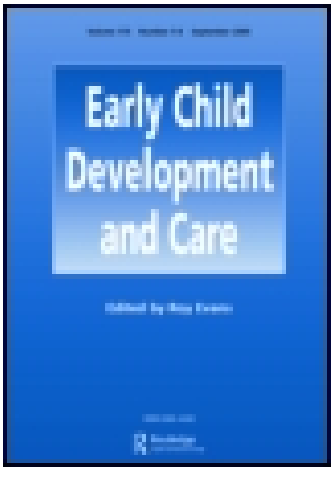
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Dialogic teaching: developing thinking and metacognition through philosophical discussion

Robert Fisher [a]
[a] Brunel University , Uxbridge, UK
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Dialogic teaching: developing thinking and metacognition through philosophical discussion

Robert Fisher*
Brunel University, Uxbridge, UK

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This paper explores the important relationship between dialogue and cognitive and metacognitive development in young children. The characteristics of dialogue are identified and a case is presented for involving young children in talking to think through philosophical discussion. The paper provides a theoretical context for kinds of metacognitive development that it defines as 'me-cognition'. It draws on classroom research, including the Philosophy in Primary Schools research project, to describe how the theory and practice of dialogue can be used to develop cognition and 'me-cognition' in young children. It concludes that dialogic enquiry is a primary thinking skill from which other skills follow, that Philosophy for Children approaches provide effective methods for dialogic teaching that can support and develop children's capacities for cognition and metacognition.

Keywords: *Dialogue; Dialogic teaching; Thinking; Metacognition; Philosophy for children*

Why dialogue is important

'Why is speaking and listening important?' I asked a group of nine year olds during my recent Philosophy in Primary Schools research project. 'It helps you to think', said Andrea. 'It helps to build your brain', said Dan. 'You learn more', said Pat. They are surely right. Human intelligence is primarily developed through speaking and listening. The quality of our lives depends on the quality of our thinking and on our ability to communicate and discuss what we think with others. Talk is intrinsic to literacy and to our ability to form relationships with others. It is the foundation of both verbal and emotional intelligence.

*7 Maze Road, Kew, Surrey, TW9 3DA. Email: rtfisher@btconnect.ca

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Dialogue is important because it is the primary means for developing intelligence in the human species. It is through the capacity to verbalize that consciousness and understanding develop. Tomasello *et al.* claim that consciousness originates in 'a species-unique motivation to share emotions, experience, and activities with other persons' (Tomasello *et al.*, 2004). They refer to this as a 'dialogic' capacity, and claim that it is more fundamental than language or tool use. It is through dialogue that we develop consciousness, learn control over internal mental processes and develop conceptual tools for thinking.

Bakhtin claims that the basis of being human (or 'human being') is not self-identity, but the opening of dialogue, an opening that always implies the simultaneous inter-animation of more than one voice (Sidorkin, 1999). As Vygotsky (1978) noted, 'all the higher mental functions originate as actual relations between human individuals'. We internalize those voices and develop the mental functions that we learn through dialogue with others. Hobson (2002) argues that both a child's self-awareness and ability to think creatively are internalized from the dialogic bond formed between mother (or other primary caregiver) and child. These dialogues begin pre-verbally, beginning with 'peek-a-boo' games in the cradle, and open up 'mental space', and a dialogic space of multiple perspectives through which things become thinkable for the first time. A child's consciousness and repertoire of concepts is expanded through talk with significant others such as parents and peers. Research shows that the opportunities for speaking and listening that children experience before they enter school vary greatly in terms of potency and quality. Children's early experiences of dialogue clearly put some children at a disadvantage and empower the learning potential of others (Hart & Risley, 1996).

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Dialogic teaching: what classroom research says

In school the teacher is the primary mediator of children's cognition and metacognitive awareness, supported by other adults. There children learn to see things from at least two perspectives at once: their own point of view and that of their teacher or other adults. Bakhtin points out that people do not take words from a dictionary, but from the mouths of other speakers, and so they carry with them the voices of those who have used them before. For him dialogic talk consists of an 'inter-animation' or 'inter-illumination' of voices (Bakhtin, 1981). The world for us, and the process of making meaning, is essentially dialogic. Meaning is created through dialogue; it has no fixed or stable identity, but is the product of different voices. Children need to be exposed to and involved in enquiry with different voices, ideas and perspectives, for example, through responding to three equally important questions:

- 'What do I say?'
- 'What do you say?'
- 'What do other people say?'

Research on children's experience in schools, in the UK, shows that the quality of classroom talk has the power to enable or inhibit cognition and learning (Alexander, 2006). The forms of instruction and learning conversations that stimulate thinking can be described as 'dialogic'. Dialogic teaching refers therefore to the kinds of verbal interaction that provide cognitive stimulus, expand consciousness and enlarge the dialogic space for thinking in children's minds.

