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Benefits of Collaborative Philosophical Inquiry in Schools

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Abstract

In the past decade well-designed research studies have shown that the practice of collaborative philosophical inquiry in schools can have marked cognitive and social benefits. Student academic performance improves, and so too does the social dimension of schooling. These findings are timely, as many countries in Asia and the Pacific are now contemplating introducing Philosophy into their curricula. This paper gives a brief history of collaborative philosophical inquiry before surveying the evidence as to its effectiveness. The evidence is canvassed under two categories: schooling and thinking skills; and schooling, socialisation and values. In both categories there is clear evidence that even short-term teaching of collaborative philosophical inquiry has marked positive effects on students. The paper concludes with suggestions for further research and a final claim that the presently-available research evidence is strong enough to warrant implementing collaborative philosophical inquiry as part of a long-term policy.

Keywords: philosophy in schools, philosophy for children, collaborative philosophical inquiry, communities of inquiry, thinking skills, engagement

Introduction

In May 2009 the UNESCO Regional High-Level Meeting in Manila of Asian, Pacific and Australasian educators agreed to support the introduction of philosophical thinking into all levels of schooling, in ways appropriate to the context of each country's culture and capacities (UNESCO, 2009a; see also UNESCO, 2009b). This important decision makes it timely to survey the current state of research evidence on the intellectual and social benefits of collaborative philosophical inquiry in schools. As we shall show, in recent years good research evidence has emerged to support this turn towards the teaching of philosophy in schools. The evidence strongly supports important changes in education policies at the local, state and national levels. It is clear from this evidence that Philosophy is a discipline that enriches and improves the effectiveness of the school curriculum, while also providing important social benefits in the lives of students and schools. It is a mystery why it was allowed to drop out of school programs and why sometimes there has been resistance to its reinstatement.[1]

Philosophy has certainly suffered from an image problem, with it sometimes being thought of as a remote and abstract discipline suitable only for a small number of

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academically-minded adults. This image is mistaken in two ways. Firstly, philosophy as a discipline is intertwined with many everyday adult interests and concerns. This is illustrated by the burst of publishing in popularised philosophy that has taken place in recent years.[2] Secondly, and less obviously, it is also mistaken because philosophical questions, the use of philosophical method, and the benefits of philosophical discussion are not confined to adults. Children can and do engage in philosophical questioning whether in school or out (Matthews, 1984; Pritchard, 1985; Kitchener, 1990; Murris, 2000; Haynes, 2001; Sprod, 2001; Matthews, 1994; Daniel & Auriac, 2009). Since about 1980 'Philosophy for Children' (P4C) has been practised in many countries, though usually as a minority interest and rarely as a part of the mainstream curriculum. In this paper we will mostly use the term 'collaborative philosophical inquiry' (CPI) rather than 'philosophy for children', even though as an acronym 'P4C' has been in widespread usage.[3] The terms are often taken to be interchangeable, and there is at least considerable overlap between them.

The term 'collaborative philosophical inquiry' has the important advantage that it keeps in focus the three components of CPI: it is collaborative, philosophical, and inquiring. Many kinds of education are collaborative and many involve inquiry. And some kinds of philosophy are neither especially collaborative nor notably inquiring. CPI as a practice brings together collaboration and inquiry under the banner of philosophy. This is characteristic of the tradition of 'philosophy for children' since its inception in the 1970s when the P4C movement introduced 'communities of inquiry' as its primary pedagogy. This pedagogical strategy involves rational questioning and intelligent agreement and disagreement among students. Guidance from teachers helps the students to build a constructive dialogue in which concepts are clarified, meanings are explored and where through a process of dialectic a shared understanding is achieved. There is a built-in social dimension because participants are required to listen carefully and to respond respectfully to the ideas of others. It can be thought of as the practice of 'thinking together'. Thus, its aims are essentially both cognitive and social.

The 1999 Adelaide Declaration on National Goals for [Australian] Schooling in the 21st Century stated three principal ideals of schooling that will be widely accepted in many societies:

- To build students' 'capacity for, and skills in, analysis and problem solving and the ability to communicate ideas and information, to plan and organise activities, and to collaborate with others';
- To build students' 'capacity to exercise judgement and responsibility in matters of morality, ethics and social justice';
- To help students acquire 'qualities of self-confidence, optimism, high self-esteem, and a commitment to personal excellence as a basis for their potential life roles as family, community and workforce members'. (MCEETYA, 1999)

As we shall argue, the achievement of these goals is strongly promoted by the practice of CPI.

