking out positive and negative points about their talk. Is this a good example of collaborative talk?

Emma: What about the £15 ticket? It's not too expensive, not too cheap...they're usually about £100! Becky: Oh, ok. But how many are going? Emma: We can roughly guess? Becky: But we can't roughly guess... Nathalie: Well how many in our year? Becky: How many is in our year? Sammi: 160? Becky: So if we times that by 10? Nathalie: £15 times 160 is £2,400 Kay:...and then add the £300 that the school is contributing on... Becky: So £2,700. We don't have to use all of it. Nathalie: I think it would be good if we did but then again whatever we don't spend we could just give to the school to give to charity or whatever Becky: That would be really good. I don't think we should get the limos because that would be really stupid because we can't...let people hire their own...what if I don't want a limo? Nathalie: Yeah, you might want to come on a bicycle or something Becky: In my old school, somebody came in like an army truck Emma: Wicked

Becky: Anyway Nathalie: So we need to think about our venue, entertainment, food and

drink...Caribbean BBQ?

Becky: Sounds good doesn't it?

Kay: Sandwich buffet?

Becky: Or 3 course meal?

Nathalie: 3 course meal?

Becky: Yeah...it's only £10 a head

Becky: Right, a 3 course meal. How much would that be?

Nathalie: £10 a head

Emma: So that's...

Kay: £1,600

Becky: It'll be £1,600 - are you sure?!

Nathalie: £10 times a 160 students equals £1,600

Sammi: That takes a lot of our budget

Becky: But once you've got the food and venue out of the way, because food is the main

thing...but...they need somewhere to go first...what about the venue?

Emma: Hire of Exeter Castle?

Nathalie: Village hall?

Becky: Yeah, we'll hire the village hall...

Nathalie: So we'll only have £2,600 left

Becky: Then if you take away the food, that's only £1,000 left...

Nathalie: Yeah

Becky: Ok. Instead of doing the food...

Kay: But the food's important...

Becky: And we can still work with that...would you rather just sit there with eating all the food or...

Kay: I don't really think we need a 3 course meal because there'll be dancing

Emma: Yeah

Nathalie: But you might starve yourself for the rest of the day expecting to have a big

meal

Becky: But you'll get warned beforehand what you're going to have...£15 a ticket is a lot if you think about it... I think we should do the food and see how much we have left and if it doesn't work out we'll have to go for a cheaper meal Emma: Well, we'll all need drinks won't we? Nathalie: Drinks are a £1 each Becky: Or there's a non-alcoholic cocktail bar for £300 ... that's a lot Nathalie: So drinks at £1 each Kay: What was a £1 each? Nathalie: The drinks Becky: That leaves £840 Emma: Ok, so we only have £840 left...what about a photographer? Becky: Isn't it in all of the American proms, they always have a photographer? Couldn't we just use digital cameras? Kay: I think we should have fireworks!? Becky: We could, £400 though and what if people leave early? Sammi: So why don't we just get a DJ then? Becky: Yeah Nathalie: Yeah...so take away that...£500 left Sammi: I think we should get a chocolate fountain Becky: People don't really eat it... Kay: I do Becky: If I was like dancing, after a meal, I wouldn't Nathalie: And you'd be talking to your friends Emma: Yeah Sammi: And it would probably get a bit messy Becky: What about a band? Emma: But if we have a DJ? Becky: True Nathalie: What about security guards?

Becky: And clean up? I'd do clean up because if you're partying until late, you wouldn't want to give up the next morning...

Nathalie: Yeah. So cleaners...and give the rest, £40 to charity.

Participating	Understanding	Managing	
	Positive points		
	Negative points		

Task 3: Answer the question below to compare and contrast the two conversations above.

a) What's different about the way group members **participate** in the discussion? Think about how members of the groups contribute, whether their comments are useful and whether they challenge each other's ideas.

b) Do the members of each group try to **understand** each other's ideas and opinions? How? Think about how members of the groups deal with each other's suggestions, whether they listen carefully and ask questions.

c) How do members of each group manage the discussion? Think about whether members of the group drive the discussion forward, coming to a decision.

d) In your opinion, which group achieves a more **collaborative** discussion? Explain your answer.

