

**TITLE**

Group discussion and the importance of a shared perspective: learning from collaborative research.

**ABSTRACT**

Student-led discussion during small group work is now a familiar feature in many schools. However, simply organising students in small groups does not mean they will automatically participate in collaborative discussion. In this article I report on a small-scale research project in the UK which examined the discourse patterns of Year 8 (13-14 year old students) as they worked in discussion groups during English lessons. Using a multi-case study approach, video recordings were made in four high schools over a one-year period and qualitative analysis was undertaken. For illustrative purposes I focus on two transcripts which are representative of discussions from a full range of 40 video recordings and illustrate common and recurrent patterns of discourse. The findings suggest that students' interpretations of tasks are influenced by an orthodox perception of teaching and learning which emphasises independent and individualised working practices in schools. The importance of explicit and unambiguous teacher guidance is highlighted, and the apparent paradox of encouraging critical and open discussion of texts within a structured framework is examined.

**INTRODUCTION**

Psychologists and educationalists, influenced by Vygotsky (1978) claim that, pupils working in small groups can share and evaluate ideas and develop their

critical thinking (Norman, 1992; Sharan and Shaulov, 1989; Webb and Cullian, 1983; Wells, Chang and Maher, 1990; Wood, 1988). The seminal work of Barnes and Todd (1977) highlights the learning potential of peer group discussions which are reflective and hypothetical and where speech is tentative and exploratory. However, although organizing pupils into groups may increase their potential for discourse, it does not mean they will automatically discuss issues collaboratively.

Researchers have examined group size and composition (Galton and Williamson, 1992) tasks (Cowie and Ruddock, 1988), and organizational features Bossert, Barnett and Filby (1984). Some have looked at pupils' roles in group work (Pollard, 1985; Salomon and Globerson 1989). Others have examined intra and inter-group competition (Slavin, 1983) and creative conflict (Johnson, Maruyama, Johnson, Nelson and Skon 1981). However, although Barnes and Todd (1977) drew attention to the importance of open and closed contextual conditions in determining discourse patterns, little research has examined how pupils' collective definitions of learning situations influences their interaction and patterns of discourse during small group work. Some studies show how the same tasks can generate different responses from pupils in terms of the quality of talk and collaboration that emerges (Crook, 1991; Jones and Mercer, 1993). Evidence from empirical research (Hoyles, Sutherland and Healy, 1990; Mercer, 1995) confirm Barnes and Todd's view that successful peer-group work depends on pupils having a shared understanding of the purpose of tasks and a joint conception of what they are trying to achieve. However, some studies provide examples of how pupils' interpretations of the ground rules for discussion may differ in important ways from those of their peers and/or teachers (Mercer, Edwards and Maybin, 1988;

Rohrkemper, 1985). For example while some pupils working in groups may see it as an opportunity to explore and interrogate texts collaboratively others, in the same group, may see it as an opportunity to exhibit individual knowledge and demonstrate an ability to get the correct answers. Moreover, some studies illustrate how pupils' traditional conceptions of school learning contexts and acceptable discourse patterns can inhibit their capacity for collaborative discussion (Barnes and Sheeran 1992; Edwards and Mercer, 1987; McMahon and Meyers, 1993).

There is evidence that when teachers bring ground rules for discussion into the open this can lead to improved motivation and levels of performance amongst pupils (Dawes, Fisher and Mercer, 1992; Prentice, 1991). However, a substantial body of research shows this practice to be uncommon and that pupils usually receive little help in understanding and appreciating the ground rules they are expected to follow when engaged in group discussion tasks (Elbers and Kelderman, 1994; Mercer and Edwards, 1981; Phillips, 1992).

In this article I explore how pupils' culturally based definitions and the attitudinal baggage they bring to lessons shapes their use of language during group discussions. I examine how discourse patterns in small group work are influenced by pupils' collective interpretation of contextual conditions.

## **METHOD**

The inquiry focused on small groups of Year 8 pupils (aged 13-14) working in English lessons. Four high schools in England (age range 11-16) were involved. Two schools were located in urban industrial areas, one in an inner-city area and one in a semi-rural area. The schools organized year groups into classes according to attainment (as determined by school-based tests and

national standardized test results). Pupils who took part in the inquiry were from mid-range attainment classes: groups C and B from the range A (high attainment) to D (low attainment). The four teachers involved in the inquiry (3 men and 1 woman) had all been teaching for at least 10 years. They were members of a professional development cluster group and had worked with the author on previous classroom research projects. They valued collaborative learning and group work formed an integral and important part of their teaching approach. Unless a task specifically required selection to be made on the grounds of gender, ability or interests, pupils were allowed to work in friendship groups. The teachers were reflective practitioners and anxious to improve the effectiveness of teaching and learning in their lessons. They were curious to know why, seemingly identical tasks and learning contexts often produced very different patterns of student discourse and interaction.

### **Data Collection and Analysis**

A review of relevant literature indicated that, although not all classroom research projects are suited to a collaborative approach, great benefits can accrue from collective inquiry, which can inform theory, empower practitioners and influence school cultures and practices (Cochran-Smith and Lytle, 1999; Everton, Galton and Pell, 2000; Griffiths and Impey, 2000). Saez and Carretero (1996) and Alvermann and Young (1996) conducted what Stenhouse (1988) describes as ‘action research case study’ by synthesising the case studies of a number of teachers and developing descriptive narrative events into a collective analysis. Other researchers have also undertaken

collaborative research projects, which involved groups of school practitioners working alongside external researchers (Aspland, Macpherson, Proudford and Whitmore, 1996). We therefore, adopted the co-operative problem-solving approach, defined by King and Lonnquist (1994) as collaborative action research.

Erikson and Shultz (1992) illustrated the value of qualitative research in gaining insight into student interaction during English lessons. An underlying assumption of social constructivism is that reality is seen to be socially generated by groups of like-minded peers. This constructivist perspective underpinned the research because the teachers wanted to explore how pupils' perceptions (and thus, their constructions of reality) influenced the way they interacted during group work. A guiding principle therefore, was Erikson and Shultz's (1992) view that, "On the topic of student experience, pupils themselves are the ultimate insiders and experts" (p. 480).

