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Who's that talking in my class?: What does research say about pupil to pupil exploratory talk that leads to learning?

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Abstract

This paper explores the literature to determine if exploratory talk could aid pupil learning and understanding in secondary schools and, if so, how it could best be utilised and what the roles of the 'teacher' and the 'learner' are in the process.

We found five main themes related to talk and learning: exploratory talk is educationally valuable but not easy to implement; 'initiation-response-feedback'; is much more commonly used; there are other types of talk which are generally less good for developing thinking; exploratory talk is good for collaborative learning; and exploratory talk is best organised with a set of 'ground rules'.

It became apparent to us that agreeing and setting the ground rules was a very important factor in generating successful pupil to pupil talk for learning and that there is a strong relationship between adherence to ground rules for talking together and improving children's ability to solve problems. For consistency of a whole-school approach, we found that these group-specific ground rules should be set within an overall framework developed through teachers developing ways to work collaboratively with colleagues to investigate ways of promoting exploratory talk with all classes. Finally we highlight to school leaders the importance of developing and supporting a whole school approach to exploratory talk.

Key Words

Exploratory talk; learning; collaborative learning; ground rules.

Introduction

This review is one of several publications, designed to help teachers, practitioners and lecturers to understand, think about and implement the findings of educational research. Each review has been co-written by lecturers at a university in England, in partnership with teachers, practitioners or lecturers from schools, colleges and other educational settings. As teaching practitioners, first and foremost, it is our main intention to report on research in a way that is: accessible in terms of language; concise enough for teachers to read (given the limited time they have available for 'other' professional activities); and, hopefully, thought-provoking in terms of developing their practice because 'All teachers are likely to be enthused by hearing about something that works' (Ofsted (Office for Standards in Education), 2013:40).

Each review contains a focus on teaching and learning that we anticipate will be of interest to teachers in schools and is intended to inform improved practice.

This review focuses on talk for learning in the classroom. There are several types of talk used in the classroom, for example, our talk might be 'presentational', 'organisational', 'disputational' or

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'expert'. Each of these, and more, types of classroom talk will be (briefly) discussed later in the paper but the main focus of our research was exploratory talk and it is that, and the factors that facilitate it.

The Importance of Exploratory Talk

Exploratory talk is talk that teachers and learners use when committed to learning and building understanding together. For this paper, we wanted to find out if such talk could aid the learning and understanding, particularly of secondary school pupils, because this is where the substantive posts of two of the researchers were held, and, if so, how best it can be utilised.

When discussing the literature we recognised that exploratory talk is firmly grounded in established teaching and learning theory. For example, the influence of the underpinning theory of social constructivism (see, for example, Vygotsky, 1978 and Bruner 1986) was very clear, and the importance of social interaction for learning makes exploratory talk vital for understanding. Vygotsky (1978) stressed the relationship between language and social interaction for learning as children, for example, talk through a problem to verbalise their thinking about it in order to come to an understanding. This 'thinking' then becomes an active not a passive process and teachers can learn much from listening to students thinking aloud which 'involves the effective use of talk for learning in contrast to the ineffective talk for teaching that features in many classrooms' (Hattie, 2012:74). When pupils talk, they can reveal their thinking which, in Hattie's terms, means making it 'visible', and, through interactions with others, develop those thoughts. Thus 'the learner actively constructs the new way of understanding' Barnes (2008:2, cited in Mercer and Hodgkinson, 2008) through exploratory talk.

Rajalaa et al (2012) report that the capabilities for engaging in exploratory discussions are seen as essential for students' progress through and, importantly, beyond their formal education, to their future participation in the institutions of society. Mastering exploratory talk will enable them to contribute rather than just listen, and in a learning context, exploratory talk will have a positive impact on attainment. Equipping all students with these capabilities should therefore be a top priority in schools.

Whilst the focus of our research was pupils of secondary school age it was also recognised that exploratory talk is important for learners of all ages. For example, although only a small study, Rojas-Drummond et al (2003) convincingly report on how exploratory talk can help to enhance pupils' problem-solving skills both working interactively in groups and individually as needed, thereby supporting Barnes' argument that '...school learning is at once individual and social...' (Barnes, 2008: 9, cited in Mercer and Hodgkinson, 2008).