Homework

Task: Compare and contrast the two scripts below

Consider the following:

• How do Sarah, Matt and Tom participate in the discussion? How do they speak to each other?

Does the language they use help the discussion?

Do they start the discussion well?

• Does Tom understand the problem with his moustache? Do Sarah and Matt explain the problem clearly?

Do they try and understand each other's perspectives by asking questions?

• Do Sarah, Matt and Tom manage the discussion well? Do they come to an agreement that they're all happy with?

How do they move the discussion along?

Office Problems

Sarah and Matt are fed up with Tom's moustache. Tom continues to twist his moustache and leave food in it for later on. They all have to work in the same office and Tom's habits are really distracting Sarah and Matt.

They sit down to discuss a solution to the problem.

Lesson 5: X Factor: How do participants make decisions in collaborative talk?

Resources

Rebus – A3 copy for each group

Student booklet page 17-21

X Factor Task 1 OR X Factor Task 2 – one for each group on large paper

Aims

- To develop an awareness of a continuum of talk, from spontaneous to scripted
- To develop an understanding of how decisions are handled and agreed in collaborative talk
- To practise coming to a decision in groups
- To evaluate decision making

Warm Up

Each group should be given an A3 copy of the Rebus activity. They must decide on each Rebus, two have been done for them. Allow a moment for feedback to establish how they came to a decision.

To clarify the aims of the lesson, ask student to discuss the statement on page 17.

Development and Analysis

As a whole class or in groups, read and discuss the X Factor scripts. How are decisions made? How do they speak to each other? Are opinions justified? Does this way of talking seem deliberate for entertainment purposes?

Individually, students should answer the questions.

Collaborative Task

Groups should complete X Factor task 1 or 2. The tasks do not depend on every member of the group being familiar with the programme. In fact, if there are students who don't watch it then there is an opportunity for some to explain what has happened etc. The aim of the task is for students to focus on band image, they do not necessarily have to know a lot about each person. If you have a class who are very keen on this year's X Factor, then task 2 may be more fun.

Reflect and Evaluate

After giving feedback, students can answer the evaluative question individually (page 21). Allow time for discussion or feedback if appropriate.

STUDENT BOOKLET PAGE 17-20

Lesson 5: X Factor: How do participants make decisions in collaborative talk?

How do you show respect to other people during a discussion?

a) Being rude, aggressive and not listening

b) Being soft, passive and agreeing with everything Discuss with your groups.

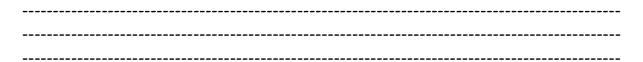
In the scripts below, you will see snippets of the X Factor judges' decision making discussions. Read the scripts in your groups.

	During collaborative talk, participants:
Participating	1. Speak clearly and concisely
	2. Share experiences and challenge ideas without conflict
	3. Show respect for other people's ideas
	4. Build on other people's ideas
Understanding	5. Listen carefully in order to understand what's being said
	6. Listen with an open mind
	7. Use questions to explore ideas and ensure understanding
	8. Make sure that they and everyone in the group understands
Managing	9. Manage the talk to make sure that goals are met
	10. Keep the talk focused on the goal
	11. Manage challenges and objections with sensitivity
	12. Encourage others to contribute

Discuss the questions as a group then write your answers below.

1. How do the judges participate in the discussion? Think about whether they show respect for each other's opinions and whether they build on each other's ideas.

2.How do the judges try to understand each other's points of view? Think about whether they ask questions to understand more about each other's opinions.



3. How do the judges manage the decision making? Think about how they come to a decision and whether they all agree.

4.Although the judges' talk is not scripted, they are speaking in front of a camera. Do you think that the way the judges talk is deliberate? Why?

STUDENT BOOKLET PAGE 21

Once your group has completed the X Factor task, write some comments below to evaluate your group's own talk.

Participating
Understanding
Managing

How did members of your group participate in the discussion?

How did members of your group make sure they understood each other?
How did members of your group manage the discussion to come to a decision?
Do you think your discussion was a good example of collaborative talk? Why?

Lesson 6: Great Ideas: How do participants in collaborative talk develop ideas and coordinate plans?