It is perhaps not well known that the practice of philosophical inquiry with children is supported by an international movement with strong advocates on every continent and region in the world (UNESCO, 2007b). The International Council for Philosophical

Inquiry with Children (ICPIC) was founded in 1985.[4] In 1995, the UNESCO-organised Paris Declaration for Philosophy asserted that 'by training free, reflective, minds capable of resisting various forms of propaganda, fanaticism, exclusion and intolerance, philosophical education contributes to peace and prepares everyone to shoulder responsibilities in face of the great challenges of the contemporary world, particularly in the field of ethics' (UNESCO, 2007b, p. xiii). As a recent UNESCO survey entitled *Philosophy: A school of freedom* shows (UNESCO, 2007b), various countries are now turning to philosophy to give students the intellectual and cooperative skills necessary to survive in a knowledge economy.

The 2009 UNESCO Regional High-Level Meeting in Manila indicated a strong commitment to integrating CPI into schooling in many Asian and Pacific countries. Some countries in the region are already strongly committed to CPI. In Singapore, the Education Minister has instituted a change in the education system based on the fourth 'R'—reasoning—which is based in part on the introduction of collaborative philosophical inquiry. His aim is 'to create a culture of reasoning and discussion that nourishes children's natural sense of intellectual curiosity' (Shanmugaratnam, 2006). Singapore allows multiple pedagogical pathways to teaching reasoning and CPI is not the only strategy employed there, but it has a strong following. In Australia, philosophy is now generally accepted as a subject in upper secondary schools, and for the most part this involves the pedagogical practice of communities of inquiry.[5]

A Short History

Collaborative philosophical inquiry is an educational approach that has its origins in philosophical pragmatism. Pragmatism in this context holds that knowledge is the product of inquiry, that 'knowing' is not merely the acquisition of facts external to the knower, but comes through a problem-solving exercise that moves from doubt to belief on the basis of evidence and inference. The theory and practice of CPI owes much to John Dewey and Matthew Lipman, both of whom belong to the tradition of reflective education which puts learning-to-think as the basis of educational aims and practices (Dewey, 1938, 1997; Lipman, 2004; Bleazby, 2009).

As already noted, a key idea behind the Philosophy for Children movement is that philosophy in the classroom should be based upon a distinctive pedagogy, commonly known as 'community of inquiry'.[6] In engaging with CPI each class reflects on its own processes and behaviours in discussing a text and students are encouraged to evaluate critically the performance of themselves and of the class. 'Text' here is used in a very general sense: a text may be a picture, a poem, a narrative, etc, but such texts need to be chosen with care. Often purpose-written texts are the most successful. The community of inquiry is not the only pedagogical approach, but it is the most widely used approach. There are many reasons for this, mainly associated with children's enjoyment and engagement with it.

To put the use of CPI in context, we can follow UNESCO in distinguishing between five pedagogies for the teaching of philosophy.

- The *dogmatic and ideological paradigm*—that is, 'the teaching and learning of a state philosophy'

- The *historical and patrimonial paradigm*—in which 'philosophy is a major historical form of culture, the manner in which humanity, in answer to the questions that it asks about its own condition, has moved from *mythos* (myth, which tries to explain things in narrative and metaphorical fashion), to *logos* (rational discourse, which philosophy shares with science)'
- The *problem-solving paradigm*—in which philosophy is about 'learning to philosophize'. On this view, 'Philosophizing begins, as Aristotle said, with astonishment and questioning. It is a process of attempting to think through crucial questions and of trying to answer them from beyond any pre-formed opinions, beyond the commonplace and obvious. The challenge is to learn to think for oneself.'
- The *democratic and discussionary paradigm*—'Here as well the aim is problem-solving. What is different is the attempt to link the goal of learning to think for oneself to democratic objectives … . The idea is that for democracy as a political system to mature, it needs to have a thinking citizenry, that is to say, citizens with critical minds who can avoid the excesses of which democracy is always capable: doxology, majority rule, sophistry, persuasion by any means, demagoguery, and similar.'
- The *decision-making (praxeological) and ethical paradigm*—'this concerns learning to act, and not solely to think, in order to live well and in accordance with values. Doing philosophy involves consciously adopting a certain ethical conduct.' (UNESCO, 2007b, pp. 83–85)

The first of these pedagogies is clearly inconsistent with CPI, since it is neither inquiring nor collaborative. CPI can include elements of the second and third approaches; however, the last two are central to it.