Added to the persuasive arguments from the literature for employing exploratory talk as a learning strategy is a pragmatic awareness that schools are increasingly under pressure to deliver exam results and are 'target driven' (Mintrop and Sunderman, 2009). As well as the pressure of league tables, there is the ever-present requirement to drive up standards. For example, a key part of the 2012 Ofsted framework states that outstanding teaching and learning must include: the extent to which teachers' questioning and use of discussion promote learning; the extent to which teachers enthuse, engage and motivate pupils to learn and foster their curiosity and enthusiasm for learning; and the extent to which teachers enable pupils to develop the skills to learn for themselves (Ofsted, 2012:15). More recently, Ofsted (2013) reported that, to improve literacy in schools, it is good practice to demonstrate that all teachers are engaged in using language 'to promote learning in their subject' (Ofsted, 2013:41). They should also 'identify the particular needs of all pupils in reading, writing, speaking and listening' (Ofsted, 2013:41), and this can be evidenced via pupil to pupil exploratory talk for learning.

Whilst the evidence is very positive about the use of pupil to pupil exploratory talk for learning it is important to acknowledge that there are challenges associated with introducing it. Some of the barriers identified include the need to manage behaviour, the pressure to meet targets, having too much content to cover, pupil low self-efficacy, an absence of ground rules, and a lack of understanding of effective strategies for learning through exploratory talk. Coultas (2012) reports that in some schools talk for learning is not being used due to teachers not being willing to take risks because of pupil behaviour problems. She goes on to say exploratory talk is vital to allow all pupils to learn effectively and use language for thinking, yet sometimes amongst adolescents the resistance to learning appears to be so strong that it can be hard to persuade them to learn through talk. While those advocating talk point to the long term benefits of greater pupil independence and self-control, a lot of courage and support is needed to attempt this type of learning (Coultas, 2012).

It is also important to note that, amongst all the positivity surrounding pupil to pupil talk, shortcomings to its success have been noted. One key consideration comes from the research of Wall et al (2009) who found pupil talk in the classroom had limitations for extending the most able and argued that differentiation during talk centred tasks was an area requiring further development in their research. With younger learners, it could be considered a weakness that their talk has been found to be '...hesitant, broken and full of dead-ends...' (Barnes, 2010, cited in Mercer and Hodgkinson 2008:5). However, this '...is to be expected...' (Barnes, *ibid*) because, he explains, they are 'trying out' ideas and adjusting them literally as they speak. Properly managed by the teacher, by making a distinction between exploratory talk and presentational talk (both examined later in the article) this (apparent) weakness can be turned into a positive experience and a particularly powerful in engaging them in their learning.

To sum up, exploratory talk is important for schools, teachers and pupils and its importance is life-long, not just for a particular phase of education. However, the challenges associated with its use must be acknowledged and addressed.

Method

The aim of our project was to offer teacher practitioners an update on 'best practice' related to the use of exploratory talk and we did this by carrying out a systematic literature review. Through our review we sought to develop our understanding of exploratory talk and to translate the literature into suggestions for improving practice in the classroom (White and Schmidt, 2005; Sackett et al, 2000). We worked to identify links between benefits of exploratory talk and the strategies employed where it worked for the positive benefit of the learners (and teachers).

We have already stated our reasons for adopting a systematic approach to this literature review, but we did not do this without being aware that this method has its critics. We did not set out with the intention of the 'oversimplification of educational problems' (MacLure, 2004:17). We set out to produce a readable and accessible update on exploratory talk for practitioners. We were acutely aware that 'different readers will extract different meanings from texts' (MacLure, 2004:19). Indeed we had a number of healthy debates between ourselves and with our teacher consultants to reach a shared understanding of the literature. This was a necessary process for us as beginner researchers which we felt served to deepen our understanding. Reflecting on the experience of writing this paper we agreed that this seemed to be a very good example of exploratory talk in action. At the outset of our search we had identified Talk for Learning as a focus. Our first research question was 'How might schools use "talk for learning" to better engage and motivate pupils in their learning?' Our search criteria were: Time: 1996 – to date; Phase: principally secondary but including significant primary literature where teacher colleagues feel it has application to secondary

practice; Location of studies: International; Curriculum Area: All; and Communication model: teacher to pupil, pupil to teacher and pupil to pupil.