The concept of 'dialogic teaching' builds upon a long tradition of theoretical and empirical research into the role of talk in learning and teaching. This research has included the work of cognitive and cultural psychologists (Vygotsky, 1978; Bruner, 1996), discourse analysts (Dillon, 1990; Coulthard, 1990, 1992), psycholinguists (Halliday, 1993; Wells, 1999), sociocultural linguists (Barnes, 1995) and philosophers (Bakhtin, 1981, 1986; Lipman, 2003), as well as many classroom researchers (Galton *et al.*, 1980; Alexander, 2000) who have provided influential perspectives on the role of dialogue in learning.

The fruits of this research have not always permeated into classroom practice. Research has found that children's experience of speaking and listening in the classroom is not dialogic and does lead to learning or stimulates cognitive response (Wegerif, 2002). Such research shows that schools and teachers often do not fully exploit the learning potential of talk for learning in the classroom. This, to summarize Alexander (2006), is because they often:

- view talk only as a means for learning and not an aim of learning;
- fail to use talk to cognitively challenge children;
- focus on the social and affective functions of talk rather than the cognitive;
- not plan for sustained and effective group dialogue;
- not teach children the ground rules for effective dialogue;
- rely on written and ignore oral learning tasks and modes of assessment;
- use feedback to praise and support rather than diagnose and inform;
- employ teacher questions but not questions from pupils;
- use closed questions inviting recall, rather than challenging questions inviting speculation;
- not allow children enough time for of thinking, reasoning and enquiry.

Researchers claim that children's talk in group work often lacks cognitive challenge (Mercer, 1995, 2000). Children do not naturally engage in sustained intellectual enquiry. Getting children, individually or in group activities, to speak and listen together, often advocated in curriculum guidance (as in DfES/QCA, 2003) is not enough. Speaking and listening does not necessarily lead to learning. Classroom research shows that children talking together does not often evidence what Habermas (1991) called 'communicative rationality' or cognitive challenge (Fisher 2003, 2005a, 2005b). There is therefore a need to identify the elements of effective dialogue and other kinds of talk used in school if the potential for speaking and listening to promote and accelerate children's learning is to be fully realized.

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Forms of talk

Talk in classrooms can take many forms; these include:

- *instruction*: telling the pupil what to do, and/or imparting information;
- *recitation*: teaching through questions designed to test or stimulate recall;
- *monologue*: one person speaking, without engagement with others;
- *conversation*: talk with others characterized by uncritical sharing, lacking depth and challenge, speaking and listening at a low level of cognitive demand;
- *discussion*: exchanging ideas with others, to share information or solve problems;
- *argument*: where individuals views compete and monologic viewpoints are aired;
- *dialogue*: exploratory talk with others, cooperative enquiry with dialogic space to agree/disagree, challenge, question, appeal to reason and allowing possible self-correction.

Traditional teaching, and many interactions between parents and children, is characterized by the familiar rote-learning routines of instruction and recitation. These are dominated by teacher talk and one-sided discussion is characterised by what Edwards (2005; Edwards & Westgate, 1994) calls 'unequal communicative rights'. Most teachers and parents, though by no means all, extend this repertoire through the use of discussion to share and exchange ideas and dialogue that scaffolds understanding through the use of open questions. All these kinds of talk serve useful purposes and have their place in learning conversations.

In traditional classrooms it is the teacher's voice that is authoritative and persuasive. Wertsch (1991) describes the process of appropriating the voices of others, such as the teacher; by children as a process he calls 'ventriloquation'. This is evidenced, for example, when children try to guess what the teacher wants them to say. However, in dialogic talk we listen to the voices expressed by the child. Dialogic talk challenges children to voice their thoughts. The practice of dialogue is an essential element in their development as future independent learners and active citizens.

Talk is important when it empowers children socially as well as cognitively, and helps them to acquire the capacity to narrate, explain, instruct, ask different kinds of question, listen to and build upon answers, analyse and solve problems, speculate and imagine, discuss, argue, reason, negotiate, explore and evaluate ideas. To do this effectively with others they need to be trained in the skills of dialogue. This means learning to be able and willing to:

- listen to and be receptive to alternative viewpoints;
- ask effective questions;
- think critically and creatively about the issues under review;
- exercise good judgement in what they think and do.

Several research studies have now demonstrated that teaching children how to talk together effectively improves their thinking and learning (see e.g. Mercer, 2000). Such studies show that good talk does not always just happen—it needs to be planned. Good questioning promotes children's understanding and does not merely

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test their recall of information. Such questioning can improve comprehension in reading and writing, as well as in talk. Research shows that the quality of children's talk is greatly enhanced if children are given *time* to think (Fisher, 2005a, 2005b). Thinking time and talking time before an activity, during an activity and after an activity will help extend children's thinking, and provides the oral groundwork for learning. Talk is also a powerful tool for raising the confidence of children, especially those with special needs and those with low self-esteem.

