

Talk, Thinking and English Teaching

Neil Mercer

Faculty of Education



Professor Neil Mercer - Faculty of Education, University of Cambridge
184, Hills Road Cambridge CB2 8PQ
Tel+44 (0) 1223 767592 Email: nmm31@cam.ac.uk

Home page: <http://www.educ.cam.ac.uk/people/staff/mercер/>

What we know from research on talk, thinking and learning

About children:

Talk – of the right quality – promotes the development of children’s reasoning, conceptual understanding and reading comprehension.

Many children do not get a rich enough experience of spoken language outside school for this development to be assured.

Children do not just need experience of speaking and listening in school, they need to be expressly taught the relevant functional skills: how to use talk to construct arguments, jointly solve problems and comprehend texts.

Children learn most from talk in class when:

- the teacher develops children’s reflective awareness of how to talk and work together;
- the teacher encourages them to express tentative ideas;
- the teacher ‘models’ good talk skills in whole class discussions;
- the teacher ‘scaffolds’ group work but mainly stays out of it;
- group work involves tasks that really require children to ‘think together’.

About teachers:

Teachers are very aware that some children lack experience and skills in using talk for thinking.

However, most teachers do not expressly teach children to become better at using talk for reasoning, discussing and solving problems.

If they ‘teach talk’, English teachers tend to focus on developing good ‘presentational talk’, not good ‘exploratory talk’.

There are some outstanding examples of good practice in helping children develop their talk skills, which can inform training.

Teachers' dialogue with students

What is teacher-led talk usually like?

It is still largely dominated by teachers' closed questions and students' brief attempts at 'right answers'.

Why has the quality of classroom talk not improved?

Most teachers do not have an insightful understanding of how they use talk, or how they could use it more effectively.

Teachers feel that extending discussion and incorporating students' views conflicts with maintaining pace and delivering the curriculum.

Student teachers are rarely trained in effective strategies for using dialogue.

Would it make a difference if the quality of talk did change?

Yes. Research evidence has shown that teachers who are aware of the importance of talk for learning, and so use certain strategies, get better results.

Are interactive whiteboards good for promoting useful dialogue?

Yes, if linked to effective talk management strategies. They can allow a skilled teacher to provide a lively, multimodal stimulus for talk very easily. IWBs also make it easy for a teacher to incorporate students' work into whole class discussions, and to link activities through time in a way that benefits whole class activity and individual learning.

No, if only used to present material for passive consumption, or if the planned IWB sequence of material is allowed to determine and dominate the lesson.

On the whole, we have observed that ineffective IWB practice is not caused by poor ICT skills, but rather by poor teaching skills.

IWBs can be a useful tool for a group of children working together – but only if they have previously developed the appropriate discussion skills.

Classroom talk about literary texts

Characteristics not associated with good learning outcomes

Teachers merely check students' comprehension of a text, often requiring only yes/no answers, and leave little room for students to say how they make sense of it.

Teachers' questions simply require students to finish an incomplete sentence about the text.

Teachers do not link the students' own ideas to the text.

Teachers offer only one authoritative, definitive reading of a text.

Texts are only examined piecemeal, with little appreciation of their overall message and emotional impact.

Characteristics associated with good learning outcomes

Teachers ask open questions about texts and accept a variety of answers.

Teachers teach *how to read* rather than teaching a text.

Teachers encourage students to put the main idea into their own words.

Teachers regularly reformulate and summarise what students say in the appropriate discourse.

Teachers press the students to elaborate their ideas, e.g. 'How did you know that?'

Teachers encourage thinking by asking 'Why do you think that?'

Teachers sometimes ask the same student a series of progressively more challenging questions or prompts (while the class listens).

Teachers ask students to respond to other students' views.

Whole class discussion: Example 1

Teacher: OK. Looking at the text now I want you please to tell me what tense the first paragraph is, in what tense the first paragraph is in.

Girl: The past tense.

Teacher: Yes it's in the past tense. How do you know it's in the past tense?

Girl: Because it says August 1990.

Teacher: You know by the date it's in the past tense, but you know by something else you know, you know by the doing words in the text that change. What's a doing word? What do we call a doing word David?

David: A verb.

Teacher: A verb good. Will you give me one verb please out of this first paragraph. Find one verb in this paragraph. Stephen?

Stephen: Rescued.

Teacher: Rescued, excellent, excellent and that's in the past tense.