Findings from the Literature

We found five main themes from the literature: exploratory talk is educationally valuable but not always easy for a teacher to implement; another type of talk, Initiation, Response, Feedback (IRF), further discussed in 2) below, is much more commonly used by teachers – this is effective for controlling behaviour but not for developing thinking; there are other types of talk which are also not effective in developing thinking; exploratory talk is effective for collaborative learning; and exploratory talk is best organised with a set of 'ground rules'.

1) Exploratory talk is educationally valuable but not easy to implement

Exploratory talk for learning is not new. It is well grounded in established theoretical approaches to learning. Vygotsky (1978) reported that concepts, memory and language are acquired through interaction between the child and another person. He also identified a 'Zone of Proximal development' (ZPD) in which children are able to carry out more and more challenging tasks when assisted by more competent peers or adults. It is the role of the peers or adults to act as facilitators in creating cognitive conflict through which the children can learn. More recently, Alfrey and Durrell (2004) identified that children's cognitive progress depends on their ability to resolve cognitive conflict through discussion and this is greatly influenced by teaching or support from adults or peers. As such, this line of thinking emphasises that the role of talk in cognitive development is heavily dependent on adult and peer facilitation.

Many benefits of exploratory talk have been found. For example, Dawes, Mercer and Wegerif (1999: 108) found three benefits of exploratory talk to improve children's ability in reasoning: using the kind of language we call 'exploratory talk' helps children to work more effectively together on problem solving tasks; using a specially designed programme of teacher led and group-based activities, teachers can increase the amount of exploratory talk used by children working together in the classroom; and children who have been taught to use more exploratory talk make greater gains in their individual scores on the Raven's test of reasoning¹ than do children who have not had such teaching.

The (then) General Teaching Council for England (2006) reported that the benefits of pupils using exploratory talk were that they: involved each other; asked each other questions; listened carefully to what each other said; responded constructively, even if their response was a challenge; and gave reasons for their opinions. Alfrey and Durrell (2012), citing the work of Bruner (1986), highlight the importance of the adult in 'scaffolding' support for a child to develop their learning through discussing and addressing challenging tasks (and that the support should be gradually withdrawn as competence develops). However, whilst setting out with the best intentions to be a supporting adult, we do not always get it right. Many studies about classroom talk have highlighted the continued domination of teacher talk (reported in Hattie, 2012), who reports that 'teachers talking increases as the year level rises and as the class size decreases' (Hattie, 2012: 72) The important message from this is for teachers to listen and encourage more pupil involvement.

2) IRF: Talk for Controlling Behaviour

¹ A test developed by Dr John C. Raven which comprises of multiple choice questions of abstract reasoning, meant to measure general cognitive abilities. The test is a non-verbal and culturally-fair multiple choice IQ test.

A number of authors have highlighted the practical issues to be considered as the teacher plans for pupil to pupil exploratory talk for learning. Coultas (2012) discusses the practical difficulties of behaviour management related to talk, for example getting the attention of the whole group to start the activity. She suggests that a common way for teachers to control talk is to use the IRF sequence (*teacher Initiates – student Responds – teacher Follows up/Feeds back*). This is teacher talk leading teaching, rather than enabling learning. Higgins (2001) concurs with this view, reporting that the IRF cycle is typical of most lessons in school, and is advantageous for control. This approach checks knowledge but, importantly, it does not check understanding. Instead, to encourage genuine pupil to pupil exploratory talk and to check for understanding, teachers should aim to use 'referential questions which are genuine questions, those for which the teacher does not know the answer,' (Thornbury 1996: 281) thereby encouraging real talk for learning amongst all learners (including the teacher) in the classroom.

Barnes (2010) suggests an alternative model for a sequence of using talk in lessons to promote good behaviour, engagement and active learning through the role of talk:

... (1) eliciting from the class what they know already ... (2) inviting the pupils to interpret the evidence before them... (3) "exploration", carried out through talk... (4) finally, it is likely to be useful to ask the class to write at length (Barnes, 2010: 7-8). Barnes also discusses how to move away from teacher control to keep all of the learners involved to deeper analysis. Barnes (2010: 7) reports on Alexander's (2001) view that exploratory talk will lead to 'better intellectual engagement with what is being taught'.