Children enjoy and are stimulated by well-structured oral lessons. But they need cognitive challenge to turn mere talk into talk for thinking and to develop their dialogic skills. One well-grounded approach to introducing young children to dialogic thinking is 'Philosophy for Children'.

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Talk for thinking using 'Philosophy for Children'

The Philosophy in Primary Schools project used a special form of 'talking to think' based on an approach called 'Philosophy for Children'. 'Philosophy for Children' is a programme for teaching thinking developed by Matthew Lipman (Lipman, 1981); it has since been adapted and developed for use in many countries (Fisher, 2003). It is a form of dialogic teaching that emphasizes the development of critical and creative thinking through questioning and dialogue between children and teachers and between children and children. Researchers have reported striking cognitive gains through this approach in the classroom (Trickey & Topping, 2004). 'Philosophy for Children' can help enhance communicative skills, as well as develop habits of intelligent behaviour, through aspects listed as follows:

- *Curious*: asking deep and interesting questions.
- *Collaborative*: engaging in thoughtful discussion.
- *Critical*: giving reasons and evidence.
- *Creative*: generating and building on ideas.
- *Caring*: developing awareness of self and care of others.

Philosophical dialogue develops the kinds of thinking that children may not use in other lessons, including *philosophical intelligence*—the capacity to ask and seek answers to existential questions (Fisher, in press). Philosophy begins in wonder and in the capacity for curiosity. Curiosity is more important than knowledge since it is needed to generate knowledge. Philosophic enquiry develops questioning skills and builds on children's natural curiosity. It also provides a means for children to develop *discussion skills*—the capacity to engage in thoughtful conversations with others. Discussion of complex objects of intellectual enquiry such as stories provides cognitive challenge and enhances *critical thinking* and verbal reasoning—capacity to draw inferences and deductions from all kinds of texts, and helps develop *creative thinking*—the capacity to generate hypotheses and build on the ideas of others. Philosophy with children helps develop *emotional intelligence*—the capacity to be self-aware and caring towards others, providing essential practice in *active citizenship* and participative democracy. It also provides a context for developing 'me-cognition', the beginnings of metacognition.

Being curious: asking open questions

What research on 'Philosophy for Children' (P4C) has shown is that even young children have the capacity to engage in philosophic questioning, like Tom, aged 5, who asked: 'Where does time go when it stops?' Tom may not, of course, fully understand his question, but he is full of curiosity and wonder. This capacity to question lies at the heart of intelligent behaviour. But as he gets older it is likely that Tom will ask fewer questions in school. However, the practice of P4C would help to sustain and develop his ability to question and interrogate the world. It has a well-researched pedagogy called 'community of enquiry' and teaching programmes through which the habits of intelligent behaviour can be developed. These habits will help them face the conceptual problems and conflicts that facethem in an uncertain world. An eight year old expressed the problem we all face:

> The trouble is people are telling you different things, and sometimes your mind tells you to do different things too!

The following are some of the questions raised by a group of seven–eight year olds who had asked if they could discuss God at their next philosophy session in the community of enquiry (Winyard, 2005). The questions reflect the breadth of their vision and imagination:

- Who made God?
- Who is God?
- How was God made? How old is God?
- How did God make the world?
- Why was God made?
- Is God real?
- How did He make us?
- What does Heaven look like?
- Why is God so special?
- Why does God make thunder?
- Why did God make us?
- Why did God make the devil?
- Why does God kill us?
- Why did God make swear-words?

Teaching for thinking requires a community approach to enquiry in the classroom, not one or two voices many voices creating single viewpoints but many voices creating multiple viewpoints within a dialogic space. The community of enquiry is sustained by the use of complex open-ended questions and elaborate explanatory responses—by teachers as well as children. For example, a teacher using a story that includes the theme of truth (such as Aesop's fable of 'Mercury and the Axe'[1]) might prepare a number of open-ended prompt questions to encourage children to discuss the nature of truth. The following presents a list of such questions that have been used in many primary classes.

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Thinking about telling the truth

Key question: What is truth?

1. Do you think this is a true story? Why?
2. What do we mean when we say something is true?
3. What do we call something that is not true? What does 'false' mean?
4. What is a lie?
5. What do we call a story that is not true? What is fiction/a fable/a fairytale?
6. Which character in the story was honest? What does 'honest' mean?
7. Which character in the story was a liar? What does 'liar' mean?
8. Is it better to tell the truth or lies? Why?
9. Have you ever told a lie? Can you say when or why?
10. Is it ever right to tell a lie? Is it ever wrong to tell the truth?

