

This article was downloaded by: [Swets Content Distribution]

On: 21 November 2010

Access details: Access Details: [subscription number 925215345]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Language and Education

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t794297816>

Enacting dialogue: the impact of promoting Philosophy for Children on the literate thinking of identified poor readers, aged 10

Philip Jenkins^a; Sue Lyle^b

^a Llanrhidian Primary School, Llanrhidian, Swansea, UK ^b School of Education, Swansea Metropolitan University, Swansea, UK

First published on: 02 August 2010

To cite this Article Jenkins, Philip and Lyle, Sue(2010) 'Enacting dialogue: the impact of promoting Philosophy for Children on the literate thinking of identified poor readers, aged 10', *Language and Education*, 24: 6, 459 – 472, First published on: 02 August 2010 (iFirst)

To link to this Article: DOI: 10.1080/09500782.2010.495781

URL: <http://dx.doi.org/10.1080/09500782.2010.495781>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Enacting dialogue: the impact of promoting Philosophy for Children on the literate thinking of identified poor readers, aged 10

Philip Jenkins^a and Sue Lyle^{b*}

^aLlanrhidian Primary School, Llanrhidian, Swansea, UK; ^bSchool of Education, Swansea Metropolitan University, Swansea, UK

(Received 8 August 2009; final version received 13 May 2010)

The Philosophy for Children in Schools Project (P4CISP) is a research project to monitor and evaluate the impact of Philosophy for Children (P4C) on classroom practices. In this paper the impact of P4C on the thinking skills of four children aged 10 is examined. Standardised tests indicated the children had below-average reading ages. The pupils were video recorded while engaged in discussion of questions they formulated themselves in response to a series of texts in preparation for a community of philosophical enquiry. Group discussions were analysed, paying attention to verbal and non-verbal communication. We argue that reading scores do not necessarily indicate inability to engage in literate thinking. When dialogic approaches are used and pupils are given opportunities to work in small groups to formulate their own questions and evaluate their potential for generating enquiry, they demonstrate their ability to use higher-order language skills. Dialogic approaches can challenge the hegemonic impact of standardised testing that dominates modern schooling. A dialogic approach to teaching listens to pupil voice and has the potential to change how adults view children and contribute to an epistemological paradigm shift away from positivism towards dialogism.

Keywords: classroom dialogue; dialogic; pedagogy; peer interaction; sociocultural theory; participatory discourse

Introduction

The Philosophy for Children in Schools Project (P4CISP) is an ongoing research project that began in 2005 to explore the impact of Philosophy for Children (P4C) on classroom practices from the perspectives of all stakeholders in the process. Following training in P4C a class teacher carried out research with his class of nine- to 10-year-old children in a large junior school of 300 pupils for his MA dissertation. This paper reports on one aspect of his research – the impact of P4C on the oracy and higher-order thinking skills of four pupils deemed by standardised tests to be low achievers – and argues that a focus on the dialogic practice of P4C can support the development of higher-order thinking in low-attaining pupils and contribute to a shift in how adults view such children.

Background

An accumulating body of research is calling for dialogic approaches to classroom interaction. Grounded in Vygotskian theory, it recognises the importance of talk in thinking and learning:

*Corresponding author. Email: sue.lyle@smu.ac.uk

Speech does not merely serve as the expression of developed thought. Thought is restructured as it is transformed into speech. It is not expressed but completed in the word. (Vygotsky 1987, 251)

The view that knowledge is constructed in dialogic interactions between people and that 'higher mental functions are internalised social functions' (Vygotsky 1978, 146) is now increasingly accepted. Mercer (2000) extends Vygotsky's notion of the centrality of dialogue in learning to what is termed 'inter-thinking' and argues that 'joint social activity . . . promotes individual development'. In a discussion of Mercer's accumulated body of work, Swann (2007) emphasises the importance of the social and cultural contexts in which talk for learning takes place. Furthermore, Wells and Arauz (2006, 379) note that among researchers there is a growing acceptance that learning is most effective when students are engaged in dialogic activities, related to topics relevant to their experience, in which they co-construct meaning.

The notion that language and indeed thought is dialogic can be traced back to Bakhtin. The synthesis of Vygotsky and Bakhtin into a sociocultural theory (Wertsch 1991) has prompted considerable discussion about the nature of dialogic teaching and provoked criticism of the ontological assumptions made by those who have appropriated Bakhtin's ideas (Wegerif 2008). Kennedy (2006), a philosopher, argues that our understanding of children is dominated by developmental psychology that has objectified the child and suppressed the questions which cannot be answered outside the search for statistical norms, arrived at through standardised forms of research. He believes that dialogism has the potential to challenge scientific positivism's domination of research into child development. We therefore need more research into the nature of dialogic teaching to better engage with this growing area of debate.