The fieldwork began at the start of a school term and I visited each school at least once a week for a month. This familiarisation period was used to develop effective working relationships with the teachers and pupils. The video camera, tripod and microphones were taken into the classrooms and pupils were allowed to use the equipment to record and discuss group discussions. The teachers were asked to select a focal group that was typical of other groups in the class. In each of the four classes the focal group was then video recorded as the pupils worked on group tasks. All groups were video recorded within the classroom setting. Clarity of recording, for

transcription purposes, was achieved through the use of tie microphones. Approximately 13 hours of videotape was gathered. The data comprised forty group discussions (10 from each school) ranging from 15 to 20 minutes. A grounded theory approach was used (Glaser and Strauss, 1967; Hutchinson, 1988) and the video recordings were transcribed in full. Transcripts were then reviewed to develop constant comparative categories (Goetz and LeCompte, 1984) and retrospective analysis was undertaken (Circourel, 1974). After a period of between one and two weeks, each recording was re-played to the pupils. Transcripts of discussions were provided and pupils were invited to comment on the interpretation of utterances. This returning of the data to the participants provided respondent validation and helped to rectify misunderstandings. For example, on one occasion although a student had responded to a previous utterance with the remark, 'that's crucial' the subsequent discussion had ignored the contribution. This had been annotated to denote a failure of the group to develop an initiative. However, pupils clarified that the term 'crucial' was being used ironically on this occasion. During informal interviews pupils discussed their feelings about the nature and purpose of tasks and described how teachers' directions and expectations had influenced their responses.

Questions for an interview schedule were formulated collaboratively by the researcher and teachers and piloted within each school. A tunnelling format was adopted whereby main questions were supplemented by probes to encourage elaboration. For example:

<i>Lead question</i>	What did you see as being the purpose of the lesson?
<i>Probe</i>	What led you to believe this?
<i>Probe</i>	What did you think the teacher wanted you to learn?
<i>Probe</i>	What made you think this?
<i>Probe</i>	Did you feel there was one correct answer or a variety of acceptable answers?
<i>Probe</i>	To what extent do you feel you have achieved the purpose of the lesson?

The interview schedule served as a guide to what was often a wide-ranging conversation, with pupils invited to discuss and explore issues. Interviews were audio recorded and later transcribed. Field notes were taken in the classroom while video recording was taking place. Field notes provided non-judgmental descriptions of the verbal and non-verbal interaction of pupils as they participated in discussions. A diary-interview method was used (Burgess, 1981) and teachers kept journals in which they recorded their reflections and evaluations of lessons. Teachers were interviewed weekly and their journal entries provided the focus for discussion. In addition a text analysis concordancer (Wordsmith) was used to identify salient linguistic features of pupils' talk and to compare different transcripts. Qualitative analysis revealed the use of linguistic markers as features of exploratory talk where pupils were forwarding a hypothesis, suggesting an alternative perspective or justifying their views with reasoning. Key exploratory mode markers were:

*I reckon,*  
*what if,*  
*but suppose,*  
*don't you think,*  
*so,*

*because,*

*perhaps.*

A computerised search for such key features provided a further means of comparing transcripts by exploring the frequency of exploratory markers and identifying recurrent discourse patterns.

### **Exploratory Talk and Contextual Conditions**

Setting up tasks and environments for generating talk is no simple matter. Bossert, et al (1984) show that certain kinds of task organisation are likely to create particular learning contexts which will, in turn, influence the way pupils interact. Too little structure for some kinds of tasks may result in chaos and student anxiety; too much structure for investigative tasks may inhibit discussion. Teachers and pupils in the inquiry considered tasks to have open contextual conditions when:

- the subject matter was likely to be interpretative or controversial,
- there was an onus on process and the sharing of ideas,
- a number of alternatives could be critically evaluated,
- outcomes could be a group response or individual decisions that are reached after group discussion.

Tasks were considered to have closed contextual conditions when:

- there was only one correct answer or teachers had firm preconceptions and tightly defined parameters of acceptability.



Teachers felt pupils' use of exploratory language and their reasoned evaluation of texts was the most significant feature of successful group reading sessions. Desultory talk (random exchanges which contributed little to the task in hand) and disputational talk (where participants disagreed and took decisions individually without constructive dialogue) were seen as main features of unsuccessful group interaction. At a linguistic level of analysis therefore, each transcript was evaluated according to the distribution of utterances as shown in Table 1.

insert Table 1 here

### **PROBLEMATIC ISSUES AND LIMITATIONS OF THE INQUIRY**

Bassey (1999) identifies several kinds of educational case studies, discusses their different features and shows how evidence from individual studies can be combined to elicit tentative or 'fuzzy' generalisations. Our collaborative action-research approach dealt with singularities (contexts in four different schools) but addressed a corporate concern shared by a community (the research cluster group). The work could be described as 'theory seeking' in

that we were attempting to understand the importance of shared perspectives, and 'theory testing' in that we wanted to see whether particular perceptions influenced discourse patterns (see tables 4, 5, 6). As reflective individuals the concept of collaborative problem solving (King and Lonnquist, 1994) was appealing to the teachers, who liked the idea of being both the subjects and objects of their own research. They felt that through undertaking collaborative inquiry they would promote their own engagement in critical thinking,

restructure their existing knowledge and understandings, and develop as effective practitioners. Teachers wanted the inquiry to be critical and personally emancipatory but also informative for other professional colleagues beyond the research group. An initial methodological concern therefore, was whether to occupy what Cordingley (1999) describes as the high ground or be immersed in, what she terms, the swamp. An underlying premise was that, through collectively analysing individual experiences and interpretations, insights might be gained which could be shared with colleagues. There was also a feeling that a qualitative research approach would unveil the pupils' experience and allow their voice to be heard. We recognised that 'fuzzy' rather than 'firm' generalisations would be drawn from our inductive inquiry. However, we hoped that patterns of discourse could be identified from which tentative hypotheses might be formulated to stimulate further deductive research (Glaser and Strauss, 1967; Hutchinson, 1988). In the UK the Department for Education and Employment (DfEE, 2000) has encouraged school-university research partnerships, designed to undertake 'evidence based' research (Hargreaves, 1996) where the efficacy of teaching practices can be demonstrated and shared with colleagues. We certainly hoped that our findings would have this kind of 'pragmatic validity'.