Here is an excerpt from one such classroom discussion, prompted by the teacher using questions like those listed above:

Child 1: Sometimes you say something you think is true. It's not a lie if you think it is true.
Child 2: I disagree with that because you could think something was true and say it was true when it was not true.
Teacher: Can you give an example?
Child 2: Well, if you could say it is raining because you thought it was raining and it was only birds on the roof. You can say something you think is true, although in fact it is not true.
Child 3: You can only tell if something is true if you or somebody sees it with their own eyes and ears. That is why there are many people think things are true, like ghosts or witches, that sort of thing. But you might be wrong, so you have to check it first before you say it's true.
Child 4: It's not true because you say it is, but it might be.

The unique value of 'Philosophy for Children' is that it is the only well-researched thinking approach that focuses specifically on developing questioning and, in particular, the kinds of questioning that enable children to think and act with philosophical intelligence.

Collaborating in thoughtful discussion

Teaching children the skills of dialogue is an end in itself and an essential thinking and communicative skill that provides a foundation for other skills such as creativity, reasoning and metacognition. The keys to success in children solving problems through discussion lies, as with adults, in them learning to listen to each other, responding to the ideas of others and being willing to change their thinking in the light of the thinking of others. These habits move dialogue away from merely 'saying what I think' towards building on the ideas of others in the shared space of the dialogue. Every dialogue creates a space of possibility for shared thinking. But it requires ground rules. These need to be made explicit if children are to internalize them as habits of behaviour when in discussion with others.

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The ground rules for discussion need to be agreed, preferably by the children, with help from the teacher. Research shows how important the agreeing, implementing and reviewing of ground rules is in creating the conditions for successful discussion. One study describes how teaching the ground rules for effective discussion helped children do better at non-verbal reasoning test problems than control classes who had not been taught rules for discussion (Wegerif, 2002). Simply learning how to discuss in reasonable and reflective ways seems to help improve children's reasoning and problem-solving skills.

In the Philosophy in Primary Schools Project the most commonly agreed rules for successful discussion identified by primary children (sometimes differently expressed) were:

- Only one speaks at a time.
- We all listen carefully to others.
- We think before we speak.
- We say what we mean.
- We think about what other people say.
- We give reasons for what we say.
- We can disagree and ask 'why?'.
- We show respect to others.

One teacher did this by listing and discussing with the children all the 'talking' words they could think of, such as 'argument, 'discussion' and 'reason'. The children in groups then discussed and agreed the meaning of each word (with the help of dictionaries and thesauruses). Then they discussed in groups 'the most important rules that people talking in groups should follow' and were asked to come up with no more than six of these. They then discussed as a class the different sets of rules and agreed a final list to display in the classroom.

Each session begins with a review of the ground rules. Children can stop the discussion if they see any ground rules being broken. At the end of the lesson there is a plenary in which the discussion and ground rules are reviewed, with questions such as:

- Did we have a good discussion today?
- What was good about our discussion?
- What could have been better? How?
- What do we need to remember next time?

Being critical and creative

Critical thinking can be summed up as the use of reasoning to draw inferences and make deductions. For young children it means being challenged to give reasons for opinions. Creative dialogue can be summed up as 'playful talk' (Wegerif, 2005), what I have termed 'Menippean dialogue' in classrooms (Fisher, in press), which is being playful with ideas and suggesting divergent possibilities. For young children it means

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applying imagination to their thinking, and trying alternative explanations and ideas. Dialogue as shared enquiry needs to be mediated by the teacher by processes of playful speculation (creative thinking) and by applying criteria of judgement (giving reasons).

What philosophical enquiry offers is a tried and tested strategy for helping children to apply critical and creative reasoning to stories and other texts. The teaching strategy, which is based on whole-class discussion, is called 'community of enquiry'. It is not a new strategy, but one that is gaining popularity, because it works in making children more reflective and critical thinkers (Burgh *et al.*, 2006).

How does it work in the classroom? Ideally the group sits in a circle or horseshoe, the aim being that everyone can see everyone else. The following are typical stages in a lesson; for other descriptions of the stages of a philosophy with children lessons see Haynes (2002), Cleghorn (2002) and Fisher (1996, 1999).

A 'Philosophy for Children' lesson format

Focusing exercise: sharing the learning objectives, reminding the agreed rules, and using a relaxation exercise or thinking game to ensure alert yet relaxed attention.

Sharing a stimulus: presenting a story, poem, picture or other stimulus for thinking.

Thinking time: children think of what is strange, interesting or unusual about the stimulus and share their thoughts with a partner.

Questioning: children ask their own (or partner's) questions which are written on a board, these are discussed, clarified and grouped, then one is chosen to start the enquiry.

Discussion: children are asked to respond, building on one another's ideas, with the teacher probing for reasons, examples and alternative viewpoints.