(From Hardman, 2007)

Whole class discussion: Example 2

Teacher: Those of you that think he should not have changed his name, I'd like to hear your reasons, some of your reasons. Matthew?

Matthew: One reason is because Chang is part of his history, his life, his um culture, like if, he, just 'cause he changed schools he didn't have to change his name, and even if they're all American, he lives in a Chinese part of town, and uh, it's his culture, all behind him, what, he does Chinese ceremonies and stuff, and um, he just shouldn't have changed his name, 'cause all his culture and stuff.

Mandy: I don't agree with Matthew, because I thought it would be kinda neat to change your name. 'Cause, um, if you kinda get, your name kinda gets old so you'd probably want to change it for a while.

Teacher: Do you think that's the reason?

Mandy: Well, that's not why he changed his name, but, I thought that'd be neat, to change your name.... And also, you want to be the same as the people, all the rest of the people around you. You want to have, you want to have it, a name that's common, around the other people.

(From Chinn et al., 2001)

Children's speaking and listening in groups

What is collaborative talk amongst students normally like?

There is usually a lot of **Disputational talk** in which the atmosphere is competitive rather than co-operative. **Cumulative talk** is also quite common, in which everyone simply accepts and agrees with what other people say.

There is usually not much **Exploratory talk**, in which everyone listens and contributes, opinions are backed up by reasons, there is a sense of shared purpose and the group seeks agreement for joint decisions. Research showed this to be the case nearly twenty years ago; but there is no good reason to believe that the situation has improved great deal.

Why is there not more exploratory talk in classrooms?

Many children have little or no experience of this kind of reasoned discussion outside school. Yet teachers assume that when children are asked to work and talk together, they know how to do so – and so they do not teach children how to do it.

Can the amount of exploratory talk be increased?

Yes, and we know how teachers can achieve this.

Would it make a difference if there was more exploratory talk?

Yes: research has shown that, when used in well-designed collaborative activities, this kind of talk:

- improves the quality of classroom interaction;
- helps students become more independent learners;
- improves the quality of students' argumentation and reasoning;
- improves reading comprehension;
- improves the quality of student writing;
- improves understanding in science and maths;
- develops functional life skills in communicating and carrying out team-based activity.

(‘Exploratory talk’ is Douglas Barnes’ term, commonly used in the UK (Mercer & Hodgkinson, 2007). ‘Accountable talk’ (Wolf et al.) and ‘Collaborative reasoning’ (Anderson et al.) are used by American researchers.)

Two ways of setting up group work in Year 6

Example 1

Teacher: Right. Don't talk.

(Teacher is at her desk preparing to start the lesson. She drops a paper.)

Teacher: Can you pick it up Sylvia and Gina? That will be so helpful, instead of just sitting there and going 'yeah right'. Whose mess is all that? Get it into a neat pile, and two, there should be Helen, a box of compasses in the bottom cupboard, can you get them out for me please? Right this table, Fran's table can we straighten up and move down a bit? This table can to the right a bit.

(Children move desks)

Teacher: OK, right. Books away please, let's have a look at you today.

Steven we're going to be doing lots of talking today, but we need to be talking about the right things. Everything away. Come on it's a nice sunny day, and we've got stuff to do. OK.

Example 2

Teacher: You all have to co-operate, so it's a group responsibility for completing the task. It's not up to one person, it is a group responsibility. What about if you can't make your mind up? If two people, if things aren't quite going, going as they should be?

Tom: Write down both ideas.

Teacher: Write down both ideas, if that's part of the problem. And if you've got a real problem?

Katie: You could vote.

Teacher: You could vote, good way of sorting it out. You still might want to write down this is the majority. Anything else we could do, Alvie?

Alvie: Explain why you think your answer is right.

Teacher: Right explain, take your time to - don't just say well I think this.

Tom: Ask 'Why?'

Teacher: Which is a word you guys often use.

Examples of group talk, before and after students have learned about exploratory talk

A Year 8 group compare public service adverts about breaking speed limits - before

- Joseph: I think this one's (*inaudible*).
Sofia: Yeah. It says like to protect the children and this one doesn't say anything like that.
Joseph: Mm.
Julian: Um, well this one is an argument about it could be a huge accident with cars but this one's protect the children and houses, so I reckon this one.
Sofia: Yeah.
Joseph: I think this one.
Sofia: Yeah.