Resources

A3 paper and pens

Student booklet pages 22-29

Time 100 task OR Superheroes

DVD The Social Network or Ghostbusters (optional)

Aims

- To become familiar with the difference between spontaneous talk and scripted talk
- To develop an awareness of how participants in collaborative talk can develop better ideas
- To develop an awareness of how utterances can be coordinated with actions
- To discuss and justify ideas in order to come to a group agreement

Warm Up

Collaborative drawing: Each group is given one piece of A3 paper and pens. It is their task to take it in turns to contribute to a drawing. They will each have 3 seconds with the pen and must pay close attention to others in the group. You will give them the image to draw – a superhero, a computer...etc (images linked to the lesson).

Development and Analysis

Read either The Social Network script or Ghostbusters. You have the option to play the scenes on DVD to set the context. Draw students' attention to how scripted talk is different from the spontaneous talk we saw last week. Ask groups to discuss the questions in the student booklet, allowing time for feedback.

Collaborative Task

If you chose to do The Social Network task, students can complete the Time 100 task. If you chose to do Ghostbusters, students can complete the Superheroes task. The Time 100 task is more challenging, requiring more reading. Allow time for feedback.

Reflect and Evaluate

When students have completed the task, they should write an evaluative comment on their talk on the appropriate page in the student booklet. You'll notice that there are now no questions to scaffold students comment. Encourage them to think about participating, understanding and managing. STUDENT BOOKLET PAGE 22-28

Lesson 6: Great ideas: How do participants in collaborative talk develop ideas and coordinate plans?

Read the following script and discuss how Mark and Eduardo develop their ideas and come to a joint decision.

How do they build on each other's ideas?

How do we know they're following each other?

How do they encourage each other?

The Social Network

In this scene, Mark and Eduardo finalise the idea for what will become Facebook.

Who are the most influential people in the world?

In April 2011 the 100 people voted Time magazine's 100 most influential people in the world in 2011 were announced. The list included artists and activists, reformers and researchers, heads of state and captains of industry. Their ideas spark dialogue and dissent and sometimes even revolution. Ten of them are in front of you.

Your team has been given the task of organising an exhibition at the National Gallery in London. It is your task to select **five** of the most influential people in the world and celebrate their achievements in the exhibition.

Your task is to decide who out of the ten people below are the most significant. Read the statements before you discuss your ideas. You must then rank your chosen **five** to decide upon the most influential person in the world.

STUDENT BOOKLET PAGE 24

After you have completed the collaborative task, comment on how your group talked collaboratively to come to a decision:

STUDENT BOOKLET PAGES 25-29

Ghostbusters

After watching scene 13, read the script below.

How do the Ghostbusters talk together to coordinate their actions?

How do they all make sure they understand what's going on and what they need to do?

After watching scene 23, read the script below.

How do the Ghostbusters build on each other's ideas?

How do they share their knowledge?

How do they all achieve a shared understanding of the situation?

After you have completed the collaborative task, comment on how your group developed your ideas. Think about how members of the group participated in the talk, achieved understanding and managed the talk to come to a decision.

Superheroes

You have eight comic superheroes in front of you.

1.

It is your task to agree on the most important superhero.

Before you begin, you will need to discuss what 'important' means to your group. Do important superheroes have the best skills? Are they the most entertaining? Do they have the biggest personalities?

Rank the superheroes in order of importance, from least to most. You must agree on reasons for your decision.

2.

Many superheroes work together in groups – The Fantastic Four, X Men etc. Looking again at the eight superheroes, form a group of four. Not only should they look like a team, their skills should be varied. Decide on a name for them.

Lesson 7: Difficult Situations: How do participants in collaborative talk understand each other's points of view and come to an agreement?

Resources

Student booklet pages 30-39

DVD 12 Angry Men (optional)

A3 paper for students to list ideas during collaborative task

Homework

Aims

- To develop an awareness of how individuals can block discussion, making progress difficult
- To develop an awareness of how to challenge opinions and encourage others to see things from a different point of view
- To practise discussion a difficult topic

Warm Up

Prisoner's Dilemma 1 and 2 – page 30 student booklet. Allow time for feedback.

Development and Analysis

Watch and/or read the two scenes from 12 Angry Men. Ask students to discuss the questions which follow each. Draw out comments about how the talk changes.