Plenary: children are asked to summarize what has been said, review the discussion (e.g. using a graphic map), and reflect on what they have learnt.

Children tend to expect to have their questions unequivocally answered by adults, not discussed by other children. They are often not used to having their attention focused on a particular issue for a length of time, to discuss questions in a systematic and sustained way or to consider things from a variety of viewpoints. But if they have a stimulus, for example, a story, then even young children can respond to questions in ways that can be called philosophical. This may mean helping them to move from the concrete and literal aspects of the story to the conceptual and the abstract, moving the discussion from *what* happened in the story and *why* to thinking about *what it means*.

Discussion can be moved to philosophical levels through use of Socratic questions (Fisher, 2003). Socratic questioning means using a series of questions to progressively engage higher levels of thinking—including literal, analytical and conceptual

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levels of thinking. The following are examples of questions that engage these three levels of thinking:

1. *Literal (or factual) questions ask for information*:
   'What is this about?'
   'Can you remember what happened?'
   'What do you have to do?'

2. *Analytic questions call for critical and creative thinking*:
   'What question(s) do you have?'
   'What reasons can you give?'
   'What are the problems/possible solutions here?'

3. *Conceptual questions call for abstract thinking*:

   'What is the key concept (strategy or rule) here and what does it mean?'
   'What criteria are we using to judge this (or test if it is true)?'
   'How might we further investigate this concept (strategy or hypothesis)?'

The following extract of a discussion of the story 'The Monkey and her Baby' (Fisher, 1999) with six–seven year olds shows the teacher trying to move the children's thinking on through a Socratic questioning:

Teacher: Why did the mother think that her baby was best?
Child: Because it was beautiful. She thought it was beautiful.
Child: She thought it was beautiful because she was the mother.
Teacher: What does it mean to be beautiful?
Child: It means someone thinks you are lovely.
Child: You are perfect …
Child: Good to look at.
Teacher: Can you be beautiful even if no one thinks you are lovely?
Child: No. You can't be beautiful if no one thinks you are beautiful.
Child: You can be beautiful inside, you can *feel* beautiful …

Paul, a reluctant reader, aged 8, suddenly sees the point of it all during a philosophical discussion of a story:

> Oh, I get it. We're not supposed to just read the story. We're supposed to think about it.

For him it is a revelation. Although still struggling with the mechanics of reading, he finds he is able to make a personal response, to question, to discuss inferences and meanings using challenging texts during the shared reading session. For John, aged 10, philosophy not only gives him time to think in a serious, structured and sustained way, but also:

> It helps you ask questions. It shows you there can be many answers to one question [and] it makes you think that everything must have a reason.

For Michelle, aged 10, the community of enquiry gives you a chance to self-correct your thinking:

> In philosophy lessons you can say what you really think and sometimes you change your mind.

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P4C is not only about developing thinking and discussion skills through the use of stories, but also about being 'reasonable', which means being more than rational. To be reasonable we need to be mindful of self and others.

Caring: being mindful of self and others

The two sets of dispositions or attitudes which philosophy for children aims to foster are being mindful of oneself and of others. Both derive from the dialogical nature of the process, developing social skills through cooperative activity. Discussion in a community of enquiry requires the group to develop trust and the ability to cooperate, and to respect the views of others. Lipman (2003) calls these aspects 'caring' thinking. Caring thinking involves learning to collaborate with others in a community of enquiry, developing empathy and respect for others. It means being guided by questions such as:

- What do others think?
- Can I understand what they think?
- Can I learn from what they think?

By taking part in a community of enquiry, children develop and strengthen what Goleman calls 'emotional intelligence': studies that show that a youngster's life chances are at least as much affected by emotional intelligence as they are by other aspects of intelligence (Goleman, 1997). Emotional intelligence includes:

- *Self-awareness*: knowing how/what you are feeling and how it impinges on your work, having a realistic awareness of one's abilities.
- *Self-regulation*: handling emotions so they facilitate the task in hand, being conscientious.
- *Resilience*: sustaining motivation, persevering in the face of set-backs, striving to improve.
- *Empathy*: sensing what other people are feeling, and using that information in our dealings with them, being able to have a rapport with a wide range of people.
- *Social skills*: reading social situations, using skills to persuade, lead and negotiate.

Philosophical discussion can develop all these personal qualities. It does so by making thinking relevant to children's personal needs and quest for answers. It is less a curriculum and more a way of life. It has more to do with what the Greeks called *phronesis* (practical wisdom) than it has to do with *tekne* (skills), more to do with the intellectual behaviour than competence. It is to do with the dispositions to behave intelligently when confronted with problems, uncertainties and puzzling questions. It is about persisting on a task, sustaining the enquiry, pursuing the question. It is about encouraging mindfulness and resisting impulsivity, thinking before acting, allowing others their say. It is about listening with understanding and empathy, devoting mental energy to attending to what others say, perceiving other points of view and sensing others' emotions. It is about the metacognitive capacity to know oneself, to be aware of one's own thoughts and feelings and their effects on others.