3) Different types of Talk

Putting talk in the classroom into context Moate (2011) identified several types of talk for learning and when Mercer and Hodgkinson (2008) investigated 'exploratory talk' they found it was just one of a number of types of talk for learning in the classroom. A combined summary of these types of talk is shown in table 1 below:

Type of Talk	Explanation
Exploratory Talk	Talk explicitly focused on pupil understanding – established or emerging. This includes what some authors have called 'meta talk' which is used for making talk 'visible' – to discuss how talk and thinking works as a tool for learning; and Critical Talk, which is about asking 'why' and 'how come' questions
IRF	Initiation-response-feedback; useful for maintaining control but not for generating learning
Social Talk	Safe, non-assessed talk between peers
Presentational Talk	Public talk, intended for a listening audience, practised and fluent
Organisational Talk	The what, when and how of the classroom
Expert Talk	The formal voice of the subject
Disputational Talk	Talk that is argumentative, where people argue their own point of view and are not willing to change it in the light of other arguments.

Table 1. Types of talk in classrooms.

All these types of talk work interdependently and concurrently, and the teacher's central task is to set up a 'culture of talk' to get the most out of them. For the purposes of this paper we concentrate on exploratory talk here but suggest that the other forms of talk may provide a good basis for further research. Exploratory talk is talk committed to learning and building understanding together

(Moate, 2011) and it is particularly powerful in engaging younger learners (Pierce and Gilles, 2008, cited in Mercer and Hodgkinson, 2008). Moate (2011) identified that as pupils share their personal understanding they can change their minds and this enables new understanding to develop and new concepts to grow. As Mortimer and Scott (2003:19) reported: 'When students are first introduced to a new word or concept in a science class, they may quickly master the teacher's definition of the word, but this is not the end of the learning process, it is just the beginning'. In this way exploratory talk can be viewed as a tool for learners to work with. Initially language use may not always be accurate but, with teacher scaffolding and group collaboration, an almost unintended consequence is that pupils' use of terminology may become sharper, and more consistent and a better understanding will be developed. According to Swain (2000:102 cited in Lantolf, 2006) '...what was said is now an objective product that can be explored further by the speaker and others.' Whilst much talk 'just happens' in classrooms the teacher requires time to create a classroom culture in which exploratory talk can be utilised for interthinking (Mercer, 2004; Rojas-Drummond et al, 2008; and Pierce and Gilles 2008, cited in Mercer and Hodgkinson, 2008). Barnes (2008:11, cited in Mercer and Hodgkinson, 2008) argues that a key part of the teacher's task is to 'provoke a questioning habit of mind'. He suggests that the overall purpose of developing this culture for exploratory talk should be to hand over more responsibility to pupils for their own learning. The learners should then be encouraged to be active, reflective, critical thinkers and, where possible, link the learning to their lives outside school.

To emphasise the importance of the teacher planning meaningful and appropriate tasks for pupil to pupil talk to thrive, Pierce and Gilles (2008: 43, cited in Mercer and Hodgkinson, 2008) draw attention to how these tasks should 'slow down the talk to make it more visible'. They describe how one teacher in their study used webs and charts which enabled her to revisit a discussion days later in order to 'dig deeper'. Pierce and Gilles (2008: 44, cited in Mercer and Hodgkinson, 2008) also draw attention to the use of drama, writing and drawing as strategies to engage students in deeper conversations.

Barnes (2008:10, cited in Mercer and Hodgkinson, 2008) discusses in more general terms the types of tools teachers should use to engage pupils in exploratory talk. He raises the importance of 'the provision of useful material for discussion – demonstrations, apparatus, maps, pictures, texts'. Furthermore, Barnes argues that exploratory talk can have positive benefits for individual as well as group work.

4) Group work and collaborative learning

Engaging in exploratory discussions through group work is seen as essential for students' current and future participation in key institutions of society (Baines, Rubie-Davies and Blatchford, 2009). Contributing rather than just listening to exploratory talk will be conducive to students' school achievement. Dawes and Mercer (2008: 16) argue that 'a teacher needs to ensure that group activities are well designed to elicit debate and joint reasoning.'