Dialogic approaches are often contrasted with monologic approaches to the management of classroom talk as epitomised by the interrogation–response–feedback (IRF; Sinclair and Coulthard 1975; Mehan 1979), whereby, especially in whole-class discussion, the talk is a three-part exchange involving teacher 'interrogation', student 'response' and teacher 'feedback'. This teacher-centred approach has been criticised in a number of ways, as it gives scant opportunity for children to share their own ideas, respond to ideas from others or formulate their own questions (Wells 2007).

In the UK, discussion of dialogic approaches to classroom practice has been led by Alexander (2006), who suggests that dialogic teaching can promote more inclusive classrooms, where more reticent pupils gain the confidence to voice their ideas and opinions to the class. In dialogic teaching, pupil voice is respected, and pupils get the opportunity to collaborate in joint meaning making, where their voices are given equal weight to that of the teacher.

In the UK, the Cambridge Primary Review (Alexander 2009) has carried out the most fundamental and exhaustive review of primary education for 40 years and provides further support for dialogic teaching. It identifies 'enacting dialogue' as one of its 12 key aims for primary education. It sees learning as an interactive process between teacher and pupil and between pupils, renegotiating and re-creating knowledge during the dialogic process. The Cambridge Primary Review describes the aim of dialogue as follows:

Enacting dialogue. To help children grasp that learning is an interactive process and that understanding builds through joint activity between teacher and pupil and among pupils in collaboration, and thereby to develop pupils' increasing sense of responsibility for what and how they learn. To help children recognise that each of us in the end makes our own sense out of the meeting of knowledge both personal and collective. To advance a pedagogy in which dialogue is central: between self and others, between personal and collective knowledge, between present and past, between different ways of making sense. (Alexander 2009, 32)

In relation to this aim this paper seeks to contribute to the research base for putting flesh on how teachers in classrooms can enact dialogue to promote pupils' 'engagement, confidence, independence and responsibility' (Alexander 2006).

The dialogic pedagogy examined in this paper is Philosophy for Children (P4C). First developed in the US by Mathew Lipman (1988), P4C is now practised in over 30 countries worldwide, using a wide variety of materials to instigate questioning and enquiry. The basics of P4C are straightforward as outlined on P4C.com (2010):

Children share some reading, listening or viewing with their teacher. The children take some thinking time to devise their own questions. They choose a question that interests them and, with the teacher's help, discuss it together. The teacher is concerned with getting children to welcome the diversity of each others' initial views and to use those as the start of a process . . . that involves the children questioning assumptions, developing opinions with supporting reasons, analysing significant concepts and generally applying the best reasoning and judgement they are capable of to the question they have chosen.

Extensive research into the impact of P4C on classroom practices and processes is documented through the Institute for the Advancement of Philosophy with Children at Montclair University (<http://cehs.montclair.edu/academic/iapc/whatis.shtml>). Evidence suggests that when P4C is practised regularly, children's questions get deeper and more thoughtful. Their discussions become more disciplined and focused, yet at the same time imaginative. They care about what others say but do not accept easy answers (Topping and Trickey 2004).

The P4C approach relies on building a Community of Enquiry (COE) within the classroom, where pupils can develop a sense of trust and openness to share their contributions honestly and candidly. Wells and Arauz (2006, 382) argue that language is the key tool in the personal development of community members to contribute effectively and simultaneously in the development of the community through the participation of its members. Dialogism sees knowledge as something that people do collaboratively with language as a social system, producing and organising the social reality (Lyle 2008, 225). This paper explores dialogue between four children whom standardised tests have labelled 'low achievers' and argues that the dialogic practice of P4C has the potential to help such children engage in higher-order thinking.

Research context

The research was carried out by one of us, a white, male teacher, with eight years' teaching experience, as the focus for an MA dissertation. The site of research was a primary school with 430 pupils in South Wales, UK, located in a mixed catchment area of private and public housing. Free School Meal indicators show the school is in the upper 25% of socio-economic grouping. The practice of P4C was introduced to a year 5 class (age 10) of 15 girls and eight boys at the beginning of the academic year.

Once a week children took part in a community of philosophical enquiry. Each COE followed a pattern. After the initial stimulus for discussion – which took the form of fictional narratives, non-fictional information texts or poetry (Cleghorn 2002) – was presented to the whole class, all children were given some quiet reflection time and asked to write down any ideas or issues they would like to discuss. Children then formed pairs to discuss their ideas and to formulate a question they would like to explore. Pairs were then grouped into fours, and the process was repeated, each four agreeing on a question to put to the class. Each group then presented and explained their question to the class prior to holding a secret ballot to decide which question to discuss. The whole class then discussed the question chosen, allowing each child to contribute to the enquiry. The enquiry was led and controlled by the

pupils, with the teacher acting as a facilitator seeking clarification and trying to engender deeper understanding through questioning (Lyle 1996). Data for this paper are drawn from the first two stages of the COE, where the target pupils were discussing and deciding on the question they would take forward to the whole class.