The same group - after

- Joseph: I think the Daily News article is more persuasive because it talks about, um (*pause*)
Sofia: Children.
Joseph: Yeah, children getting run over, not people in general.
Julian: Yeah, people are more receptive to like things like that I think.
Sofia: Yeah – because they've got more chance of getting hit because they're not as aware as adults.
Joseph: I do think this one's good though because it actually has quotes from people like this Inspector Jones.
Jonathan: Yeah rather than this one's kind of question and answer. It's just like, it's like, well, not really...
Jeremy: It's like telling you what to do. This [other] one's more persuasive and this one's *telling* you - but I still think this one's more...
Jonathan: Yeah the *idea* of this one is more persuasive but I think the way ...erm...the motorway one *reads* is much more persuasive.

Some implications of research findings for...

...English curriculum policy and teacher guidance

Teachers need to realize that talk is not just part of English/Speaking and Listening – its development underpins children's achievement throughout the curriculum.

In English, it is not only 'presentational talk' that needs to be taught, but also 'exploratory talk'. There needs to be a more explicit emphasis on teacher modelling and direct teaching of talk for thinking.

Children should learn more about the links between talking and thinking, and become more reflectively aware of how they use talk to get things done.

The value of guided discussion (whole class and group-based) for improving reading comprehension should be emphasised.

...teacher training:

Initial and continuing training needs to help teachers to:

- gain a better, more reflective understanding of how they use talk, and of its cognitive and educational functions for children;
- recognize that they can, and should, *teach* children how to use talk for learning and problem solving;
- recognize that they are responsible for the 'talk culture' of their classrooms;
- develop ways of guiding and modelling talk for their students;
- achieve a suitable balance between 'authoritative' and 'dialogic' talk in whole class sessions
- design suitable activities for group-based talk;
- use informal methods for assessing and monitoring children's talk.

There is no research evidence to persuade us that all children, in the crucial years of their development, naturally encounter all the language genres that they might need for taking responsible control over their own lives: but there is evidence to the contrary. Good teaching can make a world of difference to children's futures.

(Mercer & Littleton, 2007)

Bibliography

Research site: <http://www.thinking-together.org.uk>

- Anderson, R.C., Chinn, C., Waggoner, M. and Nguyen, K. (1998) 'Intellectually-stimulating story discussions', in J. Osborn and F. Lehr (eds.) *Literacy for All: Issues in Teaching and Learning*. New York: Guildford Press.
- Chinn, C, Anderson, R., Waggoner, M. (2001) Patterns of discourse in two kinds of literature discussion. *Reading Research Quarterly*, 36, 4, 378-411.
- Dawes, L. (2008) *The Essential Speaking and Listening: Talk for learning at KS2*. London: Routledge.
- Hardman, F. (2007) Teachers' use of feedback in whole-class and group-based talk. In Mercer, and Hodgkinson (eds) (2008) *Exploring Talk in Schools*. London: Sage.
- Fisher, R. and Larkin, S. (2008) 'Pedagogy or ideological struggle? An examination of pupils' and teachers' expectations for talk in the classroom'. *Language and Education*, 22 (1), 1-16.
- Galton, M. (2007) *Learning and Teaching in the Primary Classroom*. London: Sage
- Hart, B. and Risley, T.R. (1995) *Meaningful Differences In The Everyday Experience Of Young American Children*. New York: Brookes.
- Horowitz, R. (2008) (Ed.) *Talking Texts: How Speech and Writing Interact in School Learning*. Mahwah, NJ: Lawrence Erlbaum
- Howe, C. and McWilliam, D. (2006) 'Opposition in social interaction between children: Why intellectual benefits do not mean social costs', *Social Development* 15: 205-231.
- Mercer, N. and Littleton, K. (2007) *Dialogue and the Development of Children's Thinking: A Sociocultural Approach*. London: Routledge.
- Mercer, N. and Hodgkinson, S. (eds) (2008) *Exploring Talk in Schools*. London: Sage.
- Smith, F. Hardman, F; Wall, K. and Mroz, M. (2004) 'Interactive whole class teaching in the national literacy and numeracy strategies'. *British Educational Research Journal*, 30(3), 395-411.
- Wolf, M. K., Crosson, A. C., & Resnick, L. B. (2005) How classroom talk supports reading comprehension. *Reading Psychology*, 26, 27-53.