### **Task types, Texts and Gender**

The nature of tasks was an important issue for the research-group because it was felt that the degree of inherent interest could impact on pupils' motivation and behaviour (Bennett and Dunne, 1992; Cohen, 1994; Deci and Ryan,

1986). Teachers believed (and recorded in their journals) that all the tasks they had set for pupils during the inquiry were similar in terms of content, expected outcomes and working procedures. However, teachers realized that some of the texts read by pupils might be construed as being potentially more interesting to either boys or girls and that this may have influenced pupils' motivation on some occasions. The teachers were also aware of research which has highlighted differences in the ways that boys and girls interact, with girls being more explorative and using a far higher percentage of abstract talk than boys (Holden, 1993; Norman, 1990; Swann, 1992). Although these were (and indeed remain) issues for consideration, the relationship between pupils' beliefs about contextual conditions and the relative distribution of utterances during group discussions was remarkably constant and remained consistent irrespective of gender grouping or reading material.

### **Pupils' Learning Styles and Collaborative Learning**

All the teachers in the inquiry valued group discussion and demonstrated this through their general teaching styles, arrangement of classrooms and organisation of tasks. However, as the following interview-transcript shows, individual and independent learning was advocated in the teaching of most curriculum subjects in the schools and pupils brought, to English lessons, meanings and expectations based on their experience of the predominant practice in other classrooms.

*Rashmi* We only work like this (in groups) in English really

*Abi* Sometimes we do in Geog

*Rashmi* And geography yeah and RE but only for bits

- Shabina* We just take notes and copy from books mostly...in Science and Maths and that
- Rashmi* Right...and then we have to learn stuff for homework and ]
- Abi* We have a test...we have tests to test if we've learned it
- Rashmi* And then you're told what position you are

The concept of independent learning for individual achievement appeared to be what Gordon and Lanelma (1996) describe as the 'ritualistic working practice'. However, teachers in the inquiry had all worked hard to create a counter-culture in English lessons and to develop pupils' appreciation of collaborative learning. They had organized discussion forums where pupils viewed and evaluated audio and video recordings taken of them as they worked in small groups. From initial evaluations pupils had drawn up ground rules for collaborative learning. They had identified generic salient points which formed charters for governing interaction in small group discussions. Engaging pupils in activity designed to help them see the value of group work had proved to be highly effective, as illustrated by the following interview-transcript.

- Nina* It's good I think 'cos I would never have thought about a lot of things on my own
- Chanese* Well you think about them but in a different way
- Raj* Yeah, and its like...when you hear what other people think right...its like 'Oh yeah I never thought of that' or ]
- Nina* Or you think that's not right...you don't agree, but then if they say like...why not, you have to think about it or you look stupid...as though you don't know what you're talking about
- Raj* Yeah, like when Chanese asked me why I thought that poem ('Not Waving but Drowning' by Stevie Smith) wasn't about drowning...like drowning in water, I had to really think about it so's I could explain what I meant

*Chanese* But it doesn't mean you have to agree does it... 'cos I don't really agree with you about that

*Raj* Yeah, but then you have to tell me why you don't agree don't you and that makes you think as well

This extract shows how pupils' in the inquiry valued group discussion and understood the potential of discourse in furthering their individual understandings. Teachers were curious therefore, to know why, when faced with similar tasks, pupils collaborated extremely well on some occasions but worked individually and independently at other times. They hoped that collective action research might uncover some reasons for this phenomenon.

### **PRESENTATION OF EVIDENCE FROM THE STUDY**

I draw upon data, gained from just two transcripts, selected for three reasons. Firstly, both can be regarded as representative of discussions from the full range of 40 recordings, illustrating common and recurrent patterns of discourse (see Tables 4, 5, 6). Secondly, these two discussions can be seen to illustrate wide differences in pupils' use of language, during small group work on what teachers perceived as identical tasks. Thirdly, by focusing on two complete transcripts it is possible to show how pupils either developed or closed down discussion. The group work arose out of similar and deliberate teaching strategies. It followed a pattern of teacher-led preparation and culminated in a task to be carried out through small-group talk. In these, as in other lessons, the talk-processes and the value attached to them by the teacher were emphasized in more or less explicit ways. The discussions involve the

same teacher, the same class and the same group of pupils. They usefully illustrate a potential insight from the overall data: namely, that it is not necessarily the nature of the task itself which determines interaction and its outcomes but the pupils' collective conception of task, based upon their perception of contextual conditions. My analysis of the transcripts focuses on the way pupils use talk to discuss and critically evaluate two narrative texts.

### **Learning Tasks and Group Discussions**

In the case of both transcripts the teacher considered the two tasks he had set for the pupils to be similar and he believed he had established identical ground rules for learning. He felt he had provided a learning context where pupils would collaborate in a critical discussion of texts. In the first discussion pupils were examining the book *Conrad's War* by Andrew Davies (1978) and in the second discussion the book *London Snow* by Paul Theroux (1986). The teacher's common practice was to follow a period of shared whole-class reading with directed group work. During group-work sessions pupils were provided with texts to examine and discuss. In the first example the teacher read the opening two chapters from *Conrad's War* to the whole class, and pupils were asked to work in small groups to evaluate the story according to aspects of setting - plot - characters - style - theme.

It is possible to identify a series of phases in the discussion. It begins semi-collaboratively with Beckie attempting to explore the characters of Conrad and his father. The linguistic mode marker *I think* indicates the exploratory nature of her utterance.

*Beckie* Conrad seems a bit spoiled I think...I wouldn't talk to my dad like that...he's ...sort of //

- Jay* He's horrible to his dad
- Beckie* = got no respect
- Shabina* Yeah, like he calls him a tramp...says his friends think he's a tramp
- Jay* He's nutty...nutty...(reading from the text) 'mad decrepit old tramp'

Kirsty attempts to develop group collaboration by suggesting a collective interrogation of the text but she meets with limited success. She volunteers to be the scribe for the group and there is an assumption that discussion will ensue. At this stage there is every indication that Kirsty is correct. Shabina accepts Kirsty's suggestion and refers to the text for evidence to support a claim and Jay draws attention to the derogatory term Conrad uses to describe his father.