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The exercise of philosophical enquiry is, like any educative practice, most effective when it is participatory, proactive, communal, collaborative and given over to constructing meanings rather than receiving them. With its emphasis on inclusive, democratic practice philosophy with children provides a powerful means for children to share experience and explore meaning. They can learn to express their views with confidence, to raise doubts and questions, and to challenge the thinking of others. Through engaging in a community of enquiry children learn how to:

- ask their own questions and raise issues for discussion;
- explore and develop their own ideas, views and theories;
- give reasons for what they think and believe;
- explain and argue their point of view with others;
- listen to and consider the views and ideas of others;
- change their ideas in the light of good reasons and evidence.

Dialogue is crucial to its radical democratic role. Children are soaked with written and visual information. They need to be given a voice, a voice to question, to challenge, to construct and deconstruct the meanings around them. As Jason, aged 10, said:

> Everyone is telling you things and not getting you to think things through.

'Philosophy for Children' (P4C) provides a way through which children engage critically with their given world and find a space to think things through. Like other groups in society, such as women, ethnic minorities and the poor, children's views have been marginalized and their claims to knowledge and reason devalued. It opens up a space for thinking, for sharing beliefs and for creating knowledge, as in the following excerpt from a discussion by a group of nine year olds on whether it is right for parents to smack their children:

> Child: I think Sophie's was a good idea why smacking children is wrong.
> Teacher: What was the idea?
> Child: Well she said it was wrong because smacking you doesn't tell you why it was wrong, it just tells you that if you do it you will get smacked. That means you'll do it again if you can get away with it and not be smacked. But if you are told why it is wrong … whatever it is … then you are less likely to do it again. Because you know why it is wrong. If you understand the reason …

P4C has been shown to be effective in teaching democratic community values (Burgh *et al.*, 2006). It gives children a voice and a vote in deciding the focus and the course of the enquiry. It offers an arena for the free flow of their views, a space for creativity and dialogue.

'Philsophy for Children' does not provide just a 'talking shop', or an exercise in free-flowing discussion. Research suggests that programmes that promote thinking skills have positive effects on academic achievement (McGuiness, 1999). The research evidence from a wide range of small-scale studies across the world indicates that the philosophy for children programmes can make a difference to various aspects of a child's academic performance. Findings from my Philosophy in Primary Schools

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research project echo worldwide research into P4C programmes and show positive effects on:

- pupils' achievements in academic tests;
- children's self-esteem and self-concept as thinkers and learners;
- the fluency and quality of children's questioning;
- the quality of their creative thinking and verbal reasoning;
- their ability to listen to others and engage effectively in class discussion.

Research shows the positive effects of philosophical discussion extend across the curriculum. Jemma, aged 10, said:

> Philosophy can help in all your lessons, no matter what you're learning.

Teachers generally feel that philosophical discussion adds a new dimension to their teaching and the way their pupils think. One teacher put it as follows:

> We need to teach the habits of good thinking and through using 'Stories for Thinking' we can do just that … children become more ready to ask questions, to challenge each other and to explain what they mean.

Kim, aged nine, said:

> The important thing is not to agree or disagree but to say why.

Children too value what philosophical discussion has to offer not only as a stimulus to learning in the classroom, but as a life skill. Camilla, aged 10, said:

> Philosophy helps you make the most of your mind.

The best way to teach the habits of good thinking and discussion skills is for the teacher to model these behaviours and, in particular, the heart of dialogic teaching which is cognitive challenge. The following are some strategies to provide cognitive challenge in dialogue with children:

- *Questioning and challenging*:
  Asking why, how, what if?
  Posing unusual questions or problems.
  Asking for reasons.
- *Making connections, seeing relationships*:
  Sharing previous knowledge or experience.
  Agreeing, disagreeing and saying why.
  Giving examples.
- *Exploring and building on ideas*:
  Imagining and seeing things in the mind's eye.
  Asking: 'what if?' and 'what if not?'.
  Playing with and building on ideas.
- *Reflecting on ideas*:
  Reviewing progress of the discussion.

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Reflecting critically about the process of discussion.
Thinking about our thinking and the thinking of others.

It is through this process of reflection, thinking about our thinking and the thinking of others, that metacognitive awareness develops. The foundation for metacognition in young children lies in developing 'me-cognition'.