What does group talk look like? Higgins (2001) argues that in group talk there should be no authoritarian figure and taking turns has to be managed amongst the group. This gives pupils the opportunity to set their own ground rules, preferably in their own language (the Thinking Together initiative produces 'A 'child friendly' version of ground rules for Exploratory Talk' (Thinking Together, accessed 2015), initiate questions, pool responses and draw their own conclusions. Sutherland (2006) reported that the quality and cognitive level of pupils' talk improves through group work. She found that the pupils were more focused when working in groups, participated more equally, asked a greater number of questions, including higher-order questions, and engaged in less off-task talk. However the same study also revealed that implementing the group work approach effectively was not an easy task. One of the biggest challenges teachers felt they faced was being able to guide

pupils towards using the kind of talk that would develop their understanding without dominating the discussion, as this would prevent the pupils from independent talk and thinking. Sutherland (2006) reported that teachers who position themselves as fellow learners are more effective at developing group talk. Schmitz and Winskel (2008) produce a list of 'key words' that indicate the sort of thinking that occurs in exploratory talk: Because, 'cause (used in reasoning); I think/I reckon/I guess (used to introduce ideas); Maybe (used to introduce ideas); If (used to reason about the problem); Why (task-related question); Which/where (task-related question); What (task-related question); How (task-related question); You (used in a question); Actually (used to justify/clarify); But (used for constructive challenging or clarification); No (used with justification or reasoning); and, Let's ... (suggestion of cooperation, excluding 'let's see' as a generalisation). This list can be used as a means for teachers to recognise that exploratory talk is occurring although the researchers (from Australia) recognise that there might be differences in different cultures.

Discussing the ideal size of groups, Wall et al (2009) found that tables of 4 were best suited to developing exploratory talk through group work and produced many indicators of the positive impact of collaborative learning. Similarly it was reported that small groups self-selected, usually on a friendship basis, work well, and that there was a direct relationship between length of time groups worked together and the amount of exploratory talk engaged with (Edwards, 2005). It is also very evident that the longer pupils work in groups on open ended tasks the greater the authority of the students over their learning and development of higher level of reasoned thinking (Sutherland, 2006).

The General Teaching Council for England (2006) produced a case study specifically from the perspective of raising achievement that identified that the right conditions for group work must be created by a consistent whole school approach, where there is a focus for both pupils and teachers on developing group work. They argue that, if sustained, there will be genuine benefits in learning and additional benefits from group work, including pastoral advantages due to improved pupil communication skills. Similarly, Wall et al (2009: 113) found that 'children's positive attitudes to working with each other are invaluable and there is every indication that it has influenced their behaviour in the playground as well.'

Finally, developing exploratory talk through group work is not just the teachers' responsibility. School leaders also have a part to play in this process. They must consider the importance of developing teachers' skills in managing group work and promoting exploratory talk thus sowing the seeds of pupils' understanding. It is essential that senior staff give more attention to whole school, cross curricular development, over a sustained period of time, of pupil to pupil exploratory talk for learning for it to be successful (Mercer and Hodgkinson, 2008).

5) Ground Rules

The research literature emphasises the importance of planning and preparation for exploratory talk to be effective. For instance, the General Teaching Council for England (2006) point out that designing and using suitable tasks in lessons is crucial for group work to be beneficial for learning. Likewise, Edwards (2005: 2) points out 'the composition of the groups and the form of tasks the groups tackle are important factors in determining the quality of learning achieved.' The literature describes several different types of tasks, where pupils engaged in exploratory talk. In Sutherland (2006), pupils analysed texts from media, fiction and non-fiction. She quotes them discussing the effects a poet intended in a poem. Robins (2011) had an open question, 'how would you survive on a desert island?' In contrast, several studies involved the children in verbal reasoning tests and some, such as Wickham (2008) centred around a set of mathematical problems. Most of the research includes a structure in which the pupils are clear about a) what they are discussing (a text, a series of problems etc.); and b) what the outcome might be (for example, a verbal report to the whole class, a

visual poster, a set of answers). Schmitz and Winskel (2008) list characteristics of suitable tasks, drawing on previous research: The task is one in which partners have to talk in order to complete it; The task should not be competition based but encourage cooperation; The partners have a shared understanding of the aim or purpose of the task; The partners have an understanding of devised ground rules, which encourage active participation and a joint exchange of ideas; Same sex partnerships are formed; Partners are friends or at least friendly towards each other; and Partners have a shared knowledge or common experience (Schmitz and Winskel, 2008:585).