- Kirsty* So, shall we read through and make a note of all these first
- Shabina* Yeah he thinks he's useless...he says (reading from the text) 'why are you so useless?'
- Kirsty* OK...if I write all this down for now then and //
- Jay* He calls him Fuzz (laughing)
- Kirsty* = then we can talk about it
- Shabina* You what...why
- Jay* I dunno...'cos he's got a beard I suppose

This exploratory interaction is short-lived and soon a decisive transition takes place as Jay signals an independent approach to the work.

*Jay* I'm gonna say Conrad doesn't respect his dad...thinks his dad is a nut...a nutty old tramp (2)

*Beckie* Conrad does not think much of his dad...he thinks his dad is useless (writing this down)

*Jay* Is that what you're putting

*Shabina* I'm putting that he doesn't have any respect for his dad

These last two utterances mark the onset of much more individualized work. From this point on the talk involves little more than minor associated transactions, as the following extracts show.

*Beckie* Shab are you writing out bits from the book

*Shabina* Yeah, some bits like where Conrad or his dad say things to each other (1.5)

*Jay* This is daft...as if you could make a tank

When Kirsty does attempt to initiate some collaborative discussion by asking *do you think* and referring to evidence in the text she is rejected.

*Kirsty* But do you think he's really going to make a tank or is he just going to imagine it...(reading from the text)...it says 'Somewhere out there in his imagination'

*Jay* Well, just put what you think...I think it's daft

Some other potentially collaborative moves are made but are not supported and the talk eventually subsides into a sporadic and mainly off-task mode. The pupils interpreted the task as one where the onus was on each individual group member to produce a set of answers. They did not perceive the task as one, which required them to collectively investigate the text. During interview the



pupils revealed that their perception of the task and learning conditions had been influenced by their experience in the preceding teaching period. This had been a Science lesson where they had been seated formally in rows and required to work silently and individually.

*Beckie* You just get used to working in a certain way...I mean in most lessons it isn't like in English...we don't talk much

*Shabina* We listen to the teacher or read and take notes and that...and then answer some questions or do a worksheet...you get done if you talk

The contrast between the talk in the activity on *Conrad's War* and that arising through the same pupils discussing *London Snow* could hardly be sharper. The girls begin their discussion by focusing on the main characters in the story. The talk evolves in a fully collaborative manner and could be described as truly exploratory, indicated by linguistic markers such as *what if, suppose, I reckon, but don't you think, so are you saying, yeah but, how do you know, perhaps*. The talk is also naturally but deliberately managed by the group as they clarify the task, exchange views, challenge, reason, justify and extend ideas. As in the previous transcript it is Beckie who initiates discussion with an exploratory utterance marked by *I think* and Shabina who maintains the initiative by offering supporting evidence from the text.

*Beckie* I think he's made Snyder seem more nasty by how he's made the others

*Shabina* Yeah, like the others are...nice...nicer

All participants now engage in collaborative activity as they extend Beckie's initiative. Kirsty and Jay investigate the text in an attempt to substantiate Beckie's hypothesis.

*Kirsty* Like Mrs Mutterance...(reading from the text) 'she was white haired and small and entirely round'

*Jay* Yeah, and she wore funny fingerless mittens and sucked sweets

*Shabina* Yeah, it's how he's described them...but he's made Mrs Mutterance and Amy both small and I reckon he's done that on purpose

Beckie reaffirms her view and shows an implicit appreciation of the others' contributions. Jay and Kirsty respond by again seeking evidence from the text to support Beckie's point.

*Beckie* That's what I mean...to make Snyder seem more horrible...

*Jay* To make Snyder seem more threatening...more scary...'cos yeah...here it says her face was white and solemn

*Kirsty* 'A kittenish concern in the large dark eyes' (reading from the text)

Shabina extends the discussion by offering a hypothesis, signalled by the linguistic mode-marker *suppose*. Kirsty accepts Shabina's point and develops it by offering an additional perspective. Kirsty's utterance is particularly noteworthy because it illustrates the truly collaborative nature of the discussion in both social and cognitive terms. *I think* indicates an exploratory mode and the linguistic hedge *don't they* suggests tentativeness and an invitation for others to agree or disagree with her contribution.

*Shabina* Suppose he's saying she's just like a kitten...like a kitten is...small //

*Kirsty* But not just small

*Shabina* = like...a kitten...because anything can hurt a kitten

*Jay* Not anything

*Kirsty* No but kittens trust people don't they...I think he's trying to make Amy seem like someone who you could hurt dead easy

Beckie agrees with Kirsty's hypothesis and extends it by referring to the text. The hedge *don't you think* again illustrates a tentativeness and willingness to engage in debate. Another characteristic of collaborative discussion, the use of conjunctions to begin utterances, is now evident. In turn, *and*, *because* and *so* serve as cohesive devices and indicate that the pupils are not merely offering individual and disparate contributions but are focusing on and collectively extending an issue.

*Beckie* Yeah,...oh yeah...'cos look...Wallace...he calls a Snyder an old monster man...so don't you think that's good...he's making Amy a little kitten and Snyder a monster

*Jay* And here...back here it says he was like a bear...(reads from the text) 'his shadow a bear on the wall'

The pupils go on to discuss Mrs Mutterance and exploratory mode-markers such as *because*, *so*, *but* and *how* are evident. One pupil feels that, like Amy, Mrs Mutterance is projected as weak and vulnerable to contrast with Snyder and make him appear more menacing.

*Beckie* Because she's like an old mother cat...all fat and cuddly

*Jay* So, are you saying she's weak and scared as well...she wouldn't //

*Shabina* But don't you think she does //

*Jay* = be able to defend Amy

*Shabina* = she's not scared of Snyder

Kirsty now challenges Shabina but the utterance is not disputational or dismissive. Kirsty is prompting Shabina to provide evidence from the text to support her view.

*Kirsty* How do you know that...how do you know she's not

The following extract shows all participants focusing on the issue, which Shabina has raised, and exploring the text collaboratively to prove or disprove her theory.

