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Chapter 1: Creating a supportive environment for classroom dialogue

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Chapter Summary

This chapter first considers the role of dialogue in classroom contexts, and the importance of open-ended dialogue in contrast to more traditional, closed questioning sequences. I briefly discuss the role of dialogue in individual psychological development, focusing on its importance for conceptual development in whole classes and small groups in the context of the classroom. A common-closed-sequence of classroom talk is first outlined, and then discussed in the context of ‘dialogic talk’—talk which is more open, builds on prior knowledge, is supportive and collaborative in nature. The use of ‘exploratory talk’—talk which focuses on the use of reasoning to build mutual understanding—is also outlined in this context.

1. What role does dialogue play in learning?
2. What form does dialogue typically take?
3. How can we make dialogue more effective?

The second part of the chapter discusses some ways to promote effective dialogue in classroom contexts. Some suggestions for creating and identifying an effective environment for classroom talk are discussed. I highlight the importance of ‘ground rules’ for talk, and some key words teachers might look for and emphasise in
encouraging the use of ‘exploratory talk’. I then discuss some ideas for ways to start effective talk in classrooms, including the use of Talking Points and effective questioning. This chapter aims to give some background on effective dialogue of relevance to subsequent chapters, which will consider particular features of the interactive whiteboard in the context of dialogue.

What Place Does Dialogue Have in the Classroom? The Importance of Dialogue in Classroom Contexts

The Russian psychologist, Lev Vygotsky, highlighted the importance of language, emphasising that:

…what children gain from their 'intermental' experience (communication between minds through social interaction) shapes their 'intramental' activity (the ways they think as individuals). What is more, he suggested that some of the most important influences on the development of thinking will come from the interaction between a learner and more knowledgeable, supportive members of their community. (Mercer, 2003)

This highlights the significance of dialogue in learning. Wherever education is taking place, commonality – a shared perspective – is key, and dialogue is the tool used to create such a perspective (Edwards & Mercer, 1987). Furthermore, the dialogue used to create ‘common knowledge’ is related to the educational development of children. Indeed, the strong consensus is that high quality dialogue is associated with learning (see the collection edited by Littleton and Howe (2010). Engaging children in extended talk which encourages them to ‘interthink’ and explain themselves – as in the Thinking Together approach (Dawes, Mercer, & Wegerif,
2004) described below – stimulates both their subject learning, and general reasoning skills (Mercer, Dawes, Wegerif, & Sams, 2004; Mercer & Sams, 2006; Mercer, Wegerif, & Dawes, 1999; Rojas-Drummond, Littleton, Hernández, & Zúñiga, 2010), as well as their social and language skills (Wegerif, Littleton, Dawes, Mercer, & Rowe, 2004).

With respect to direct pedagogical functions (as opposed to social functions such as behaviour management), dialogue seems to serve several purposes:

1. supporting individuals’ subject learning
2. supporting psychological development – the development of oral language and reasoning skills
3. promoting whole class and small group understanding or commonality
4. enabling sharing of ideas that can be improved together (both whole class and small group) – a purpose the IWB is particularly well placed to serve, as later readings discuss.

**A Common Classroom Sequence**

Classroom talk is typically rather different to ordinary conversation. It tends to focus on an individual, and for the majority of the time this individual is the teacher. Furthermore, there is a rather unequal balance in classroom communication, with particular rights, and expectations – including the expectation to confer or affirm ‘correct’ answers – placed on the teacher. Teachers commonly use talk to assess understanding, both of classes and individuals – indeed dialogue is essential in this pursuit. It is perhaps for this reason that a particular sort of exchange was noted by
Sinclair and Coulthard (1975) as being especially common, the Initiation-Response-Feedback exchange:

Initiation (by teacher) – What is the smallest prime number?
Response (by student) - 2
Feedback (by teacher) – Yes, well done

Although these sequences provide easy means for assessment, there is a temptation not to explore beyond the individual student’s answer (whether correct or incorrect), nor the reasoning and further understanding behind it (for example, why 2 might be an interesting prime).