The literature is clear that developing a set of 'ground rules' is a key to successful learning through pupil to pupil exploratory talk. Mercer (1996) highlighted the need to raise the status of talk (teacher to pupil) in all classrooms by developing ground rules and creating favourable conditions for useful talk. Subsequently he reported on improved outcomes through the use of pupil to pupil exploratory talk where agreed and established ground rules were in place (Mercer and Hodgkinson, 2008). Fisher and Larkin (2010) identified that programmes designed to improve pupils' and teachers' use of classroom interaction will continue to have limited impact while participants' motives and understandings remain confused. To address this they highlighted the need to set rules, 'Given the unequal distribution of power in the classroom, teachers will also need to reassess their expectations of the rules of participation – even though this may challenge their cultural interests and expectations.' (p15). Finding that the quality of exploratory talk is an important factor of attainment, Barnes (2008, cited in Mercer and Hodgkinson, 2008) stresses the need to establish new ground rules to encourage it. He went on to add a warning that there might be little progress in improving exploratory talk because teachers and pupils are used to and comfortable with the 'old' model of asymmetrical talk (teacher to pupil) and the established ground rules do not encourage any other type of talk, for example, symmetrical (pupil to pupil). Sutherland (2010) is clear that agreeing ground rules is a key factor in successful exploratory talk for learning and goes on to say that reflection on talk are effective strategies in enabling pupils especially for unconfident, low-achieving and/or pupils of low socio-economic status, to develop this learning skill.

If ground rules are key to the successful employment of exploratory talk for learning, what do they look like? Dawes, Mercer and Wegerif (1999:100) gave an example of a set of ground rules one class created which were particularly successful:

Discuss things together - Ask everyone for their opinion, ask for reasons why and listen to people. Then be prepared to change your mind, think before you speak, respect other people's ideas – don't just use your own, share all the ideas and information you have and make sure the group agrees after talking.

Drawing upon this evidence, and the wider suggestions and implications from the literature review, the research team arrived at a number of pragmatic social ground rules that they suggested pupils needed to act upon during group discussion which were: all relevant information should be shared; the group should seek to reach agreement; the group should take responsibility for decisions; reasons for answers and opinions should be expected and explored; challenging others is acceptable; alternatives are discussed before a decision is taken; and everyone in the group is encouraged to speak by other group members.

The first three ground rules in the list served to bind the group, share information and construct knowledge together through seeking agreement. The next two rules focused on the explicit reasoning that characterises pupil to pupil exploratory talk as opposed to the other types of talk. The sixth ground rule, that alternatives are discussed, reflected the findings of research on collaborative problem solving (see for example, Nelson, 2013), which has found that the groups that do best are those that consider alternatives before making decisions. In the light of our experience of working

with groups of learners, we added rule seven. We found that simply offering learners the right to participate was not enough, in practice learners needed their peers to actively encourage them to speak and put forward their views. It should be noted that in very best practice, agreeing and setting ground rules even when established is not the end of the story. They should be reviewed and changed as the learners and the learning process develops. By engaging with constant review teachers and pupils can develop from I-R-F to I-D(iscussion)-R-F thereby developing exploratory talk in classrooms.

Conclusions

This study set out with the aim of assessing the importance of pupil to pupil exploratory talk in teaching and learning. We found that: 'It is now quite widely appreciated that the quality of classroom dialogue is important for ensuring that children get the most benefit from school' (Mercer and Dawes, 2008:56, cited in Mercer and Hodgkinson, 2008). It is important to use strategies to 'engage students in deeper conversations' (Pierce and Gilles, 2008, p. 45, cited in Mercer and Hodgkinson, 2008) and develop higher order thinking skills. Furthermore, the ability to engage in exploratory discussion is essential for students' current and future participation in the key institutions of society.

Reading the research literature, it became apparent to us that agreeing and setting the ground rules was a very important factor in generating successful pupil to pupil talk for learning. We also found that a strong relationship between adherence to ground rules for talking together and improving children's ability to solve problems, which it is argued 'confirms the value of explicitly teaching children how to use language to reason.' (Dawes, Mercer & Wegerif, 1999: p95). As well as agreeing with the need to set general ground rules we partly agreed with Dawes, Mercer and Wegerif (1999: 99) who suggest going one step further and advocate that 'each teacher and class (should) create their own, user-friendly version of the ground rules for generating exploratory talk.' But, for consistency of a whole-school approach, we would add that these group-specific ground rules should be set within an overall framework.

Based on our review, it is clear that there are implications for schools when developing and employing pupil to pupil exploratory talk for learning. Teachers should think about and plan for consistency of practice by working collaboratively with colleagues to promoting exploratory talk with all classes. In addition to this, and directly linked with it, school leaders should develop and support a whole school approach to exploratory talk for learning.

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