*Jay* She never tells him to bog off or anything does she

*Kirsty* Yeah, if she wasn't scared of him she'd tell him to get lost and she never does

*Shabina* Oh I think she does though...she doesn't tell him...like...say get out or get lost...bog off or anything...not in those words but she //

*Beckie* Puts him in his place...yeah makes fun of him

*Shabina* = makes fun of him...so she can't be scared of him

*Kirsty* How do you mean

*Beckie* She tells him she can do what she wants....(reading from the text) 'I own this entire premises'

*Shabina* Perhaps...maybe she knows something about the shop he doesn't...so she doesn't take him seriously... just makes fun of

him...like she says (reading from the text) 'that's no smile his shoes are too tight'

The pupils continue to discuss the relationship between Mrs Mutterance and Snyder for some minutes until Kirsty steers the group's attention back to Amy. Kirsty offers an idea for consideration and Shabina and Jay indicate their support. Kirsty then develops the discussion by referring to the text to substantiate her theory and she is supported by Shabina.

*Kirsty* You know what...it could be Amy isn't weak really...she could be the one they listen to...like...you know...whatsisname...in Watership Down who //

*Shabina* Oh...err...Fiver...Fiver...the one what sees things

*Kirsty* = yeah and they all listen to him don't they

*Jay* What if...right...what if say Amy's got these special powers and she can ]

*Kirsty* She's clever...I think she's the cleverest 'cos here (referring to the text) she says she doesn't think Snyder's evil...but he's bad (reads from the text) 'I don't think he's evil,' said Amy. 'I think he's a bad man.'...then when Wallace says that's not the same she says ]

*Shabina* (reading from the text) 'Evil people never change, but bad ones do'

*Kirsty* Yeah, but bad ones do...so I don't think she's weak I think she's clever

During interview the pupils said they felt that cooperative investigation and discussion was an important part of the task. The pupils' comments reflect their corporate view of the ground rules.

If we could say why we thought things...as long as everybody said what they thought...and we talked about all the ideas...right...that was OK (Shabina)

The difference in pupils' understanding of the contextual conditions for each task influenced their use of language and resulted in different discourse patterns. This is shown in Tables 2 and 3. The extent to which the two discussions accurately represent the discourse patterns of the total data can be seen in tables 4 and 5.

insert Tables 2 & 3 here

During interview the teacher said that in the *Conrad's War* task he had assumed pupils were familiar with the ground rules for critical reading sessions and understood the importance of reasoned exploratory discourse. However, in the teacher's directions this remained implicit. The teacher (George) revealed that his intention was not to encourage independent work, but merely to ensure pupils justified their views by reference to the text.

Because they have been working in discussion groups for a while now I took it for granted they understood, you know, that I expected them to work together and share ideas but I wanted to make sure they based what they were saying on evidence, to support their ideas by reference to the text.

The teacher had also underestimated the influence of the pupils' experience in the preceding Science lesson where they had been required to work silently and independently.

It is hard to believe that unless I make it absolutely clear at the beginning of every lesson that I want them (pupils) to collaborate, they will automatically work in relative silence, individually and, in fact, in competition with each other.

In the *London Snow* task the teacher's intention was the same but the ground rules for collaborative interaction were made more explicit. He reminded pupils that the purpose of the generic-questioning framework was to generate discussion. He emphasised the collaborative nature of the task and the need for pupils to share views but to justify opinions by reference to evidence in the text. The analysis of 40 recordings (Tables 4, 5, 6) showed a similar relationship between pupils' perceptions of contextual conditions and subsequent discourse patterns. A computerized text analysis concordancer was used to identify the frequency and distribution of different utterances during the 40 group discussions. This allowed the research group to detect definite and consistent discourse patterns.

insert Tables 4, 5, 6 here

Exploratory language was used most frequently when pupils held a shared understanding of contextual conditions, and when this corporate perspective placed a higher value on the collaborative cognitive process (e.g. investigation and interrogation) than individual output. When pupils collectively perceived a task in this way discourse was characterised by tentative exploration and propositional extension (Halliday, 1989). A significant feature of the discourse was the way pupils identified issues, considered and evaluated each other's contributions, and adapted their own views accordingly. Moreover, pupils not only considered and evaluated material presented to them but also formulated questions for themselves.

## **DISCUSSION**

Pupils need to hold a corporate perception of the ground rules for learning when they are working on tasks that require collaboration and discussion. When such a shared understanding exists pupils are likely to use exploratory language and to interrogate texts through an exchange of diverse and often conflicting ideas. The data indicate that when pupils collectively recognize collaborative ground rules they exercise self-regulation, display self-determination and a desire to persevere with a task. Group interaction involves a combination of pupils thinking aloud, being open to each other's ideas, and collaborating in the expression of shared meanings. An essential element of successful group discussion appears to be the development of pupils' metadiscoursal awareness (Hardman and Beverton, 1993; Lyle, 1993): that is, their ability to monitor, control and reflect on their own use of language. According to Bruner (1986) it is this process of objectifying in language what we have thought and then turning around on it and reconsidering it, which allows us to develop our understanding. It seems that activity designed by teachers to lead into group discussions is especially important in shaping pupils' perceptions of the ground rules and determining the quality of interaction. Wood (1992) states that pupils often have to go through the process of discovering the teacher's intention when presented with a task. Evidence from the inquiry suggests it is at the phase of introducing tasks that pupils' expectations and understandings of contextual conditions are confirmed. Classroom research has, for some time, recognized the significance of pupils' expectations about their roles as learners (Delamont and Galton, 1986; Gordon and Lahelma, 1996; Edwards and Westgate, 1994;



Mercer, 1992; Pollard, 1985). Teachers in the inquiry found that, because of past experience, pupils tended to resist new ways of interacting and failed to collaborate or use exploratory language during group discussions. Pupils expressed the view that, unless instructions for working collaboratively were made absolutely clear to them, they would assume normal rules of independent working and individual product-assessment applied. However, when all pupils in a group were clear about the ground rules for collaborative learning they were able to overcome inhibitions formed through previous expectations and preconceived ideas about independent working and required individual outputs. There is a need for teachers to develop specific strategies if they wish to create collaborative learning contexts, and overcome pupils' normally perceived obligation to work silently and individually. Data from the inquiry suggest that unless teachers make clear to pupils that they value group work skills and the exchange of ideas there is correspondingly less chance that pupils will feel able to talk collaboratively or to critically evaluate issues. If a group task is one which requires the collective application of heuristic problem solving strategies it may be necessary for teachers to establish positive goal inter-dependence where successful completion of a group task is closely linked to the achievement of individual goals (Johnson, Johnson and Stannes, 1990). Teachers may need to consider the way they respond to the products of group discussions and to establish group reward procedures which are valued both by the group as a whole and by individual group members.