Collaborative Task

Explain to each group that they are going to work as a jury. They must come to a decision that they are all happy with (Student booklet). Allow time for students to feedback.

Reflect and Evaluate

Individually, students can write an evaluative comment on their group's talk and their own contributions. Allow time for some feedback.

Homework

The homework requires students to write a script for film or TV (see student booklet).

STUDENT BOOKLET PAGE 30-39

Lesson 7: Difficult situations: How do participants in collaborative talk understand each other's points of view and come to an agreement?

1.

Read the following scenario:

Two men are arrested, but the police do not possess enough information for a conviction. Following the separation of the two men, the police offer both a similar deal- if one testifies against his partner, and the other stays quiet, the betrayer goes free and the other receives the full one-year sentence. If both remain silent, both are sentenced to only one month in jail for a minor charge. If each 'rats out' the other, each receives a three-month sentence. Each prisoner must choose to either betray or remain silent. The decision of each is kept quiet.

What should they do?

2.

Read the following in your groups and then, on your own, make your decision.

- You have all been arrested for murder
- The police do not have enough information to convict you all
- You are all separated
- Each of you is offered a deal: if one of you betrays the others and the others remain silent, the betrayer goes free and the others will do five years in jail
- If you all remain silent, you will all do 6 months in jail
- If you all betray each other, you will all get 2 years

In silence, consider your options and write down <u>your</u> choice – BETRAY or REMAIN SILENT?

On the count of three, reveal your choices to the group.

12 Angry Men

Read the following scenes and discuss the questions which follow.

In the first scene, how do the jury members talk to each other?

Do they listen to each other with an open mind? Do they try and understand each other's point of view?

In the second scene, what's different?

How do they demonstrate their points of view? How does the way they talk begin to change some people's opinions?

Guilty or Not Guilty?

Below is the case for the prosecution and the defence of a real murder case.*

Which version of events do you think is true?

It is your task to decide whether Ralph James is guilty or not guilty of murdering his family. As a jury, you must all agree on the verdict.

You must present at least 5 reasons for your verdict. Write them below:

_____ _____

*Names, places and dates have been changed

Homework

Write a TV drama or radio script of a group of people participating in *ineffective* or *effective* collaborative talk. Set the scene within a workplace context, thinking about how participants contribute inappropriately or appropriately to the discussion.

Here are some ideas to help you:

- Members of a wedding planning team find out that the groom's gone missing.
 They must decide together what to do to save the day.
- A team of firemen arrive at the scene of a fire. They have to decide how they are going to deal with the emergency situation.
- Members of a Crime Scene Investigation team discuss the evidence they've gathered at the scene of a murder. They talk together to decide what they think happened to the victim.

Lessons 8: Developing your own ideas in collaborative talk

The final three lessons will involve students working more independently to complete a task. It may be necessary to be more flexible with timings in these final lessons. It will be important to remind students of the different expectations for talk – we remain concerned with the way they talk together but will be looking for different talk qualities during the presentation.

Resources

Student booklet pages 40-42

Youtube clip: youtube.com/watch?v=8F2YJcgoelk

http://www.youtube.com/watch?v=Urrc95jrQcU

Aims

• To work together independently to develop and present and idea

Warm Up

In groups, students can read the exchanges on pages 40 and discuss. You'll notice that the warm up activities change in the final three lesson in order to focus students on collaborative talk skills. The tasks also highlight some of the problem they may encounter when working together.

Development and Analysis

Watch The Apprentice Youtube clip/s. Discuss the way that the team talk together. Draw attention to the way they went about completing the task. Explain that they will be expected to work in groups over the next 3 lessons to complete a task which will be presented to the rest of the class.

Collaborative Task

The Apprentice Brief.

Reflect and Evaluate

At the end of the lesson, allow time for groups to comment on their progress and form a plan for the next lesson.

STUDENT BOOKLET PAGES 40-42

Lesson 8: Developing your own ideas in collaborative talk

Read the following exchanges - what's the problem?

Mike: I've got this good idea about something to do with this thing, right, that I saw on the weekend, like a big thing that we could use and it would be great.

Sally: Ok, what sort of thing?

Mike: Well, it's big, right...it's fun and big and would be great...goes round and round...spinning...lots of screaming, gets people really scared.