Moving Beyond Questioning¹

While the prevalence of this sequence has led to debate regarding its classroom use, such debates often fail to acknowledge two key points. Firstly, that the IRF’s prevalence may in part be attributed to the important – non-pedagogic – role of the classroom teacher in orchestrating classroom activity, assessing student performance, and relating such activities to the wider school accountability systems. Secondly, there has been an assumption that all IRF sequences perform the same function. Thus various sorts of questions (“can you pass the salt?”, “what is xyz?”, “do you think this is acceptable behaviour?”) are treated in the same way. Yet it is clear that teachers’ questions have a variety of intentions and communicative

¹ This section is adapted from (Mercer, 2003); direct quotations are indicated as such where included. The whole article can be read at http://tinyurl.com/Mercer2003; sections from that article are also adapted and used across the wiki.
functions behind them – from classroom management, to seeking elaboration, and of course assessing factual responses.

**Dialogic Talk and Whole Class Dialogue**

Robin Alexander’s (2001) research in the primary school classrooms of five countries has highlighted that, although dominance of classrooms by teacher talk is common, the types of contribution, and the ways they are balanced vary. One factor in this variation was the length of response students gave to teacher questions; observations revealed some rather brief responses, and other longer, more reflective responses. The most effective of these interactions were conceptualised as being ‘dialogic’ in nature: ‘Dialogic talk is that in which both teachers and students make substantial and significant contributions and through which students' thinking on a given idea or theme is helped to move forward. It may be used when teachers are interacting with groups or with whole classes’ (Mercer, 2003, p. 74).

Dialogic talk, then, is associated with the key benefits of dialogue described in the introduction. It enables both learners’ intra- and intermental skills – their capacity to reason individually, and to engage with others in joint activity – and through this, their wider intellectual capabilities. Alexander (2008) summarises the five key characteristics of dialogic education thus:

- **Collective**: teachers and children address learning tasks together, as a group or as a class, rather than in isolation
- **Reciprocal**: teachers and children listen to each other, share ideas and consider alternative viewpoints
• **Cumulative**: teachers and children build on their own and each others’ ideas and chain them into coherent lines of thinking and enquiry

• **Supportive**: children articulate their ideas freely, without fear of embarrassment over ‘wrong’ answers and they help each other to reach common understandings

• **Purposeful**: teachers plan and facilitate dialogic teaching with particular educational goals in view.

**Exploratory Talk – A Useful Tool for Effective Dialogue**

A related approach to thinking about dialogue which has been found useful builds on Mercer and colleagues’ work on the Thinking Together project\(^2\), and Exploratory Talk. In this approach, ‘group talk’ is characterised as one of three ‘types’ – cumulative, disputational, or exploratory (Mercer & Littleton, 2007) as {Insert Table 1.1} indicates.

{Insert Table 1.1}

These types of dialogue can be identified in whole class and small group activities. In whole class exploratory talk, a dialogic approach to questioning is taken by the teacher, in which knowledge is built cumulatively, through the shared, guided, exploratory talk of the children. One such example was provided in the history lesson extract in the main resource in Section 2d (IWB Activity 3), and duplicated in Resource Appendix 4. Another example drawing directly on IWB use comes from whole class dialogue captured during Diane Rawlins’ second lesson on personal

\(^2\) [http://www.thinking-together.org.uk](http://www.thinking-together.org.uk)
safety with 10- to 11-year-olds. In this example, groups are coming up to the IWB in turn and presenting outcomes of their group discussions (“as a team working for Childline”) about a domestic violence scenario to the class; they write their suggestions next to the photographs they have selected and arranged from a set provided by Diane. The teacher helped children to be responsive and build on each other’s ideas through her open-ended, probing questions such as “Why did Mehmet write “be assertive”? “Why are you [suggesting she calls the] police?” “Does anyone agree that’s a good step to take?” Her sensitive mediation spawned a number of thoughtful ideas, reasoned arguments and mature insights into the characters’ mindsets as the class together explored some complex issues and ethical dilemmas (e.g. the worry that a family would be split up if a domestic violence situation was reported).

A video clip from this activity can be seen at http://sms.cam.ac.uk/media/1085308. Figure 1.1 captures one of the resulting IWB screens and it is followed by associated dialogue.