## **CONCLUSION**

This study illuminates the need for pupils and teachers to hold a shared understanding of learning contexts. Teachers need to be clear about (and to

make clear to pupils) what kind of interaction is desired in a given task and tasks need to be structured accordingly. Research has indicated that highly structured tasks with constrained interaction are more suitable for relatively low level (information gathering) outcomes whereas, high level (problem solving) tasks need to be less formally structured to allow for more elaborate interaction (Webb 1992). However, the structuring of tasks is a delicate procedure and requires much thought and fine-tuning. Teachers in the inquiry wanted pupils to investigate texts collaboratively. Pupils were meant to share and evaluate ideas and explore and debate issues in an informed way and according to relevant criteria. Pupils had been provided with a generic framework for discussing narrative texts, and the teachers felt that this helped to foster discussion. However, as the data indicate (*Conrad's War* transcript - Table 3) this was not always the case. It seems that too much structure can inhibit interaction but too little structure or inadequate guidance can lead to ambiguity. Some researchers such as Nystrand, Gamoran and Heck (1991) argue that the imposition of procedures on pupils may inhibit group discussion. However, the data from the present inquiry would seem to support other research which claims that teachers who provide clear instructions, suggest procedures and specify roles can "Create interaction that is markedly superior to that produced simply by asking a group to reach consensus" (Cohen, 1994, p. 21). Creating the circumstances where a critical discussion of texts can occur involves more than organizing pupils into small groups. There needs to be agreement between pupils and between pupils and teachers about the ground rules for learning, the nature of tasks and their purposes. If effective interaction is seen as a mutual exchange process where ideas and hypotheses are shared, teachers must ensure that tasks are structured so pupils

working individually and independently cannot do them just as successfully. Paradoxically, it may be that teachers need to structure tasks carefully and provide unambiguous ground rules for learning if they wish to encourage exploratory discourse during group activities.

### Note

40 video recordings were transcribed and annotated. The following transcript coding scheme was used:

...	indicates a slight, un-timed hesitation between utterances
( 2.00)	indicates a period of silence between utterances (in this example 2 minutes)
//	marks the beginning of an overlap between utterances
=	indicates the continuation of an utterance
]	shows that an utterance has been interrupted and is not completed

### REFERENCES

- Alvermann, D. and Young, J. (1996) Middle and high school pupils' perceptions of how they experience text-based discussions: a multicase study. *Reading Research Quarterly*, 31, 244-67.
- Aspland, T., Macpherson, I., Proudford, C. and Whitmore, L. (1996) Critical collaborative action research as a means of curriculum inquiry and empowerment. *Educational Action Research*, 4, 93-104.
- Barnes, D. and Todd, F. (1977) *Communication and Learning in Small Groups*. London: Routledge.
- Barnes, D. and Sheeran, Y. (1992) Oracy and genre. In K, Norman (ed.) *Thinking Voices: the work of the National Oracy Project*. London: Hodder and Stoughton.
- Bassey, M. (1999) *Case Study Research in Educational Settings*. Buckingham: Open University Press.

- Bennett, N. and Dunne, E. (1992) *Managing Classroom Groups*. Cheltenham: Stanley Thornes.
- Bossert, S., Barnett, B. and Filby, N. (1984) Grouping and instructional organisation. In P, Peterson, L, Wilkinson and M, Hallinan (eds.) *The Social Context of Instruction*. Orlando: Academic Press.
- Bruner, J. (1986) *Actual Minds Possible Worlds*. New York: Harvard University Press.
- Burgess, R. (1981) Keeping a research diary. *Cambridge Journal of Education*, 11, 75-83.
- Circourel, A. (1974) *Language Use and School Performance*. New York: Academic Press.
- Cochran-Smith, M. and Lytle, S. (1999) Relationships of knowledge and practice: teacher learning in communities. In A. Iran-Nejad and C. Pearson (eds) *Review of Research in Education*, Volume 24. Washington, DC: American Educational Research Association.
- Cohen, E. (1994) Restructuring the classroom: conditions for productive small groups. *Review of Educational Research*, 64, 1-35.
- Cordingley, P. (1999) Constructing and critiquing reflective practice. *Educational Action Research*, 7, 183-90.
- Cowie, H. and Ruddock, J. (1988) *Cooperative Group Work: an Overview*. London: BP Educational Service.
- Crook, C. (1991) Computers in the zone of proximal development: implications for evaluation. *Computers in Education*, 17, 81-91.
- Davies, A. (1978) *Conrad's War*. Harmondsworth: Puffin.
- Dawes, L., Fisher, E. and Mercer, N. (1992) The quality of talk at the computer, *Language and Learning*, October, 22-25.
- Deci, E. and Ryan, R. (1986) *Intrinsic Motivation and Self Determination in Human Behaviour*. New York: Plenum.
- DfEE (2000) *Best Practice Research Scholarships*, DfEE, London.
- Delamont, S. and Galton, M. (1986) *Inside the Secondary Classroom*. London: Routledge and Kegan Paul.