Developing 'me-cognition': the foundations for metacognition

There has been a growing recognition that metacognition or self-awareness, including awareness of ourselves as learners, helps us to learn more effectively (Fisher, 1998). The term 'metacognition' was introduced by Flavell in 1976 to refer to 'the individual's own awareness and consideration of his or her cognitive processes and strategies' (Flavell, 1979). It refers to that uniquely human capacity of people to be self-reflexive, not just to think and know but to think about their own thinking and knowing. Flavell argued that if we can bring the process of learning to a conscious level, we can help children to be more aware of their own thought processes and help them to gain control or mastery over the organization of their learning (Flavell *et al.*, 1995).

Vygotsky (1962) was one of the first to realize that conscious reflective control and deliberate mastery were essential factors in school learning. He suggested there were two factors involved in gaining knowledge. At first it is unconsciously acquired, followed by a gradual increase in active *conscious control* over that knowledge. This essentially reflects the difference between cognitive and metacognitive aspects of learning. Metacognition is not thinking *about*, but thinking *above* (above cognition), and becoming consciously aware of how one thinks and learns.

Metacognitive awareness builds autonomy by helping children become more self-aware and self-evaluative. It contributes to self-understanding and emotional intelligence. The challenge for teachers, support staff and carers is to help children see themselves as agents of their own thinking.

Metacognitive awareness develops with age. Older children are more successful learners partly because they have internalized a greater quantity of metacognitive information, but metacognitive development relates not just to age, but also to experience. Teachers can help even young children to develop some of the metacognitive strategies that underpin successful learning (Fisher, 1998).

One way of thinking about the beginnings of metacognitive awareness in young children is to help them see the 'me' in cognition. Much of their cognitive activity in learning is about doing, remembering and responding to others. Metacognition is about reminding them of the *me*-thinking, in thinking about what *I* think and how *I* learn. It is this aspect of metacognition I call me-cognition (Fisher, 2006).

'Me-cognition' is about what I know, think and feel about myself. It involves applying our thinking skills and emotional awareness to self-understanding. Me-cognition involves being aware of what one can and cannot do and ways to do what one wants

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to do or learn. Asking children about their personal lives, hopes and fears make good starters for thinking, for it focuses on what they think, know and have experienced. Many kinds of questions can encourage children to think about themselves and their lives. As Tom, aged 10, said:

> You don't really know what you think until someone asks.

For example, by finding answers to questions, such as:

- What do I think about myself?
- What do I know about myself?
- What do I feel about myself?
- What makes me different from other people?
- What makes me special?
- What makes 'me' me?

Such questions have challenged philosophers, psychologists and scientists down the centuries. Outside the oracle at Delphi was the injunction: 'know thyself.' For the ancient Greeks this was the hardest challenge to thinking and the highest form of wisdom.

'Me-cognition' is a capacity for self-understanding that all humans possess. It is a form of personal intelligence that Gardner (1999) calls 'intra-personal intelligence'. It is expressed in a child's ability to be aware of what they think and feel and of their personal preferences. It activates processes of metacognition, which is thinking about one's own thinking. The skills of me-cognition are developed when the individual learner is given a voice and a choice in what they think about themselves and their lives. Such self-reflection lies at the heart of personalized learning. As Joel, aged nine, put it:

> A good teacher makes what you think matters.

Conclusion

This paper has explored the important relationship between dialogue and cognitive and metacognitive development in young children. It concludes that dialogic enquiry is a primary thinking skill from which other skills follow, that 'Philosophy for Children' approaches provide effective methods for dialogic teaching that can support and develop children's capacities for cognition and metacognition.

When children develop the habits of intelligent behaviour, the results can be unpredictable. When they learn how to interrogate ideas within texts and in the world, they will also learn to interrogate you and what you say. Talking for thinking with children is an intellectual adventure, full of unexpected challenges.

Note

1. For the story 'Mercury and the Axe', and further questions and suggestions on ways of using the story to create a community of enquiry see Fisher (1996, 1999).

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References

Alexander, R. J. (2000) *Culture and pedagogy* (Oxford, Blackwell).

Alexander, R. J. (2006) *Towards dialogic teaching* (3rd edn) (Cambridge, Cambridge University Press/Dialogos).

Bakhtin, M. (1981) *The dialogic imagination* (Austin, TX, University of Texas Press).

Bakhtin, M. (1986) *Speech genres and other late essays* (Austin, TX, University of Texas Press).

Barnes, D. (1995) *Communication and learning revisited* (London, Heinemann).

Bruner, J. (1996) *The culture of education* (Cambridge, MA, Harvard University Press).

Burgh, G., Field, T., Freakley, M. *et al*. (2006) *Ethics and the community of enquiry* (Melbourne, Thomson).

Cleghorn, P. (2002) *Thinking through philosophy* (Blackburn, Education Printing Services).

Coulthard, M (1992) *Advances in spoken discourse analysis* (London, Routledge).

Daniels, H. (2001) *Vygotsky and pedagogy* (London, Routledge).

Dillon, J. T. (1990) *The practice of questioning* (London, Routledge).