In teaching philosophy at any level there is always some tension between historical and conceptual approaches. CPI gives primacy to conceptual clarification, but it can include the historical as a way of grounding and contextualizing the conceptual approach. As the UNESCO study observes,

> The debate over whether to prioritize a historical approach to the teaching of philosophy or an approach based on themes or concepts continues. Here again, as philosophy teaches us, it is the dialectics of the argument that must be sought. It is neither a question of dwelling exclusively on lists of authors, famous or less so, nor of concentrating on concepts that are often difficult to understand when removed from any contextual base. The two approaches should, rather, be able to nourish one another and to lead to a creditable stability. (UNESCO, 2007b, p. 240)

The practice of CPI has grown from the pioneering work of Matthew Lipman, and the contribution by Lipman to the theory and practice of CPI far exceeds that of any other individual.[7] His aim was to create a style of philosophy 'redesigned and reconstructed so as to make it available and acceptable and enticing to children' (Lipman, 1991, p. 262). His work has been widely used as a starting point and a springboard. He 'conceptualized three modes of thinking (*critical*, *creative* and *caring*) and four main varieties of cognitive skill (*enquiry*, *reasoning*, *concept formation* and *translation*)', the demonstration of all of which constitute his definition of collaborative philosophical

enquiry (Topping & Trickey, 2007a, p. 789). The UNESCO report sums up Lipman's approach in this way:

> Lipman's primary goal is to foster critical thinking—and formal logic in particular—in children, based on his belief that children possess the ability to think abstractly and understand philosophical questions from an early age. Rather than attempting to instil any specific philosophical doctrines, Lipman's approach centres on the child's own reasoning and questioning, by working through universal concepts such as rights, justice, or even violence. Lipman believes that children can use their own references to develop a more concrete understanding of these topics, drawn from their experiences and personal knowledge. (UNESCO, 2007b, p. 3)

It adds that 'Lipman proposes a political model of philosophy that emphasizes the connection between democracy and P4C, arguing that stimulating critical thinking in children in the context of a 'community of enquiry' is a means of educating them about democracy' (UNESCO, 2007b, p. 7; see also Dewey, 2004).

The UNESCO study summarises some common arguments for and against the Lipman approach to CPI. Criticisms include the claims that:

- by basing the classes on novels, the students are discussing things they have only experienced second hand, and that this limits their real involvement with the questions and reduces the debate to a relatively lightweight discussion, rather than developing opinions about their own experiences;
- the approach is overly logical, and the exercises repetitive;
- it is based on a purely utilitarian conception of philosophy;
- it subordinates critical thinking to a democratic purpose, so instrumentalizing philosophy. (UNESCO, 2007b, p. 27)

On the positive side the Lipman approach is seen as having enriched philosophical education by adding a number of new dimensions:

- the postulate that children are capable of philosophical thinking, according to which children are not simply 'cultural dopes', to use [sociologist Harold] Garfinkel's term, incapable of thinking for themselves;
- the conviction that it is possible to learn to philosophize through oral debate and a process of sociocognitive questioning, and not only by reading the works of the great philosophers;
- the idea that to philosophize is not to have no opinion, but to question and develop one's opinions;
- the idea of a 'community of enquiry' based on the contributions of student-philosophers;
- the historic opportunity, in the tradition of Greek democracy and the philosophy of Enlightenment, to connect philosophy to democracy. (UNESCO, 2007b, p. 27)

The connection between democracy and Philosophy for Children reflects the influence on Lipman of Deweyan pragmatism, whereas Lipman's emphasis on children's ability to think abstractly and their ability to use their own cultural experiences and

references to develop understanding can be traced to the Russian psychologist Lev Vygotsky. The main Vygotskian element at work in a CPI classroom is the idea that 'every feature of a child's cultural development appears twice: first on the social level, and later, on the individual level; first *between* people (*interpsychological*), and then *inside* the child (*intrapsychological)*' (Vygotsky, 1978, p. 27; cited in Cam, 2006a, p. 45). As Philip Cam observes, 'it would be a natural extension of Vygotskian psychology to suggest that children come to think for themselves through the internalization of social practices' (Cam, 2006a, p. 45). Lipman himself notes the importance of 'Vygotsky's demonstration that many children work at a different—and higher—level when doing intellectual work cooperatively rather than competitively' (Lipman, 1988b, p. 52; see also Lipman, 1996).