- Edwards, D. and Mercer, N. (1987) *Common Knowledge: the development of understanding in the classroom*. London: Methuen.
- Edwards, A.D. and Westgate, D.P.G. (1994) *Investigating Classroom Talk*, 2nd edition. London: Falmer.
- Elbers, E. and Kelderman, A. (1994) ground rules for testing: expectations and misunderstandings in test situations. *European Journal of Psychology of Education*, 9, 111-120.
- Erikson and Schultz (1992) Pupils' experience in the curriculum. In P. Jackson (ed) *Handbook of Research on Curriculum*. New York: Macmillan.
- Everton, Galton and Pell (2000) Teachers' perspectives on educational research: knowledge and context. *Journal of Education for Teaching*, 26, 167-182.
- Galton, M. and Williamson, J. (1992) *Group Work in the Primary Classroom*. London: Routledge.
- Glaser, B.G. and Strauss, A.L. (1967) *The Discovery of Grounded Theory*. Chicago: Aldine.
- Goetz, J.P. and Lecompe, M.D. (1984) *Ethnography and Qualitative Design in Educational Research*. New York: Academic Press.
- Gordon, T. and Lahelma, E. (1996) School is like an ants' nest: spatiality and embodiment in schools. *Gender in Education*, 8, 303-310.
- Griffiths, M. and G. Impey, G. (eds) (2000) *Working Partnerships: Better research and learning*. Nottingham: The Nottingham Trent University.
- Halliday, M.A.K. (1989) *Spoken and Written Language*. Oxford: Oxford University Press.
- Hardman, F. and Beverton, S. (1993) Co-operative group work and the development of metadiscoursal skills. *Support for Learning*, 8, 146-50.
- Holden, C. (1993) Giving girls a chance: patterns of talk in co-operative group work. *Gender in Education*, 5, 179-89.
- Hoyles, C., Sutherland, R. and Healey, I. (1990) Children talking in computer environments: new insights on the role of discussion in mathematics learning. In K. Durkin and B. Shine (eds) *Language and Mathematics Education*. Milton Keynes: Open University Press.

Hutchinson, S. (1988) Education and grounded theory. In R.S. Sherman and R.B. Webb (eds.) *Qualitative Research in Education: focus and methods*. New York: Falmer Press.

Johnson, D., Maruyama, G., Johnson, R., Nelson, D. and Skon, L. (1981) Effects of cooperative competitive, and individualistic goal structures on achievement: a meta-analysis. *Psychological Bulletin*, 89, 47-62.

Johnson, D., Johnson, R. and Stannes, M. (1990) Impact of goal and resource interdependence on problem-solving success. *Journal of Social Psychology*, 129, 507-516.

Jones, A. and Mercer, N. (1993) Theories of learning and information technology. In P. Scrimshaw (ed.) *Language, Classrooms and Computers*. London: Routledge.

King, J. and Lonquist, M. (1994) The future of collaborative research, qualitative action research: premises, problems and prospects. Paper delivered at the *University of Minnesota*, College of Education.

Lyle, S. (1993) An investigation into ways in which children talk themselves into meaning. *Language and Education*, 7, 181-97.

McMahon, S.L. and Meyers, J.L. (1993) *What's happening here? A comparison of two literature discussion groups*. A paper presented at the National Reading Annual Conference, Charleston, S.C.

Mercer, N. (1992) Culture, context and the construction of knowledge. In P. Light and G. Butterworth (eds.) *Context and Cognition*. London: Harvester/Wheatsheaf).

Mercer, N. and Edwards, D. (1981) Ground rules for mutual understanding: a sociopsychological approach to classroom knowledge. In N. Mercer (ed.) *Language in School and Community*. London: Edward Arnold.

Mercer, N., Edwards, D. and Maybin, J. (1988) Putting context into oracy: the construction of shared knowledge through classroom discourse. In M. Maclure, T. Phillips and A. Wilkinson (eds.) *Oracy Matters*. Milton Keynes: Open University Press.

Mercer, N. (1995) The quality of talk in children's collaborative activity in the classroom. *Learning and Instruction*, 6, 359-377.

Norman, K. (ed.) (1992) *Thinking Voices: the work of the National Oracy Project*. London: Hodder and Stoughton.

- Nystrand, M., Gamoran, A. and Heck, M. (1991) *Small Groups in English: when do they help pupils and how are they best used?* Madison, WI, University of Wisconsin-Madison. Center on the Organisation and Resourcing of Schools.
- Phillips, T. (1992) Why? The neglected question in planning for small groups. In K. Norman (ed.), *Thinking Voices: the work of the National Oracy Project*. London: Hodder and Stoughton.
- Pollard, A. (1985) *The Social World of the Primary School*. London: Holt, Rinehart and Winston.
- Prentice, M. (1991) A community of enquiry. In *Talk and Learning 5-16: an in-service pack on oracy for teachers*. Milton Keynes: Open University Press.
- Reason, P. (ed) (1986) *Human Inquiry in Action*. London: Sage.
- Rohrkemper, M. (1985) Individual differences in pupils' perceptions of routine classroom events. *Journal of Educational Psychology*, 77, 29-44.
- Saez, M. and Carretero, A. (1996) From action research to the classroom case-study: the history of ANTEC. *Action Research*, 4, 29-48.
- Saloman, G. and Globerson, T. (1989) When teams do not function they way they ought to. *International Journal of Educational Research*, 13, 89-99.
- Sharan, S. and Shaulov, A. (1989) Cooperative learning, motivation to learn and academic achievement. In S. Sharan (ed.) *Cooperative Learning: theory and research*. New York: Praeger Publishing.
- Slavin, R. (1983) When does cooperative learning increase student achievement? *Psychological Bulletin*, 94, 429-445.
- Stenhouse, L. (1988) Case study methods. In J. Keeves (ed) *Educational Research Methodology and Measurement: an International Handbook*, 2<sup>nd</sup> edition. Oxford: Pergamon.
- Swann, J. (1992) *Girls, Boys and Language*. London: Blackwell.
- Theroux, P. (1986) *London Snow*. London: Puffin.
- Vygotsky, L.S. (1978) *Thought and Language* (revised and edited, 1986) by A. Kozulin. Cambridge, MA: MIT Press.

Webb, N. and Cullian, L. (1983) Group interaction and achievement in small groups: stability over time. *American Educational Research Journal*, 20, 411-423.

Webb, N. (1992) Testing a theoretical model of student interaction and learning in small groups, in R. Hertz-Lazarowitz and N. Miller (eds.) *Interaction in Cooperative Groups: the theoretical anatomy of group learning*. New York: Cambridge University Press.

Wells, G., Chang, G. and Maher, A. (1990) Creating classroom communities of literate thinkers. In S. Sharan, S. (ed.) *Cooperative Learning: theory and research*. New York: Praeger.

Wood, D. (1988) *How children Think and Learn*. Oxford: Blackwell.