Dave: Has anyone else got any ideas?

Mike: Well, I just...

Dave: Sally?

Sally: Yes, I think that the next fun fair should have a Halloween theme. The fair will be at the end of October so it would make sense.

Sarah's taking part in a group meeting to discuss plans for an office party. She's aware that the group have only 20 minutes until the meeting is over. They haven't made any decisions yet.

Sarah: So what's the theme of the party going to be?

Anne: Hang on a second Sarah, You out on the weekend Sam?

Sam: Yeah, not sure what to wear though.

Sarah: Yeah, good point...but what about the party?

Anne: Oh, I know what I'm going to wear to the party! Hannah, it's that dress we saw in the window of that fancy shop in town.

Hannah: Oh yeah! So jealous!

The Apprentice

Today, your group will be given a brief which you will work on for the next few lessons. It is important that you work together well to achieve the best outcome. Not only will the talk you engage in as you work be important, so will the way you present your work when you're finished.

The Brief

You have a choice of two briefs:

a) Design a concept for a pet food brand. You will need to decide:

- What your product/s will be
- Who your target audience will be
- \circ $\,$ What your marketing approach will be

b) Design a concept for an APP. You will need to decide:

- What the purpose of your APP will be
- Who your target audience will be
- What your marketing approach will be

The Presentation

Once you have discussed and developed your idea, you will need to prepare a presentation. Your presentation should inform the audience of your concept but should also persuade them that your product has exciting potential. There will be an opportunity for the audience to ask you questions.

At the end of the lesson, evaluate your progress:

What have you achieved today?

What do you need to do next lesson?

Lesson 9: Continuing to develop your own ideas in Collaborative Talk

Resources

Student booklet pages 43

Youtube clip: <u>http://www.youtube.com/watch?v=FQN9JVktvYE</u>

Aims

 To continue to develop and finalise ideas, making decisions about what needs to be addressed

Warm Up

In groups, students can read the exchange in the student booklet, page 43. Draw out comments about how to deal with conflict and aggression.

Development and Analysis

Watch the Youtube clip and discuss.

Collaborative Task

Continue working on their choice of brief.

Reflect and Evaluate

Allow time for students to evaluate and comment on their work so far individually (student booklet).

STUDENT BOOKLET PAGE 43

Lesson 9: Continuing to develop your own ideas in collaborative talk

You're involved in a meeting with colleagues when Steve charges into your office and slams a broken coffee mug on your desk.

Steve: I'm sick to death of the people in this office stealing my mug! I tell people all the time not to use it...but they do! Like it's some kind of sport to make me look for it every day! And now look - it's broken! What are you going to do about this?!

You need to calm Steve down and get on with your day. Write your response to Steve.

At the end of the lesson, comment on the progress you've made:

Are you pleased with the concept your group has developed?

How did you contribute the group? Do you think you've contributed to effective collaborative talk? How?

Lesson 10: Presenting your ideas and evaluating your learning

Resources

Student booklet pages 44-45

Warm Up

Start the lesson by briefly reminding students of expectations for presentational talk, as opposed to collaborative talk.

Presentations

During this lesson, students should present their ideas to the rest of the group. Encourage students to ask questions after each presentation.

There is space in the last page of the booklet for teacher feedback. I have allowed space for an Interacting and responding grade and a communicating and adapting language grade, to be used as appropriate.

Reflect and Evaluate

Allow time for students to complete the final evaluation form.

STUDENT BOOKLET PAGES 44-45

Lesson 10: Presenting your ideas and evaluating your learning

Now that you have presented your concept to the rest of the class, evaluate your learning as a result of this unit of work. You may wish to refer to the participating, understanding and managing strands.

How would you describe 'collaborative talk'?

What skills have you learnt which enable you to participate effectively in collaborative talk?

Have you learnt any skills which enable you to achieve better understanding in collaborative talk? Explain your answer.

What skills have you learnt which enable you to manage collaborative talk so the task gets completed?

Do you think being able to talk collaboratively is important? Why?

Well done, you have completed the Making Talk Work unit of work!

My interacting and responding GCSE grade is:
Teacher Feedback:
My communicating and adapting language GCSE grade is:
Teacher Feedback: