



Dialogic Teaching and Learning

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Schools focus primarily on teaching our children to read, write and understand mathematics. These things are readily assessed so have become indicators of both school effectiveness and the child's aptitude and diligence. However, we argue that much curriculum learning depends on the child's oral language skills, and, more specifically, on their understanding of how to use talk to think and learn with others. First, we discuss the profound influence of spoken language skills on the child's uptake of the education they are offered. The relevant oral skills are rarely taught directly, even though we know how to do so. We go on to describe some strategies which teachers have used to enable every child to take part in effective learning discussions with their peers. We also show how the teaching of oracy skills can readily be integrated into classroom practice.

What is oracy and why must it be taught?

The term oracy refers to 'the ability to use the oral skills of speaking and listening' (Wilkinson, 1965, p. 13). The ability to both express ourselves effectively through spoken language in a variety of situations and to attend to and understand others in those situations is not innate. Though young children develop the ability to use language in most home environments, it is clear that the amount and quality (of the talk) young children experience at home is one of the best predictors of their eventual academic attainment (Hart & Risley, 1995; Roy, Chiatt & Dodd, 2014). Further,

neuroscience research now suggests that 'mothers or carers who have an "elaborative" conversational style have children with more organised and detailed memories...' (Goswami & Bryant, 2007, p. 8). So, the quality of language at home is vitally important; and as children move into environments beyond the home, their ability to use language purposefully in a variety of contexts is so much more readily acquired if sensitively taught.

Being taught how to use talk in effective ways is, in our view, the right of every child. Some children may learn to speak and listen in supportive environments and may readily develop as confident and articulate speakers; others may find themselves in environments where little help is offered to them, and in which invitations to contribute orally are few and far between. Education in school can help to redress this inequality. The need to teach oracy is essential if all children are to have access to the powerful tool that is spoken language.

It is the talk skills on which reading rests that are the real key skill, and so every child should be taught to use talk in the ways that will facilitate their reading, writing and curriculum learning.

Many of our goals for education are future-oriented; that is, we develop children's thinking in a range of curriculum areas so that they become knowledgeable about their culture and thus able to take their place in society and to make their unique contribution. But the direct teaching of oracy enables a child's understanding of their experiences *now*, in their daily circumstances; oracy skills shape the child's present. The articulate child can comprehend encounters and reap educational rewards from their school experience, whilst a deficit in oracy skills has a cumulatively negative impact on the child's life in and out of school. We need to teach children the skills and purposes of oral language and to help them acquire a wide vocabulary. Every word or phrase heard in its oral context is a resource that the child can internalise to shape their own thinking. Newly learned language helps a child to make sense of their environment, to understand the experiences they are constantly faced with, and to communicate effectively with the people around them. Oracy helps children to learn generally, and the contribution to reading and writing is specific, since 'every gain in oral speech, in knowledge and in vocabulary, [...] that children make is ultimately a gain in reading comprehension' (Hirsch, 2006).

Parents rightly expect that teachers will ensure that their child learns to read, with reading regarded as the key skill which unlocks treasure troves of learning. But unless the child has had a chance to talk with others and to hear a range of oral language, the task of learning to read is terribly difficult. Reading involves turning the patterns of written letters back into speech sounds. It is the talk skills on which reading rests that are the real key skill, and so every child should be taught to use talk in the ways that will facilitate their reading, writing and curriculum learning.

We cannot assume that all children will simply accumulate essential talk skills. We do not make this assumption about any other crucial aspect of learning – we teach.

The teaching of talk skills is not particularly common in schools, but when it does happen, it can have far-reaching beneficial consequences for learners. These skills may be thought of as combining elements of the physical, linguistic, cognitive and social domains to suit the circumstances in which a child, or an adult, might find themselves (Mercer, Warwick & Ahmed, 2017¹). Thus, a child who has been taught to be confident in presentational talk might be skilled in gauging the pace and fluency of their speech, its tonal variation, gesture and posture, voice projection and so on. A child who has been taught to interact well in groups would be skilled in seeking information, building on the views of others, listening attentively, justifying their views and so on. So, a child taught oracy skills can draw on them to suit the situation in which they find themselves.

The answer to the question 'Why teach oracy in school?' is that there is an immediate need. Nearly everything in the child's development depends on oracy. We cannot assume that all children will simply accumulate essential talk skills. We do not make this assumption about any other crucial aspect of learning – we teach.²

Oracy and dialogue: exploratory talk and ground rules for talk

One substantial element in the teaching of oracy, and the one that we focus on in the rest of this article, is how learners come to develop the skills of dialogue; these might be thought of a subset of broader oracy skills. The effect of learning how to be 'dialogic' in classrooms, usually when working in pairs or small groups, is that learners become aware of the differing perspectives of others, able to probe their views sensitively and able to express and justify their own ideas clearly. The ultimate purpose is that people should be able to genuinely co-construct knowledge with others (Littleton & Mercer, 2013), an ability that employers say is desperately needed in the 21st-century workplace. Developing dialogue requires that learners experience the sharing and evaluation of ideas. They recognise the requirement to build ideas collectively, reason, provide justifications and elaborations and employ evidence to support arguments. Oral language activities can seem difficult to organise

in classrooms, especially if unsupported by school management; however, existing research indicating the positive link between dialogic classroom approaches and curriculum attainment, has been given a recent boost by two major studies by the Universities of Cambridge and York in the United Kingdom (UK).³

Exploratory Talk is very valuable in classrooms because of the way it helps children to reason aloud, clarifying their own thinking by speaking and hearing a range of other points of view.

In order to develop children's capacity to use spoken language for learning (that is, to involve them in an educational dialogue) we argue that they need to be taught how to take part in Exploratory Talk – an educationally effective set of discussion skills. In Exploratory Talk all members of a group actively participate, showing respect for one another and actively listening. Everyone's viewpoint is considered, and ideas and opinions are justified with reasons as children engage critically but constructively with each other's ideas. They invite one another to contribute, asking for explanation, reasons and elaboration. They negotiate with one another and continue the discussion until their group can agree on a joint decision. Exploratory Talk is very valuable in classrooms because of the way it helps children to reason aloud, clarifying their own thinking by speaking and hearing a range of other points of view. In such talk, listening to one another stimulates children both to think and to offer their own ideas aloud, in speech; a group talking can thus think more deeply, more laterally and more creatively than any one of its participant children could alone. Such a chance to talk about things thoroughly aids concept formation and creates memories which build into knowledge and understanding (Barnes, 2008; Mercer & Littleton, 2007).

In the example below, 'Open your Eyes', the eight-year-old children have had lessons in talk skills which enable them to maintain a discussion that supports learning. This may not be perfect Exploratory Talk – group talk is rarely that – but the children attend to one another, Bryn's question about the pupil is answered, reasons are given, and the group works to reach a negotiated agreement (at this point factually inaccurate), which they can later discuss with their class. This chance to rehearse ideas and to reach the limits of understanding fosters curiosity and an openness to understand the more robust reasons on which scientific 'facts' are based. The children know that their ideas are tentative, but are willing to express them anyway. Talk in this example helps them to perceive what they do not know and helps their teacher to discern what must be taught.

Open your eyes

A group of children discuss whether or not it is true that the pupil in the eye opens wider in the dark.

Alex: (*reading*) 'The pupil of the eye opens wide in the dark.' True or false. Hmm.

Bryn: Yes –

Alex: Opens wide (*using hands to show opening*) like, what opens wide, a door, your mouth,

Bryn: The pupil, what, what is –

Alex: The black round bit. That bit (*points to B's eyes*)

Bryn: Hey – mind out –

Alex: Shh, and so when it's dark it opens it says here, opens

Samia: But look, I think untrue, because your eyelids open, not your eye

Bryn: Yes (*blinks rapidly a few times*)

Samia: And anyway you open your eyes in the day, not in the dark

Bryn: Yes

Samia: You shut them to sleep at night and open them in the morning.

Alex: Hmmm. The pupil. How can it open? (*Group is quiet for a few moments*)

Samia: False then. We say.

Unless every child in a class or group has the skills and awareness to join in, Exploratory Talk tends



not to happen in classes or groups. There needs to be a groundswell of understanding within the group that *talk is work*, and that it is best to use the most effective talk tools for the discussion task in hand.

Teaching Exploratory Talk

The skills of Exploratory Talk are readily teachable for children at any age and can be taught through curriculum subjects (Dawes, 2000, 2010; Dawes & Sams, 2004)⁴.

The key skills of Exploratory Talk are:

1. An awareness that talk and thinking are linked
2. Knowledge of active listening and its link to thinking
3. A commitment to respect others and their ideas
4. Understanding how to ask for and give reasons
5. Understanding how to explain, elaborate and chain ideas
6. Being able to negotiate and sum up a line of thinking.

Curriculum subjects and topics provide ideal contexts for talk. Pairing the Learning Intentions for curriculum learning with Learning Intentions for talk skills means that teaching oracy is not adding another subject into an already crowded curriculum, but enhancing the child's experience of all learning offered in class. Here is a brief example of a science topic for children aged 6–7 years that illustrates these connections:

Learning Intention for Science: 'Some materials are attracted to magnets'

Learning Intention for Talk: 'To give a reason using "because" in your answer'

During instruction the teacher models vocabulary (whilst demonstrating the science) and the children are shown how and why to ask for reasons, using the word 'because' as a key talk tool. Children working together then look at materials and predict which will be attracted to the magnet, justifying ideas with a reason; every child is asked to do so by the members of their group. During the

plenary whole-class session, children are asked to talk about their science findings. Crucially, they are also asked to share their experience of reasoning. The teacher asks such questions as:

Who gave you a reason for their idea using 'because'?

Was it an interesting reason? Did you agree with it or challenge it?

Who heard a reason that helped you to learn or change your mind?

Through this ongoing process of direct instruction, modelling of good practice, chances to use the new skill and an opportunity to talk about its value in learning, the child accumulates Exploratory Talk skills.

It is important to build a classroom ethos that supports such oral activity. Children need a personal understanding of their use of talk for learning, rather than feeling that Exploratory Talk has been imposed on them. Central to this is the class generation of Ground Rules for Talk.

Ground Rules for Talk

This is a set of rules for group work generated by a class of children who have had some tuition in thinking about talk skills. The rules, if utilised consistently, help to generate Exploratory Talk. For example, here is a set of Ground Rules for Talk, which the exemplar class learning about magnets simply called 'Our Talk Rules':

Our Talk Rules

We will all join in the discussion
We will invite each other to talk
We will listen carefully and think about what we hear
We will ask, 'What do you think?' and 'Why do you think that?'
We will share what we know and don't know
We will keep thinking together to come to our decision

Unless such Ground Rules for Talk are openly developed, agreed and shared within a class, each child is restricted to their own conception of the nature and purpose of group talk. Widely different assumptions about what it means to talk and work together can generate misunderstanding, disengagement and discord with the result that group work becomes unproductive and even frustrating for many children. Instead the Ground Rules which govern talk can be made explicit so that they can be examined, taught, learned and put to work. In this way everyone has the chance to make a useful contribution to joint activity. The rules help children to take part in the powerful experience of Exploratory Talk. Immersed in such talk, a child can achieve more by working in their group than they could by working alone (Wegerif et al., 2017). The generation and use of Ground Rules for Talk contribute significantly to *dialogic teaching and learning*, which can be seen as:

- ▶ Collective: teachers and students work on learning tasks together
- ▶ Reciprocal: everyone listens to each other's point of view
- ▶ Supportive: students respect each other's ideas and know that their task is to help one another understand
- ▶ Cumulative: the discussion gradually builds on what is said, links are made, and lines of thinking are evident
- ▶ Purposeful: the teacher's planning ensures that the discussion is focused on learning goals, including those for talk

(Adapted from Alexander, 2006: 28)

Knowing how to move between authoritative and dialogic teaching is an aspect of an effective teacher's professional expertise.

Once established, Ground Rules for Talk can be used for discussion across the curriculum. A clear structure for inclusive discussion has been found to benefit joint writing or art projects, group work at the computer, creative work such

as Science, Design and Technology activities, learning in mathematics and other activities where problem-solving is needed. Interestingly, children who have shared Ground Rules for Talk are also more able to sort out social problems, such as playground disputes (Mercer et al., 2004).

Dialogic teaching

Thinking about talk between teachers and learners, it is evident that not all talk in a classroom can be dialogic. Teachers use talk for many purposes, including to convey the 'authoritative story' of a subject (Mortimer & Scott, 2003), for behaviour management or direct instruction. Knowing how to move between authoritative and dialogic teaching is an aspect of an effective teacher's professional expertise. 'The bottom line for instruction is that the quality of student learning is closely linked to the quality of classroom talk' (Nystrand, 1997, p. 29); how teachers talk with children is of vital importance.

With this in mind, a close consideration of the role of the teacher in dialogic teaching is essential. Dialogic teaching sessions, or lesson phases (since a whole lesson is often not entirely dialogic), can be thought of as oral teaching episodes which create new thinking and new questions. Such episodes may vary in length and intensity. It is the task of the teacher to generate the special combination of conditions in which dialogic teaching takes place.

In the example below, 'Shape of Wires', a group of children talks to their teacher about their observations when making simple circuits. Note that the teacher does not close down the discussion but supports the children as they give their evidence for their (incorrect) idea that wires do not become hot because they are straight. Note also how the teacher emphasises the idea of parallel circuits during the dialogue.

Shape of Wires

The ten-year-old children are using wires, bulbs and switches to look at the difference between series and parallel circuits. They have noticed that bulbs become hot but the wires do not.

Teacher: You like this one?

Sam: Yes we do, yes. It's different from last week, somehow we clipped all these wires together and they all work.

Teacher: So you've got a switch in parallel, the switch is in parallel.

(Children make the light bulbs light up on the circuit)

Flo: Wires must go through the whole building but if, if they are straight, so they don't get hot.

Teacher: Really? So that little wire inside the bulb, conducting, is coiled up and that gets really hot, doesn't it?

Sam: Yes.

Teacher: And your red wires don't. So, what's the difference then?

Elise: Electricity isn't going round, it's just travelling straight through it.

Sam: Fast and straight. Like a lightning conductor.

Teacher: We need to think about that. The shape of wires.

Having identified this misconception from the talk, the teacher can collect ideas from all the working groups in the class before taking the chance to provide more robust information about resistance in wires. Indeed, the shape of the wires does matter, but it is their cross-sectional area that determines whether they will become hot, rather than their 'straightness'. By asking genuine questions, the teacher has established a productive dialogue with the children which will become the basis for subsequent authoritative teaching.

Dialogic teaching involves using talk to find out what children think, to engage with their developing ideas and to help them talk through any misunderstandings. This is simple enough with an individual child, but in a class it requires careful organisation. However, the value of taking part in

dialogue often increases with the number of children present (up to a point!), with larger groups offering a range of points of view, a greater variety of understandings and a wider audience.

Dialogic teaching contrasts with conventional teacher questioning, which often focuses on eliciting specific items of information, or checking for individual understanding or knowledge. Instead, the teacher asks genuine questions and encourages children to take extended turns as they talk through a range of ideas and clarify what they understand, and what they don't. Dialogue may be based on previous fact-finding or may be the basis for future research and enquiry by the class.

The teacher chains or links contributions so that children become able to perceive the bigger picture. During dialogue, points are taken up, examined and questioned. Ideas can be tentative, hypothetical or in need of some modification. Importantly, the teacher needs to use strategies to encourage children to share and clarify their own thinking (for example, by extending wait time after asking a question); to help them to listen attentively (for example, by asking children to 'revoice' a contribution or simply repeat it); to help them to deepen their reasoning (for example, by asking for some evidence, or for a justification); and to help them to think with others (for example, by asking who agrees or disagrees, and why.)⁵

For a teacher, this insight into thinking is invaluable in formative assessment and for sensitive planning which can address the individual's needs as they are revealed by sharing ideas aloud.

Talk takes time, which necessitates planning. A teacher may move between episodes of dialogic and didactic/authoritative teaching to suit the needs of the class. But move they must; a teacher's range of professional styles should include the

capacity to plan and carry out dialogic sessions. In summary, during dialogic teaching:

- ▶ Teachers' questions encourage thoughtful answers.
- ▶ Children's extended contributions stimulate further questions.
- ▶ The teacher helps to chain contributions together.
- ▶ Those who are not speaking are actively listening and thinking.
- ▶ Children are aware of the importance of the discussion.
- ▶ Children have the confidence to offer ideas, which may be contradicted.

The advantage of dialogic teaching is that teachers and children think together, sharing ideas and considering a variety of ideas, raising new questions and taking time to decide what to work on next. For a teacher, this insight into thinking is invaluable in formative assessment and for sensitive planning which can address the individual's needs as they are revealed by sharing ideas aloud. Episodes of dialogic teaching ensure that every child is fully and productively involved in their own education and that of their classmates. For teachers, dialogic teaching is a clear and robust pedagogical strategy which enables the most profoundly satisfying teaching and learning for thinking and understanding.

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Notes

- 1 See <http://www.educ.cam.ac.uk/research/projects/oracytoolkit/>
- 2 These arguments, and linked discussions, can be found in the blogs posted at <http://oracycambridge.org/>
- 3 www.educ.cam.ac.uk/research/projects/classroomdialogue
- 4 <http://thinkingtogether.educ.cam.ac.uk/> provides a range of classroom resources for teachers, and detailed information on effective teacher talk, on making group work effective and on teaching lessons for talk skills.
- 5 See https://inquiryproject.terc.edu/prof_dev/Goals_and_Moves.cfm.html