The focus for this study are four pupils who were chosen for a combination of reasons: they were all female and all part of the same friendship group. Experience had shown that pupil dialogue was more productive where pupils were friends. Secondly, they all had reading difficulties as measured by standardised tests. Two of the girls' scores were significantly below average, and two were just below average. Over the past three years Angela (all names are pseudonyms) has scored between 70 and 75 and Amanda between 70 and 84; Sam's and Melanie's average scores were 90 and 92 respectively (the average score for pupils would have been 100). Results on tests like this are part of a teacher's evidence base for planning teaching and are frequently used to inform pupil grouping.

Six hours of video recordings were made over seven sessions of the four pupils while they undertook discussions in pairs and in fours to provide an accurate representation of the dialogue and an impression of their non-verbal behaviour. The teacher regularly used video recordings in the class, and the pupils were used to a camera being present.

For the duration of the research the teacher kept field notes of observations and reflections on each session and details of contributions made by each of the study group to the whole-class discussion in each session. The field notes were triangulated with the video recordings to bolster confidence in the validity of the findings (Denscombe 2007).

Analysis of the video recordings

The quality of the video and sound made it possible to analyse all the children's discussions. Initial viewings were made, and a chronological account of the discussions was created. This showed that the length of utterance increased across the seven sessions. The total time spent on each discussion ranged from 14 minutes 20 seconds to 27 minutes 5 seconds. This shows an increase in time spent on discussions, with the last two sessions accounting for 32% of the total, as compared with 21% for the first two sessions.

Although the length of the discussion itself does not necessarily indicate more sophisticated dialogue, Lipman (1988) and Fisher (2008) argue that by discussions becoming longer pupils are given the opportunity to engage in activities that are considered to be vital to progression in cognitive skills and language development. However, it is the quality rather than the quantity of dialogue that is of most interest. Initial categories, which were derived from the literature on dialogic teaching approaches, were used to code the raw footage to test the claims made for this pedagogical approach against the transcript.

Some of these categories proved useful, and others emerged from the data. These new categories were then tested against the raw footage. The final categories were discussed with the MA tutor acting as a 'critical friend' before carrying out further analysis. The final categories were as follows: asking questions, agreeing/disagreeing, managing talk, giving examples, giving opinions, providing evidence/elaborating, making comparisons/distinctions, seeking clarification, metacognition and evaluating. The relative importance of each of these categories was tested against the data by making quantitative analysis of the relative contributions and length of utterances made in each of the categories (see Table 1). In the dissertation that this paper is based on, each of the utterances was discussed separately; for the purpose of this paper we discuss the qualitative data under broad headings.

Table 1. Figures of each type of contribution for the pupils as a percentage of the total pupil time in each session.

| Session | Asking questions | Agreeing/ disagreeing | Managing | Giving opinions | Evidence/ elaboration | Giving examples | Comparisons/ distinctions | Clarification | Noticing/ thinking | Evaluating |
|---------|------------------|-----------------------|----------|-----------------|-----------------------|-----------------|---------------------------|---------------|--------------------|------------|
| 1 | 5 | 10 | 3 | 25 | 29 | 11 | 0 | 4 | 0 | 14 |
| 2 | 7 | 7 | 0 | 17 | 39 | 21 | 0 | 0 | 1 | 8 |
| 3 | 10 | 7 | 0 | 17 | 41 | 14 | 3 | 0 | 1 | 7 |
| 4 | 7 | 6 | 1 | 18 | 34 | 18 | 6 | 1 | 0 | 10 |
| 5 | 4 | 11 | 0 | 33 | 30 | 3 | 8 | 1 | 2 | 7 |
| 6 | 4 | 12 | 0 | 36 | 23 | 15 | 2 | 0 | 1 | 7 |
| 7 | 6 | 16 | 0 | 30 | 39 | 6 | 0 | 1 | 1 | 1 |
| Mean | 6 | 10 | 0.5 | 25 | 34 | 13 | 3 | 1 | 1 | 8 |

Note: The mean figure gives the average of the category of talk across the seven sessions.

Findings

Higher-order thinking and literacy

When P4C was initially designed, the working hypothesis was centred on pupils' ability to formulate their own questions. This is a powerful way of giving authority to, and demonstrating respect for, the children's ideas (Murriss 1990). When adults take pupils' intellectual concerns and questions seriously, preliterate children show evidence of highly developed thought before learning to read and write. In this study we set out to examine this claim through consideration of how pupils formed their questions and their specific ability to formulate open questions:

Normal practice is to induce in the young answers given by others to questions put by others. It is against the norm for students to ask questions. (Dillon 1990, 7)

It was thought that these low-achieving pupils would have difficulty in formulating open, moral questions related to specific stimuli. However, from the first session it was clear that this was a misconception and that the pupils' question formulation was of a high quality. Not only did the pupils understand the difference between open and closed questions, but they also managed to devise questions relevant to the stimulus provided. In Session 1 in response to a story, the questions included the following:

Sam: How did Barry feel?
 Amanda: Why did Alex steal?
 Sam: Is it wrong to steal?
 Angela: What would have happened if Barry had stolen the case?

All of these questions invite the children to give their own opinions and are directly relevant to the story. Sam raises a moral question and Angela uses the conditional future perfect form of the verb to hypothesise, an example of higher-order literate thinking. This suggests that poor reading skills do not preclude the use of sophisticated grammatical constructions normally associated with more literate pupils.

In terms of literacy Angela has the lowest literacy skills. She is a reluctant reader and scores consistently well below the class average in the biannual Suffolk reading test. Her scores of between 72 and 74 indicate a reading age of approximately seven, and her written work lacks structure and punctuation and is often out of sequence. This would imply to commentators such as Olsen (1977) that Angela is incapable of abstract thought. However, Angela's contributions consistently show evidence of abstract thought, supporting Martin (1993), who argues that thinking can be compatible with utterance and is not dependent on literacy.

Angela also shows considerable cognitive skills in interpreting information from the stimulus and cross-referencing this with her personal experience. She is capable of linking abstract ideas from the story with her own life. She does so in every session, more regularly and at greater length than her peers. For example, in Session 5 she talks about the concept of relaxation:

I relax when my mum is talking to her friends. I just sit and listen to the conversation. If it's a boring one I fall asleep, or I just sit there staring at my mum. If you're not taking part it makes it more enjoyable because I was sitting on the couch and I was just listening and they'll talk about stuff.

Not only does this illustrate that her oral skills are more sophisticated than her written ones, but it also shows an ability to listen attentively when she is engaged. Angela draws on her own life experiences and brings them in to illuminate her understanding of an abstract concept.

In fact, in each of the seven sessions the pupils had no difficulty forming questions that were open and required engagement with concepts. This is an important first step in P4C that sets the agenda for enquiries. Dillon (1990) argues that questions asked in discussion activities differ from those asked in recitation activities (the IRF discussed earlier), eliciting higher-order cognitive skills such as inference and analysis. The pupils' open questions formed the basis of their discussions and generated high-quality talk. As discussed earlier, the prevalence of the IRF means questioning in class is usually teacher-led, principally concerned with subject coverage and testing what has been learnt and for controlling verbal and social behaviour. This sort of questioning is less likely to enhance the cognitive, affective and expressive processes of pupils. Conversely, the types of questions the pupils are formulating here are 'open substantive' questions (Splitter and Sharp 1995, 35). This form of questioning centres on philosophical ideas and concepts and, it is argued, leads to children thinking through the content and construction of their responses. These sorts of questions are peculiar to philosophical enquiry and are seen by Murriss (1990) as vital in generating self-reflection and empathy among participants.

In classrooms children are less powerful than adults, and as such teachers usually control what is heard and seen as relevant. Kennedy (1996) refers to the space where children think as a transitional place, which they negotiate through dialogue and play. He argues that the oral nature of philosophical enquiry makes it a vital tool to counterbalance our written-information-soaked society. P4C also gives children the opportunity to formulate their own questions, thereby shifting the balance of power from the teacher to the pupil.

Using evidence, elaboration and examples to support opinions and develop argument

Over the period of research the pupils' discussions show evidence of becoming more structured and logical. In the beginning the pupils' responses were typically short, stating their opinion, without corroboration. By the end they were providing reasons for their answers without prompting, elaborating on their opinion to give their arguments added credence. Again, their own sociocultural contexts and personal experiences were drawn on to support their views and link their ideas to those of others in the group. This also allowed them to make distinctions and connections across a range of experiences by comparing and contrasting them.

Sam: It was like in gym today. I was sitting there 'cos of my bad leg, but I was excited watching Amanda. And she was having problems putting her arm in the right place. So I was laughing and trying to do it as well. And it made me feel part of it, just like Ian [Ian is a character in the story].

Sam is able to interpret information from the stimulus accurately and sensitively, making connections between her personal experience and the story. Her comparison is concise, and she validates her description by directly comparing it with that of the protagonist in the story. This example shows a marked difference from the responses recorded at the outset of the programme. The pupils are now making distinctions and connections across a range of experiences and comparing and contrasting them in sophisticated talk. It can be argued that this type of contribution shows a development of intrapersonal dialogue in the pupils. Such use of critical thinking skills, which is not present in early sessions, demonstrates a development in the pupils' thinking over time.

In fact, the pupils spent the greatest part of their time setting out their opinions and providing evidence to support them (59%) (see Table 1). Trickey (2007) cites this as

evidence of progression in pupils' higher-order language skills besides corresponding with the goal of P4C to improve pupils' skills in the formation of argument. The pupils frequently construct their arguments firstly by giving their view and then attempting to substantiate it with supporting evidence as the following exchange in Session 1 illustrates:

- Amanda: How did Barry feel afterwards?
 Sam: He might have felt happy, because he wasn't the one who had stolen.

The question that has to be considered is whether this early example of argument is inherent in the pupils' talk or whether it is a skill that has to be learnt. Proponents of P4C argue that pupils have to learn how to structure arguments at this basic level and set out to teach it:

Philosophy for children has clear cognitive aims. It sets out to exercise the mind through challenging and disciplined thinking and structured interaction. (Haynes 2008, 12)

Teacher intervention is important; for example, in Session 1, during pair work, the transcript shows the teacher prompting the pupils to give reasons to support their views:

- Amanda: What would have been the consequences if Barry had stolen?
 Sam: They would have been caught.
 Teacher: Why do you think they would have been caught?
 Sam: Because he wasn't used to it and not good at it.

After a short time Sam and Amanda recognise that the teacher wants them to support their views. Two minutes after the exchange noted above, the dialogue continues:

- Amanda: Why did Alex steal?
 Sam: I think he stole just to be cool.
 Amanda: To show off in front of his mate.
 Sam: I don't think he was really his mate or he wouldn't have done it. I think he might've felt happy 'cos he wasn't the one who stole.
 Amanda: Yeah, 'cos he didn't join in.

This exchange clearly shows that both pupils have assimilated the teacher's cues and modelling of responses and are already modifying their talk to fit with the desired structure (Collins, Seely Brown, and Newman, 1993). Angela and Melanie display similar speed in understanding the requirements of a 'good' response and have also incorporated reasons for their opinions by the end of Session 1. Take the following example:

- Teacher: What would you have done?
 Melanie: I would have just walked out 'cos you'd get into loads of trouble.

Supporting views with reasons is one of the behaviours cited as a desired positive outcome where P4C has been introduced in Clackmannanshire (Trickey 2007). This is presented as evidence of an improvement in children's higher-order language skills. In the present study it could be argued that this improvement is in direct response to teacher modelling of what the structure of an answer could be, and without the teacher's presence the pupils could revert to giving answers without providing supporting evidence. If these skills are a reflection of real development they must form part of an integrated and sustained set of cognitive skills, transferable to other subjects and situations. In fact, elaboration and evidence became more complex, cross-referencing to other opinions to show increasing sophistication.

In the latter sessions the children often refer back to previous sessions. Amanda and Sam show excellent recall of previous dialogues, regularly referring accurately to opinions and views raised by themselves and their peers in previous discussions. This illustrates

an engagement with their work. Not only do the pupils recall arguments from previous sessions, but they compare and contrast them with the issues currently under discussion and point out similarities or links. This illustrates progression in the pupils' discursive skills and cognitive abilities. These results reflect those reported by Trickey (2007), who found that after using a similar programme of P4C, classroom dialogue increased in quantity and quality, and children's cognitive ability scores were raised significantly.

The transcripts show progression as the quality of the pupils' responses improves over time. Typically in Sessions 1 and 2 the pupils provide an answer justified by a simple reason, often prompted by the teacher. By Session 3 the responses are becoming longer, containing immediate justifications for their answers, which are becoming more complex and interrelated:

- Sam: Why didn't he want to meet the old people?
 Amanda: He might find it boring. He was also really shy. But when he went he found it was really cool and they were interested in computers and CDs and stuff like that.
 Sam: Because he wasn't used to meeting different people so he was scared.

In her response Amanda outlines two possible reasons for the character's (Stephen's) reticence: he would find it boring, and he was shy. She goes on to elaborate both of these points in her explanation: first stating that it was cool, negating his shyness; and second that the old people were interested in similar things as him, implying they had interesting things to talk about. Not only would this allay any fears of boredom, but having common interests would be likely to put Stephen at ease and give him more confidence to talk. This response also includes the unstated reason that children, and therefore by definition Stephen, are interested in computers and CDs. This inferred reason, although not overtly stated, adds weight to Amanda's argument that Stephen's fears were unfounded (Swartz and Parks 1994).

Immediately following Amanda, Sam gives her own reason why Stephen was scared. This response shows the development of dialogue between the pupils independent of teacher input. The video evidence shows that although Sam's response is an interrelated but separate point, it is given following the briefest of glances given to her by Amanda at the end of her turn. Although this glance is not physically acknowledged by Sam, its meaning is not lost, and she picks up on the non-verbal cue for her to contribute. After Sam's answer Amanda nods in agreement, displaying her approval. This demonstrates that Sam has listened and understood Amanda's points and can reply to them in an appropriate manner to keep the dialogue moving. It shows that both speakers have established a relationship with their listeners and that the speakers' choice of vocabulary and their organisation are resonant with the listeners'. This, coupled with the non-verbal messages, creates and maintains a dialogue, which is meaningful and less stilted than earlier encounters (Wilkinson 1991).

The field notes taken during enquiries with the whole class show that the girls did transfer knowledge from group discussion to the enquiry. The following dialogue was recorded in the field notes during the whole-class part of Session 7:

- Dave: Why did she agree to be photographed?
 Melanie: She was lonely and she wanted a friend. She thought this would help him and then he'd be her friend.

This exchange illustrates that Melanie, usually the most reticent of the group, is using sophisticated thought processes and has appropriated the necessary language skills in order to express her opinions, cross-referencing the evidence used here from a previous session to illustrate her point. This is one of many instances to be found in the field notes that

illustrates that the pupils are transferring the learnt format from the group sessions into a different context, a whole-class enquiry. The children use the language patterns modelled by the teacher and practised in the group sessions in another context without prompting. Melanie gives her opinion and supports it with a sound, succinct reason. This is an example of sophisticated language skills, which illustrates the depth of thinking that Melanie is capable of and which would not be evidenced in her written responses. The fact that the skills are being transferred to another context suggests that the skills are integrated into her language repertoire and are being used automatically, reflecting a real development in language skills.

Whether the improvement in thinking skills is carried over into other subjects is an issue this research is not designed to evaluate. However, the children involved did show an increased confidence in their work across the curriculum, and this in turn helped them to achieve more in other subjects. In particular, Angela showed a real change in attitude towards her schoolwork. Her working habits changed; she became much more independent and resilient when tackling tasks, attempting them independently first, before seeking assistance, showing a greater belief in her own abilities. These observations corroborate the views of Haynes (2008, 12), who states that regular participation in philosophical enquiry 'contributes to the development of individual self-awareness and resilience'. How much of this perceived progress is due to the specific philosophy programme that was undertaken and how much is due to the perception that the teacher had singled her and the other children out for preferential treatment is debatable, but the effects on her work were undeniable.

Greater use of evaluation illustrated increases in critical thinking skills

Evaluation was identified by Bloom, Krathwol, and Masia (1956) as the highest of the thinking skills. Fisher (2005) agrees that the ability to evaluate is key to critical thinking, where children develop and use criteria to assess ideas, arguments, evidence and actions. For this study, evaluation was limited to talk that was related to deciding the value of a statement or question. It also included talk on which question to take forward to the whole-class sessions. All pupils showed evidence of evaluation throughout the programme when considering the question to take forward. Towards the end of the programme some of the evaluations became more sophisticated. The pupils modified previous evaluative comments and considered inferential ambiguities in arguments when drawing their conclusions (Wilkinson 1991). All four of the study group showed some progress in their evaluations, with Amanda and Sam demonstrating significant improvements in their skills.

Amanda demonstrates more sophisticated evaluation skills in her contributions when discussing a tricky inferential question:

- Teacher: How did he show he was part of it?
 Angela: He might have laughed.
 Amanda: I think he was part of it 'cos he was just relaxed and looking at the others laughing.

Amanda takes the theme of Angela's contribution and modifies her evaluation rather than contradicting it completely. So she agrees that he was a part of the scene, but he did not physically join in the laughter out loud; she implies that he demonstrated an internal connection with those who were laughing. Her statement is more ambiguous than Angela's and also uses the tentative precursor 'I think'. The use of this phrase softens her stated opinion somewhat, and this coupled with the ambiguity creates a much more sophisticated evaluation of the situation than Angela's.

The pupils need to be thorough in their evaluation of the reasons for the conclusion of arguments. If they are to think critically they must consider all of the viewpoints before making up their minds and be willing to modify their opinions. The pupils can decide on accepting conclusions by determining whether there are flaws in the reasons or premises. If there are fallacies in the reasons, then the conclusion can be challenged. The children showed evidence that they are engaged in this type of critical thinking (Swartz and Parks 1994).

Elements of evaluation were often included in many of the children's responses, which were coded differently. When asked to justify the choice of the question 'How big was the loch?', Sam says, 'Yes, 'cos it could be long, short, wide and we could give our opinions'. Even though her response is coded as 'opinion' and 'providing evidence', it is also an evaluation of the relevance of the question. Swartz and Parks (1994) further argue that the conclusions of an argument should not be accepted unless the reasons that are offered in support of it justify believing it. When the pupils evaluate the reasons, they use standards of critical thinking that enable them to distinguish good reasons from weak ones.

Evidence of metacognition demonstrated control over higher-order thinking skills

The children also displayed engagement in metacognitive activities during P4C. Because of the nature of metacognitive acts, the evidence for this type of activity was limited. Fisher (2005) argues that involvement in thinking about their own thinking allows pupils to gain greater control over their knowledge and thinking. A content-led and content-packed curriculum does not give many opportunities for this sort of thinking, and thus the evidence illustrating pupils' metacognition is significant. Ernest (1998, 76) argues that acquiring metacognitive skills results in learners who are 'confident and empowered, able to apply their knowledge and skills elsewhere'. If P4C is indeed offering pupils this sort of experience, then it is providing opportunities for the development of thinking skills that are scarce within the normal school experience. The acquisition and application of these metacognitive skills will have positive implications for pupils as learners and, as such, are extremely valuable.

All four of the pupils show evidence of metacognition through the programme. The teacher saw this as both unexpected and exciting. None of the pupils had demonstrated this capability previously, so it was seen as significant that all four illustrated these skills during the programme. Whether the pupils might have been capable of metacognitive acts before the programme or not is debatable, but what is clear is that P4C gave them the opportunity and the confidence to express those capabilities. Sam speaking directly to the teacher says, 'You're good 'cos you help us learn things. You help us to work it out ourselves by thinking about it'.

In this instance Sam is illustrating her ability to contemplate her own thinking in a profound way. She has been pondering on how she learns and how the teacher helps her in that learning process. Moreover, there is an implication that the teacher helping her to work things out for herself is preferable to being given the knowledge didactically.

In Session 3, the following exchange occurs while the children are discussing why they have chosen a question to pursue. The extract is a further example of metacognition, as the children are reflecting on why it is good to talk in groups:

- Sam: It makes you ... If you talk to other people it makes you talk about what you like about them [the questions being considered] instead of just you.
- Angela: [implicit agreement] And we had more to talk about and we thought about ourselves as well.

The children clearly enjoy the opportunity to discuss which of their questions they should choose to take forward to the class enquiry and can see the benefit of working this way. Sam and Angela are clearly thinking about the various learning strategies they are using and evaluating their effectiveness and are expressing a preference for group rather than individual work. This implies a depth of thought and reflection about the benefits of collaborative talk. There is widespread agreement in the literature that such engagement with their own learning is associated with progress, not only in language development but in all aspects of learning (see, for example, Watkins 2007, 39). As Burden (1998, 7) reflects:

Metacognitive knowledge about one's own thinking process has been identified as yet another distinctive feature of successful learners.

Even though the occurrence of metacognitive talk is limited in the dialogue, any incidence is looked upon as significant. Moreover, the dialogue has many instances where, although not categorised as 'metacognition', the talk infers that the pupil has been involved in contemplating their thinking processes and knowledge.

Conclusions

This study has led to a deeper realisation of the value of the P4C COE approach as an intervention to promote dialogic pedagogy and support children's language development. It has shown that dialogic approaches to learning allow pupils with low scores on standardised tests to demonstrate their ability to use higher-order thinking normally associated with the highly literate.

When pupils are given the opportunities to work in pairs and small groups to formulate their own questions and evaluate the potential of those questions for generating dialogue, they use higher-order language skills, especially when the topic under discussion relates to concepts linked to human behaviour. In these contexts the children in the study drew on their own experiences to speculate and hypothesise about the actions of characters in stories. The resulting quality of talk forced the teacher to reassess the capability of the children and to question the results of the standardised reading tests as a reliable indicator of their ability.

Through involvement in P4C the children demonstrated critical thinking skills and a high order of speaking and listening. The findings support Wells and Arauz's (2006) notion that pupils' involvement with dialogic activities leads to effective learning. A shift from monologic to dialogic talk has empowered the children to have a belief in the value of their questions and opinions and given them voice. It has enabled them to jointly construct meaning, allowing them to progress more than they would have independently. There is also evidence of the pupils becoming more confident and willing to speak in front of the whole class.

Not only does the length of the discussions increase through the programme, but the arguments within these sessions become more reasoned and complex, indicating progression in the children's language skills, similar to the findings of the Clackmannanshire Council (Trickey 2007). The implications of this are important in recognising the central role that oracy plays in cognitive development.

This study raises some important issues for researchers interested in dialogism. Following Kennedy (2006), we now question the efficacy of standardised reading tests which position children as 'below average', 'above average' or 'average'; such labels lead to actions on the part of teachers that are not necessarily in the best interests of the child. In

fact such tests can adversely affect the child; the label 'poor reader' is often synonymous with low ability, which affects teachers' expectations and in consequence lowers children's expectation of themselves. Results of reading tests are seen as an accurate assessment of the child and are frequently used to place children with similar scores in sets. As a consequence those with lower reading scores are offered a curriculum that may not match their intellectual ability.

Evidence presented here and gathered more widely through the P4CISP suggests that dialogic approaches to teaching can challenge the dominance of standardised tests as accurate measures of a child's capability and change the way that a teacher sees the child. Many teachers in the project report surprise at the oral contributions of children who had been labelled as low achievers because of poor scores on reading tests, when engaged in P4C. It caused many to question standardised tools of assessment they had previously believed gave an accurate picture of a child's competences. For many teachers, the use of P4C has transformed the organisation of the classroom and led to improved outcomes for children whom standardised tests had labelled low achievers.

This research suggests that when children's voices are valued and space is provided for them they can achieve far more than standardised reading tests predict. Unfortunately assessment tools using positivist quantitative methodologies hold greater prestige than qualitative work. It follows that we need a theory that incorporates qualitative accounts of children's voices as a counter to the dominant mode of assessing children. We believe dialogism has the potential to challenge positivism as the prevailing ideology in education. It is an important tool for those who want theory to include the child's voice, for when children's voices are heard, the ideology of positivist science as indicated by standardised reading tests can be challenged. More research, which specifically focuses on the use of dialogic teaching approaches with pupils whose scores on standardised tests indicate low attainment, is needed to test the findings of this paper that such approaches can provide a better indicator of student capability and support the development of higher-order thinking.

References

- Alexander, R.J. 2006. *Towards dialogic teaching: Rethinking classroom talk*. 3rd ed. New York: Dialogos.
- Alexander, R.J. 2009. *Towards a new primary curriculum: A report from the Cambridge Primary Review. Part 2: The future*. Cambridge: Faculty of Education, University of Cambridge.
- Bloom, B., D. Krathwol, and B. Masia. 1956. *Taxonomy of educational objectives*. New York: David McKay.
- Burden, D. 1998. *Thinking through the curriculum*. London: Routledge.
- Cleghorn, P. 2002. *Thinking through philosophy*. Blackburn, UK: Educational Printing Services.
- Collins, A., J. Seely Brown, and S. Newman. 1993. Cognitive apprenticeship: Teaching the crafts of reading, writing and mathematics. In *Thinking children and education*, ed. M. Lipman, 233–43. Dubuque, IA: Kendall Hunt.
- Denscombe, M. 2007. *The good research guide for small-scale research projects*. Milton Keynes: Open University Press.
- Dillon, J.T. 1990. *The practice of questioning*. London: Routledge.
- Ernest, P. 1993. Recent developments in mathematical thinking. In *Thinking through the curriculum*, ed. M. Williams and D. Burden, 113–34. London: Routledge.
- Fisher, R. 2005. *Teaching children to think*. 2nd ed. Hemel Hempstead, UK: Simon and Schuster Education.
- Fisher, R. 2008. *Teaching thinking. Philosophical enquiry in the classroom*. 3rd ed. London and New York: Cassell.

- Haynes, J. 2008. *Children as philosophers. Learning through enquiry and dialogue in the primary classroom*. 2nd ed. London: Routledge-Falmer.
- Kennedy, D. 1996. Young children's moves: Emergent philosophical community of inquiry in early childhood discourse. *Critical & Creative Thinking* 4, no. 2: 28–41.
- Kennedy, D. 2006. *The well of being: Childhood, subjectivity, and education*. New York: State University of New York Press.
- Lipman, M. 1988. *Philosophy goes to school*. Philadelphia, PA: Temple University Press.
- Lyle, S. 1996. Making meaning: The voices of children talking about a dramatised story. *Educational Studies* 22, no. 1: 83–98.
- Lyle, S. 2008. Dialogic teaching: Discussing theoretical contexts and reviewing evidence from classroom practice. *Language and Education* 22, no. 3: 224–40.
- Martin, J.R. 1993. Thinking and literacy. In *Thinking children and education*, ed. M. Lipman, 213–24. Dubuque, IA: Kendall Hunt.
- Mehan, H. 1979. *Learning lessons: Social organisation in the classroom*. Cambridge, MA: Harvard University Press.
- Mercer, N. 2000. *Words and minds: How we use language to think together*. London: Routledge.
- Murris, K. 1990. Philosophy with pre-literate children. *Thinking* 14, no. 4: 23–33.
- Olsen, D. 1977. From utterance to text: The bias of language in speech and writing. *Harvard Educational Review* 47, no. 3: 257–81.
- P4C.com. 2010. *About P4C*. <http://p4c.com/about/p4c> (accessed May 4, 2010).
- Sinclair, J., and M. Coulthard. 1975. *Towards an analysis of discourse*. Oxford: Oxford University Press.
- Splitter, L.J., and A.M. Sharp. 1995. *Teaching for better thinking: The classroom community of enquiry*. Melbourne, Australia: Acer.
- Swann, J. 2007. Designing 'educationally effective' discussion. *Language and Education* 21, no. 4: 342–59.
- Swartz, R., and S. Parks. 1994. *Infusing the teaching of critical and creative thinking into content instruction. A lesson design handbook for the elementary grades*. Pacific Grove, CA: Critical Thinking Press and Software California.
- Topping, K.J., and S. Trickey. 2004. Philosophy for Children: A systematic review. *Research Papers in Education* 19, no. 3: 365–80.
- Trickey, S. 2007. Promoting social and cognitive development in schools: An evaluation of 'Thinking Through Philosophy'. Paper presented at 13th International Conference of Thinking, June 17–21, in Norrköping, Sweden.
- Vygotsky, L.S. 1978. *Mind in society*. Ed. M. Cole, V. John-Steiner, S. Scribner, and E. Souberman. Cambridge, MA: Harvard University Press.
- Vygotsky, L.S. 1987. Thinking and speech. Trans. N. Minick. In *The collected works of L.S. Vygotsky. Vol. 1: Problems of general psychology*, ed. R.W. Rieber and A.S. Carton, 251. New York: Plenum.
- Watkins, C. 2007. *Classrooms as learning communities. What's it in for schools?* London: Routledge.
- Wegerif, R. 2008. Dialogic or dialectic? The significance of ontological assumptions in research on educational dialogue. *British Education Research Journal* 34, no. 3: 347–61.
- Wells, G. 2007. Semiotic mediation, dialogue and the construction of knowledge. *Human Development* 50, no. 5: 244–74.
- Wells, G., and R. Arauz. 2006. Dialogue in the classroom. *Journal of Learning Sciences* 15, no. 3: 379–428.
- Wertsch, J.V. 1991. *Voices of the mind*. New York: Harvester.
- Wilkinson, A. 1991. Evaluating group discussion. *Educational Review* 43, no. 2: 131–42.