{Insert Figure 1.1}

T (reading out what Courtney has written on the IWB): ‘We must help you to inform the police. ‘Now why are you [suggesting she calls the] police? What is it about that information that made you think ‘my advice is police’? Kalem. Kalem (group member): Well we were thinking if we don't do anything it's just gonna keep on happening so we've got to do something about it. So we came up with an idea with calling the police.
T: And that would be some advice that you could give to that girl. Telling the girl she should call the police and tell them don’t be afraid and tell them about what's happening to her friend Sam. That's a really big step isn't it. Does anybody agree that that's a good step to take? What do you think Rosie?

Rosie: I think that's good advice because if you inform the police then they could help, like in the future.

[...] Luke did you want to say something... Was there a piece of advice that your group thought was important?

Luke: If she's naughty, um, maybe that could be one of the reasons or if he's drinking too much or if he's a bit stressed, try not to go near him.

T: So some of those are the practical things, that’s right. Did your group say anything about perhaps talking to a grown-up? Someone that you know, someone that you trust. Perhaps talking to somebody at school... Did your group say anything like that at all Shannon?

Shannon: Um, yeah...You could love (?) your family very much but try not to get too much involved because if you do and your(?) friend’s dad might do...

T: Yeah, you see you're a child as well, aren't you, so maybe that's when you're saying that you'd go on and talk to adults. So what's Rosie [written]? ‘Tell Sam go and get some help with the future and past bad things that have been happening.’ Where do you think she might go for help? Where were you thinking when you wrote that?

Rosie: Like, the police and the family.

T: Ok and Kalem is going to write something on behalf of her group. Did you want to say something?
P: This is one of those ones that Rosie said, she said that these can help you for the future but if the police do arrest Sam's dad and if he gets out he can just hurt them more, if he gets near them.

T: Did you hear that? What do you think about that?

Jasmine: This is what you could do, you could have the police arrest your dad and sort of maybe give him some counselling, something's happened in the past that sort of made him violent or maybe sort of he has a drinking or drug problem.

T: So I suppose there is potential for something, might not necessarily be negative but it's not easy is it. My goodness it's a horribly difficult thing. And what have you written? ‘Ask your mum is she allowed to sleep round more often’? And that's a way of perhaps saying, let me try and make something nice happen and maybe perhaps spend a bit more time around. I see some hands up… Go on then.

Kalem: But Sam says she doesn't want her family split up and if her dad gets arrested then they will split up.

T: Are you saying then that we should say and do nothing?

Kalem: We should do something but...

T: Also it's not our decision anyway is it? It's not our decision on what happens to Sam's dad but it is our decision about whether we do something. So generally then as a team of people working for Childline would you be telling Sam to or telling the friend rather. Tell Sam to contact somebody else, to tell somebody else. We're giving information like that. We're saying to be assertive and that it might get serious. Oh, this was a tough one wasn't it?
The Thinking Together\textsuperscript{3} website based at the University of Cambridge gives some typical sequences of each talk type (Mercer, 2008) in small group work. The sequence below, between Elenor, Georgie and Carmel discussing the truth of a statement on ‘Our galaxy’, is taken from that site and indicates some of the characteristics we find in ‘exploratory talk’ episodes.

Elenor: OK (reads) ‘The moon changes shape because it is in the shadow of the earth’.
Carmel: No, that's not true, because there's the clouds that cover the moon
Elenor: No it isn't ... yeah.
Georgie: Yeah.
Elenor: Because in the day we think ‘oh the moon's gone'; it hasn't gone, it's just the cloud that…
Carmel: …have covered it.
Georgie: Yeah, that's why I like, every time, well on Sunday I went out and it was like five in the morning right, and the moon was still out so that's fine cos it was still dark, right.
Elenor: Yeah
Georgie: So when we went out it was like five, four, four o'clock, something like that, like at that time there wouldn't be the moon out would there, but I saw half the moon out and I said, I said to my mum’s friend, I said look Tony,

\textsuperscript{3} http://www.thinking-together.org.uk
there’s the moon already out, and he said oh yeah. Cos in the morning, when we came there was the clouds

Teacher: OK everybody, finish up the one you're talking about.
Elenor: So what do we think?
Georgie: I think it’s false.
Carmel: False.