Dillon, J. T. (1994) *Using discussion in classrooms* (Buckingham, Open University Press).

Department for Education and Skills & Qualifications and Curriculum Authority (DfES & QCA) (2003) *Speaking, listening, learning: working with children in key stages 1 and 2* (London, DfES).

Edwards, A. (2005) 'Let's get beyond community and practice': the many meanings of learning by participating, *Curriculum Journal,* 16(1), 49–65.

Edwards, A. D. & Westgate, D. P. G. (1994) *Investigating classroom talk* (Lewes, Falmer).

Fisher, R. (1996) *Stories for thinking* (Oxford, Nash Pollock).

Fisher, R. (1998) Thinking about thinking: developing metacognition in children, *Early Child Development and Care,* 14(1), 1–15.

Fisher, R. (1999) *First stories for thinking* (Oxford, Nash Pollock).

Fisher, R. (2003) *Teaching thinking: philosophical enquiry in the classroom* (2nd edn) (London, Continuum).

Fisher, R. (2005a) *Teaching children to think* (2nd edn) (Cheltenham, Nelson Thornes).

Fisher, R. (2005b) *Teaching children to learn* (2nd edn) (Cheltenham, Nelson Thornes).

Fisher, R. (2006) Thinking about me: me-cognition, *Teaching Thinking,* 20(1), 50–55.

Fisher, R. (in press) 'Dancing minds: the use of Socratic and Menippean dialogue in philosophical enquiry, *Gifted Education International Journal,* 22(2–3).

Fisher, R. (forthcoming) *Philosophical intelligence.*

Flavell, J. (1979) Metacognition and cognitive monitoring: a new area of cognitive-developmental enquiry, *American Psychologist*, 34, 906–911.

Flavell, J., Green, F. & Flavell, E. (1995) *Young children's knowledge about thinking* (Monographs for the Society for Research in Child Development No. 60.1) (Chicago, University of Chicago Press).

Galton, M. & Simon, B. (1980) *Inside the primary classroom* (London, Routledge).

Gardner, H. (1999) *Intelligence reframed* (New York, Basic Books).

Goleman, D. (1997) *Emotional intelligence: why it can matter more than IQ* (New York, Bantam Books).

Habermas, J. (1991) *The theory of communicative action,* Vol. 1 (Cambridge, Polity Press).

Halliday, M. A. K. (1993) Towards a language-based theory of learning, *Linguistics in Education,* 5, 93–116.

Hart, B. & Risley, T. R. (1996) *Meaningful differences in the everyday experiences of young American children* (Baltimore, MD, Brookes).

Haynes, J. (2002) *Children as philosophers* (London, Routledge Falmer).

Hobson, P. (2002) *The cradle of thought: exploring the origins of thinking* (London, Macmillan).

Lipman, M. (1981) 'Philosophy for Children' in: A. L. Costa (Ed.) *Developing minds: programs for teaching thinking* (Alexandria, VA, Association for Supervision and Curriculum Development).

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Lipman, M. (2003) *Thinking in education* (Cambridge, Cambridge University Press).
McGuiness, C. (1999) *From thinking skills to thinking classrooms: a review and evaluation of approaches for developing pupils' thinking* (Research Report No. 115) (London, DfES).
Mercer, N. (1995) The guided construction of knowledge: talk amongst teachers and learners (Clevedon, Multilingual Matters).
Mercer, N. (2000) *Words and minds: how we use language to think together* (London, Routledge).
Sidorkin, A. M. (1999) *Beyond discourse: education, the self and dialogue* (New York, State University of New York Press).
Tomasello, M., Carpenter, M., Call, J., Behne, T. & Moll, H. (2004) Understanding and sharing intentions: the origins of cultural cognition, *Behavioral and Brain Sciences,* 28(5), 720–721.
Trickey, S. & Topping, K. J. (2004) 'Philosophy for children: a systematic review', *Research Papers in Education,* 19(3), 365–380.
Vygotsky, L. S. (1962) *Thought and language* (Cambridge, MA, MIT Press).
Vygotsky, L. S. (1978) *Mind in society: the development of higher order processes* (Cambridge, MA, Harvard University Press).
Wegerif, R. (2002) The importance of intelligent conversations, *Teaching Thinking,* 9, 46–49.
Wegerif, R. (2005) Reason and creativity in classroom dialogues, *Language and Education,* 19(3), 223–237.
Wells, G. (1999) *Dialogic enquiry: towards a socio-cultural practice and theory of education* (Cambridge, Cambridge University Press).
Wertsch, J. V. (1991) *Voices of the mind* (New York, Harvester).
Wertsch, J. V. (1998) *Mind as action* (New York, Oxford University Press).
Winyard, J. (2005) Cunning little vixens, *Teaching Thinking and Creativity,*Spring, 30–36.

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