Wood, D. (1992) Teacher talk. In K. Norman (ed.) *Thinking Voices: the work of the National Oracy Project*. London: Hodder and Stoughton.

Wordsmith 3.0 text analysis programme, Oxford University Press English Language Teaching.



# Analysing Classroom Talk

## Types of exchange

Exploratory	Where issues and ideas are explored and hypotheses are expounded and offered for discussion. Language is of a heuristic nature. Dialogue is constructive – creative conflict can be generated.
Reasoned/evaluation	Where contributions are made and justified. Statements are supported by reasoning and evaluated by other participants.
Desultory	Where exchanges are random and contribute little to the task in hand.
Disputational	Where statements are made but no attempt is made to justify ideas or opinions. Individuals disagree and take decisions independently without constructive dialogue.

---

<b>Utterance</b>	<b>Category</b>
Just suppose right...he isn't who he says he is...he's like...pretending	Exploratory
Yeah...an impostor...that would make sense then...that would explain why Estelle is like she is with Daniel	Reasoned Evaluation
I'm going to Ginos tonight	Desultory
He was definitely an impostor...that's what I'm putting anyway	Disputational

---

Categorisation of students' utterances during group discussions.

# Analysing Classroom Talk

Roy Corden. *Analysing Classroom Talk*. 2000

Number of exploratory utterances		Number of reasoning utterances		Number of disputational utterances		Number of desultory utterances		Total number of utterances
<b>49</b>	<b>26%</b>	<b>92</b>	<b>49%</b>	<b>30</b>	<b>16%</b>	<b>17</b>	<b>9%</b>	<b>188</b>

Table 2. Distribution of utterances in the discussion of *London Snow*.

Number of exploratory utterances		Number of reasoning utterances		Number of disputational utterances		Number of desultory utterances		Total number of utterances
<b>14</b>	<b>11%</b>	<b>39</b>	<b>30%</b>	<b>35</b>	<b>27%</b>	<b>41</b>	<b>32%</b>	<b>129</b>

Table 3. Distribution of utterances in the discussion of *Conrad's War*.

	Number of exploratory utterances		Number of reasoning utterances		Number of disputational utterances		Number of desultory utterances		Total number of utterances
		%		%		%		%	
D i s c u s s i o n s	<b>49</b>	<b>26%</b>	<b>92</b>	<b>49%</b>	<b>30</b>	<b>16%</b>	<b>17</b>	<b>9%</b>	<b>188</b>
	42	26%	88	56%	23	14%	7	4%	160
	33	22%	84	57%	20	14%	11	7%	148
	51	25%	107	51%	37	18%	13	6%	208
	37	21%	96	54%	34	19%	10	6%	177
	40	21%	92	48%	41	22%	17	9%	190
	32	18%	99	56%	29	16%	18	10%	178
	48	25%	113	58%	25	13%	7	4%	193
	58	21%	136	49%	64	23%	21	7%	279
	61	29%	95	45%	37	18%	17	8%	210
	43	25%	93	53%	32	18%	6	4%	174
	46	19%	124	50%	56	22%	22	9%	248
	38	18%	102	48%	57	26%	17	8%	214
	35	17%	97	47%	49	24%	25	12%	206
	42	20%	101	48%	50	24%	16	8%	209
	35	20%	91	54%	36	21%	8	5%	170
	30	18%	89	55%	32	20%	11	7%	162
	31	22%	84	57%	15	10%	16	11	146
	55	28%	103	52%	28	14%	13	6%	199
	42	26%	89	55%	18	11%	12	8%	161
40	18%	106	49%	53	24%	20	9%	219	
46	21%	105	47%	50	23%	21	9%	222	
38	18%	102	48%	39	18%	33	16%	212	
39	19%	104	49%	45	21%	22	11%	210	

Table 4. Distribution of utterances where students perceived the contextual conditions to be open.

Each row represents the distribution of utterances in one group discussion.

The discussion of *London Snow* (table 2) is shown as the first row in bold typeface.

When students perceived tasks to have open contextual conditions the number of exploratory/reasoning utterances was proportionately higher and the number of desultory/disputational was consistently lower.

	Number of exploratory utterances	%	Number of reasoning utterances	%	Number of disputational utterances	%	Number of desultory utterances	%	Total number of utterances
D	<b>14</b>	<b>11%</b>	<b>39</b>	<b>30%</b>	<b>35</b>	<b>27%</b>	<b>41</b>	<b>32%</b>	<b>129</b>
i	21	19%	46	42%	15	14%	27	25%	109
s	19	13%	45	30%	40	26%	46	31%	150
c	10	7%	52	34%	31	20%	60	39%	153
u	11	8%	46	33%	45	32%	39	27%	141
s	9	7%	42	33%	28	22%	49	38%	128
s	16	14%	32	28%	29	26%	37	32%	114
i	17	13%	31	23%	34	25%	52	39%	134
o	8	6%	52	42%	26	21%	38	31%	124
n	20	18%	44	39%	14	12%	36	31%	114
s	21	17%	33	27%	27	22%	42	34%	123

Table 5. Distribution of utterances where students perceived the contextual conditions to be closed.

Each row represents the distribution of utterances in one group discussion.

The discussion of *Conrad's War* (table 3) is shown as the first row in bold typeface.

When students perceived tasks to have closed contextual conditions the number of exploratory/reasoning utterances was proportionately lower and the number of desultory/disputational was consistently higher.

D i s c u s s i o n s	Number of exploratory utterances		Number of reasoning utterances		Number of disputational utterances		Number of desultory utterances		Total number of utterances		
		%		%		%		%			
		38	21%	49	28%	58	33%	31		18%	176
		53	33%	30	18%	65	40%	14		9%	162
		42	25%	39	23%	47	29%	39		23%	167
		35	22%	38	25%	43	28%	39		25%	155
	46	22%	64	31%	67	32%	30	15%	207		

Table 6. Distribution of utterances where students did not have a shared perception of contextual conditions.

Each row represents the distribution of utterances in one group discussion.

On those occasions when students did not have a shared perception of contextual conditions, the distribution of utterances was more evenly distributed, with neither exploratory/reasoning or desultory/disputational utterances predominating.