It is important to note that often dialogue will contain elements of each type of talk, and indeed that there are times when one type of talk might be more appropriate than another. However, higher levels of exploratory talk are associated with the educational gains discussed in the introduction to this chapter. A typical pattern of research in these studies has involved an intervention including the development of classroom ‘ground rules for exploratory talk’, followed by lessons which are specifically designed to encourage high quality dialogic talk which engages learners in reasoning, and explaining their ideas to one another. The typology provides teachers with a simple way to understand the nature of the talk in their own classrooms, and – through encouraging explanation, elaboration, and mutual listening – can provide some clear ways to improve the quality of classroom talk, as will now be outlined further.

**Promoting Effective Dialogue**

**Ground Rules**

In setting up effective dialogue, the prior experiences and expectations of the children should be considered. In order for pupils to engage effectively in whole class and small group dialogue, some rules should be established. These are best
derived from children’s own awareness of what makes a good discussion. Their own experience of group work can help children to suggest the framework which will promote exploratory talk if adhered to by all; active listening, a level of challenge, the giving and asking for of reasons, an inclusive ethos. When introducing students to the class ground rules for exploratory talk teachers can elicit rules that will generate exploratory talk, discuss them in some more depth, and then refer back to them for example using a printed poster or a scrolling heading on the IWB, in subsequent lessons. The interactive whiteboard affords some opportunity to discuss and annotate such ground rules, and then return to them at a later date if it is felt that they should be amended. You may find the resources on the Thinking Together website⁴ (Dawes, 2008a) useful for this purpose. The Thinking Together materials⁵ (Thinking Together Group, n.d.) suggest the following as some basic ground rules for constructive dialogue (the web page itself also provides a student-friendly version):

Our class ground rules for exploratory talk:

- everyone in the group is encouraged to contribute
- contributions are treated with respect
- reasons are asked for
- everyone is prepared to accept challenges
- alternatives are discussed before a decision is taken
- all relevant information is shared
- the group seeks to reach agreement.

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⁴ [http://tinyurl.com/usefulrules1](http://tinyurl.com/usefulrules1)
⁵ [http://tinyurl.com/groundrules1](http://tinyurl.com/groundrules1)
**Exploratory Talk**

These ground rules should help to guide students to avoid unconstructive criticism, while seeking well-founded reasoning in their dialogue. In addition to these ground rules, teachers should think about the types of talk they model, including in their explanations of key ideas. Although far from an exhaustive list, some key words associated with exploratory talk are:

Think  listen  exploratory talk  discuss  agree  
disagree  reason  opinion  because  if  
why  knowledge  information  negotiate  compromise  
decide  joint  team  collaborate  group  question  
active listening  a good point/idea/reason  
changed my mind  learned  I don’t follow  
I don’t understand  please say more/explain/ elaborate  sum up  
present  clear description  articulate  fluent  

(Dawes, 2012)

Encouraging the use of these key words, providing prompts for their use, and ensuring enough time to engage appropriately with constructive dialogue are crucial for developing educationally effective talk skills. In addition, teachers should consider the particular skills and purposes for which students engage in dialogue and their use of Talk for Learning – which should give opportunities to explore:

1. How and why to include all group members in a discussion
2. How to attend, listen, reflect and hold thoughts in mind, taking turns in a discussion
3. How to ask for and give reasons, and to evaluate and discuss the basis for reasons
4. How to elaborate and explain, keeping a focus on the topic under discussion
5. How to summarise key ideas and negotiate an agreement. (Dawes, 20126)

Teachers should also consider the opportunities they provide for such talk, its sequencing, and the use of effective prompts for talk which could include artefacts, and the use of Talking Points.

**Talking Points (adapted from Dawes, 2012)**

Talking Points provide prompts for students to discuss key concepts, areas to explore, or misconceptions. They are designed specifically to encourage debate and talk that puts children in the position of having to justify their ideas, and articulate their thinking. Teachers may find it useful to write Talking Points as part of their sequence of lessons, which flag up the key concepts and potential misconceptions for students to discuss. They are not questions, but rather statements which might be considered ‘true, false, or unsure’ – statements which can be rationally considered. For example, you could consider with some colleagues whether you think the Talking Points below are true, false or neither and then consider how these points relate to the curriculum talking points underneath, and your own teaching.

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6 See also Dawes and Mercer (2008) [http://tinyurl.com/DawesMercer](http://tinyurl.com/DawesMercer)
Professional Development Talking Points

- Group work should finish in one lesson.
- Groups should be formed with the same students every time.
- Group work should always promote competition amongst different groups.

Curriculum Talking Points

- Things stop when they run out of force.
- Things that give out light (like the sun) are always hot.
- Dark is a form of energy that is weaker than light.
- Poor people are lazy.
- Some people, like footballers, get paid too much.
- You cannot throw things away, because there is no such place as ‘away’.

As Dawes (2008b) describes\textsuperscript{7}, Talking Points provide one way to develop the skills highlighted above, and can serve as a useful way to remind children of ideas they have previously encountered. Indeed, particularly on this latter point, the IWB might be a useful way to explore Talking Points, which may be annotated, linked back to previous work, or associated with other artefacts such as diagrams. These might also provide a useful starting point for some higher order thinking in asking students to think of their own Talking Points. In this sort of exercise teachers should consider their usual pedagogic decisions regarding tasks, and group allocation, in relation to – not separation from – their thinking regarding the types and topics of talk they would like the students to engage in.

\textsuperscript{7} See also chapter pre-print on the Thinking Together website http://tinyurl.com/Dawes2008
Effective use of Questioning in Whole Class Dialogue

Resources that stimulate and sustain group talk can be thought of as one part of a dialogic classroom, in which questioning goes beyond a typical IRF exchange of closed questions and factual responses, and towards a classroom which engages in open ended questioning – a dialogic, questioning classroom. Much has been made of the value of high quality questioning, and it is not our intention to rehash these debates here, except to highlight the synergy between those discussions, and our own. In particular, we note that Bloom’s taxonomy is often found to be a useful tool in thinking about one’s questioning. The research presented here provides further support for the claim that teachers should seek to move away from the lowest – closed, factual recall – questions, and towards more advanced questioning. This shift should bear in mind that the aim is not necessarily to ask a question, and receive a concise answer; but rather to engage in a sequence of dialogic, exploratory questioning, which develops understanding through the language it uses – through sustained interthinking.

While the typical IRF sequence is between teacher and student, the dialogic classroom should be more open to student-student, and student-teacher, questioning. This is particularly interesting in the context of the Interactive White Board given the affordances of that tool towards recording, structuring, and linking ideas over time in a mutually supportive environment, while developing understanding of the idea’s relationships, how they support or contest each other, and how they may be built upon. It is to this topic that subsequent chapters turn.
Conclusions: Recognising High Quality Dialogue

Both exploratory talk and dialogic talk:

- Build ideas, constructively, acknowledging what has been said before
- Are not monopolised by individuals (including the teacher) but are inclusive and open for contribution
- Respect the contributions of others
- Involve reasoning together, and sometimes the use of thinking aloud – interthinking - to develop understanding
- Are ‘open-ended’, encouraging hypothesis, questioning, challenge, elaboration and negotiation, rather than ‘closed’ involving the citing of only one ‘correct’ answer
- Can be planned for by teachers who have considered the concepts they are tackling, the time that will be needed, and the skills that students will need to talk constructively.

Group talk – whether whole class or small group – requires time to be effective. Planning should reflect this requirement, and the need for students to understand the sequencing of their learning. ‘Classroom learning …depends on learners having some understanding of how and why tasks are designed and ordered as they are…. Dialogue is the medium: dialogue about activity that has yet to start, that is on-going, and that has been brought to a close.” (Blanchard, 2008, p. 145).

For students to fully engage in dialogue, teachers should consider the sequence of concepts they are tackling, and the potential misconceptions that learners might
encounter. The use of Talking Points and other Talk for Learning strategies in a mutually supportive environment that makes explicit and respects the ground rules for exploratory talk is crucial if every pupil is to benefit from dialogue.

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