The Lipman tradition has been advanced in various ways. Laurance Splitter and Ann Sharp, for example, offer a discussion of the nature of philosophy that emphasises its close link with the activity of inquiry. As they observe, 'The discipline of philosophy is, traditionally, a home for the teaching of thinking, for it is intimately connected, in terms of process and content, to thinking itself'. They outline a number of 'connections between the teaching and improvement of thinking and inquiry on the one hand, and philosophy on the other'.

- Philosophy is *thinking about thinking*. '[I]t is the conceptual discipline of philosophy which deals with the foundations and criteria by which judgements are made and, more importantly, appraised.'
- Philosophy is *the quest for meaning*. All formal education is a systematic search for meaning. 'Philosophy is also a search for meaning—for connections and relationships—but at more general levels of personal experience and understanding ... . Through philosophy, one acquires the discipline of attending to those mundane and familiar aspects of experience which might otherwise be taken for granted ... . Bringing philosophy to schools is one way of addressing the sense of disconnectedness, fragmentation and alienation that many young people experience.'
- Philosophy is *conversation as dialogue*. 'The open-ended texture of dialogue facilitates the movement between the concrete and the conceptual, and among and beyond particular perspectives. Participants in the dialogue call upon one another to look for rules in support of specific claims, on the one hand, and examples and counter-examples in response to general claims, on the other.'
- Philosophy is *asking open questions*. 'Philosophical questions stimulate the kind of thinking which both increases our understanding and leads us to ask further questions ... . In so far as every school subject deserves to be treated as a form of inquiry, open questioning (procedural and substantive) plays an important role across the curriculum. Nevertheless, reflecting its ancient connection with wonder, philosophy thrives on questions.'
- Philosophy is *creative thinking*. 'Because philosophy both encourages and relies upon those who can think for themselves, it involves a dimension of freedom; a capacity to take what one has learned and relate it to one's experience in new ways. Children who think for themselves are both critical thinkers and creative thinkers.'
- Philosophy is *value-laden thinking*. 'The classroom community of inquiry ... constitutes a real-life model in which good thinking, good conduct and intellectual growth

> come together in the practice of the community ... [It] constitutes the appropriate environment for the study of values in the classroom. (Splitter & Sharp, 1995, pp. 89–98; see also Lipman, Sharp & Oscanyan, 1980; Sharp & Reed, 1992; Lipman, 1993; Lipman & Sharp, 1994)

The content of CPI can be explained in general terms. The questions discussed in a CPI class need not be philosophical in any narrow sense; however, they will not normally be scientific, literary or historical questions. What then defines an appropriate topic for discussion in CPI? The best answer to that question is that of Philip Cam, using his 'question quadrant'. Using this quadrant, questions are categorised as either open or closed and as either 'intellectual' or based on the text. This distinguishes four kinds of questions that might be asked of any text: closed textual (reading comprehension) questions; open textual (literary speculation) questions; closed intellectual (factual knowledge) questions; and open intellectual (inquiry) questions. The first and third types are 'closed' questions, in that they have settled answers; the second and fourth types are 'open', in that a variety of plausible answers might be given. CPI has its home in the fourth 'inquiry' quadrant, where the questions are open and intellectual in nature (see Cam, 2003a, 2006b, pp. 32–39). Philosophical questions all belong in this fourth category, but so do many questions that would not normally be regarded as philosophical. But in any case a method is needed to address this class of question. One way to appreciate the importance of incorporating collaborative philosophical inquiry into classes is to ask: where else in the school curriculum do we teach students how to deal with open intellectual questions? Such questions are commonly *raised*, but how are they *discussed*? To prevent discussion of them being mere exchange of opinion, there needs to be method and rules. It is easy to imagine a classroom discussion of open intellectual questions becoming a sort of free-for-all, but central to a philosophical community of inquiry are the ideas of *reflection* and *respectful dialogue*. Reflection here is not mere navel-gazing but is, following Dewey, a persistent ordered act of inquiry building toward considered (reflective) judgement. Such inquiry is a creative process. Respectful dialogue requires us to listen with charity to what others have to say and to follow rules—whether the rules are imposed by the teacher or agreed by the group. A typical set of class rules is this one, from Pemberton District High School in Western Australia:

- Listen to other people;
- Build on what others say;
- Respect other people's ideas;
- There may be no single right answer;
- Be prepared to think.[8]

The Evidence

So far we have outlined the aims and theory of collaborative philosophical inquiry, but how well does it work? Practitioners and advocates of 'philosophical community of inquiry' have built up a significant body of supportive but largely anecdotal evidence for the efficacy of the method.[9] But only in recent years has more rigorous research evidence emerged. This new research strongly indicates that teaching philosophical inquiry both

accelerates students' general learning and improves their attitudes to school and learning and to their peers. In the recent UNESCO study, Roger Sutcliffe (President of the British Society for Advancing Philosophical Enquiry and Reflection in Education [SAPERE] and of ICPIC), made the following general observations about the research evidence on the benefits of P4C:

- P4C is widely noted for its ability to 'stimulate creative as well as critical thinking in young minds'. Teachers and schools who use P4C are unfailingly commended by the British national schools inspectorate OFSTED for incorporating it into the curriculum.
- P4C 'not only extend[s] children's thinking, but also encourage[s] them to express that thinking in speech', and thus it can 'develop children's listening and speaking skills'.
- P4C helps children to 'develop both socially and emotionally at a faster rate', making them 'more patient with others, and more able to reflect upon their own feelings and behaviour'.
- P4C 'enables and encourages children to develop a personal value base, through hearing different values expressed and reasoned about. The reasoning ensures that the values are thought through and not simply adopted out of fashion or simplicity'. (Sutcliffe in UNESCO, 2007a, pp. 53–54)

We will now set out the key evidence more fully.

Schooling and Thinking Skills

All schooling aims to bring about cognitive growth. However, few schools anywhere teach thinking as a demonstrably discrete element of the curriculum.[10] There are many 'thinking skills' taught, but outside of a few programs, such as Habits of Mind and CPI, these are often taught as unconnected items and lack a cohesive 'thread'.[11] In other subjects there is wide agreement as to what should be taught at each year level, or achievement level, so as to ensure that students learn incrementally and that their base knowledge expands at a rate comfortable for most students. There is as yet no agreement on how the 'fourth R', reasoning, should be scoped and sequenced—a condition that needs to be met for philosophy to have a secure base in the curriculum. That philosophy is not taught seems paradoxical, however, since philosophy is in part the study of cognitive norms (that is, epistemology) and argument skills (commonly known as 'critical thinking'), and we should expect the teaching of such norms and skills to be considered a desirable part, or perhaps even a necessary part, of a good education.

The cost of not teaching 'thinking skills' in a deliberate way is suggested by the OECD 2006 survey, Adult Literacy and Life Skills Survey, in which, for example, 70 per cent of Australian 15–74-year-olds did not demonstrate the minimum problem-solving abilities needed to 'meet the complex demands of everyday life and work in the emerging knowledge-based economy' (ABS, 2006). Young people in the 15–19 age group were no better than the national average. Similar results were obtained for people aged 16–65 in four of the other five countries surveyed (Bermuda, Canada, Norway and Switzerland), while the findings for Italy were far worse (90 per cent failed to reach the minimum) (ABS, 2006, p. 27).

Sutcliffe contends that there is 'hard evidence' that P4C 'accelerates children's learning of skills'. He says: 'Perhaps the best [evidence] came from a study of 18 primary

schools in Clackmannanshire, Scotland in 2002/3.' This Scottish study was conducted by Professor Keith Topping of Dundee University and senior psychologist Dr Steve Trickey.[12] Some of their findings, as summarised by Sutcliffe, were:

- A whole population of children gained on average 6 standard points on a measure of cognitive abilities after 16 months of weekly enquiry (1 hour per week).
- Pupils and teachers perceived significant gains in communication, confidence, concentration, participation and social behaviour following 6 months of enquiry.
- Pupils doubled their occurrence of supporting their views with reasons over a 6-month period.
- Teachers doubled their use of open-ended questions over a 6-month period.
- When pupils left primary school they did not have any further enquiry opportunities yet their improved cognitive abilities were still sustained two years into secondary school.
- Pupils increased their level of participation in classroom discussion by half as much again following 6 months of weekly enquiry. (Sutcliffe in UNESCO, 2007a, pp. 53–54)

Other studies support these findings. In a meta-analysis that focused on studies using controlled experimental designs and reporting adequate data, Trickey and Topping found that:

> Ten studies met the stringent criteria for inclusion, measuring outcomes by norm-referenced tests of reading, reasoning, cognitive ability, and other curriculum-related abilities, by measures of self-esteem and child behaviour, and by child and teacher questionnaires. All studies showed some positive outcomes. The mean effect size was 0.43 with low variance, indicating a consistent moderate positive effect for P4C on a wide range of outcome measures. (Trickey & Topping, 2004, p. 365)

There are two other meta-analyses of note. In an analysis of 18 studies using the P4C approach Garcia-Moriyon *et al*. concluded that 'the implementation of P4C led to an improvement of students' reasoning skills of more than half a standard deviation', a gain of roughly seven IQ points. They add that 'The result is especially impressive if we note that P4C was never applied for more than one school year in all the studies reviewed' (Garcia-Moriyon *et al*., 2005, pp. 19, 21).

Higgins *et al*. analysed 'thinking skills programs', of which collaborative philosophical inquiry is one main kind. They concluded that 'they are effective at improving pupils' performance on cognitive and curriculum tests when they are researched in school settings' and 'Their effect is relatively greater than most other researched educational interventions'.

> Analysis of these studies indicate[s] that thinking skills approaches are effective in improving pupils' learning and that they have a positive effect on pupils' attitudes or beliefs. The quantitative synthesis of this impact found an effect size of 0.62 for the main cognitive measure (such as tests of reasoning or non-verbal measures, such as Raven's Progressive Matrices) and an effect size of 0.62 for the main curriculum outcomes (such as reading, mathematics or

> science tests). These effect sizes indicate that an 'average' class of pupils who received such interventions would move from 50th place in a rank of 100 similar classes to about 26th (a gain of 24 percentile points). (Higgins *et al.*, 2005, p. 28)

As noted above, Trickey and Topping showed that CPI can produce large cognitive gains, as measured by the Cognitive Abilities Test, but one might query whether these gains are manifested in students' subsequent school performance. The transferability of thinking skills to other school studies has sometimes been regarded as controversial (see Rosaen, 1988 for a discussion), but the Higgins study shows that CPI in particular and dialogical interactions generally do promote an ability in children to transfer argumentation skills to different contexts. Other less rigorous studies have produced similar results (Schleifer & Courtemanche, 1996; Sprod, 1997). Taken together, this recent research strongly suggests that the practice of CPI produces increases in measured IQ, sustained cognitive benefits, and clear performance gains in other school studies.

Schooling, Socialisation and Values

Schooling is of course not simply about learning. It also has the purpose of helping to socialise students. Social growth is less easy to measure than cognitive growth but it is at least as important. It has a number of agreed dimensions. Well-socialised students exhibit cooperative attitudes to their peers, to school and to learning—sometimes referred to as positive 'engagement'. Such students have self-confidence, show empathy with others, and form open and confident relationships with teachers and their peers. These attributes are observable in class and outside the classroom, where they extend to include constructive civic engagement.

However, since the time of Socrates and the Sophists there has been debate as to whether values and ethics can be taught at all. That debate continues, with strong advocates for the affirmative view (see Peters, 1966, 1981; Hill, 1991; Haynes, 1998; Carr & Steutel 1999; Cairns *et al*, 2000; Darling, 2002). Whatever the merits of the arguments, as a matter of fact it is widely assumed that values *should* be taught, explicitly or implicitly, as (for example) the *Melbourne Declaration on Education Goals for Young Australians* makes clear:

> As well as knowledge and skills, a school's legacy to young people should include national values of democracy, equity and justice, and personal values and attributes such as honesty, resilience and respect for others. (MCEETYA, 2008)

The 1999 *Adelaide Declaration* was even more explicit on values:

> ... when students leave school, they should ... have the capacity to exercise judgement in matters of morality, ethics and social justice ... to make rational and informed decisions about their own lives and to accept responsibility for their actions. (MCEETYA, 1999)[13]

How might collaborative philosophical inquiry contribute to values education? A key clarification here is to note that CPI is not about the direct teaching of values. A

community of inquiry exercise may or may not involve discussion of a moral question; it may discuss any open intellectual question. The social benefits of CPI arise not so much from the topics raised as from the manner in which they are discussed. The distinctive contribution of CPI is to show how values can be promoted through a particular kind of classroom practice. The classroom experience of philosophy should be *collaborative*. Students should learn not just cognitive skills but also how to engage in cooperative dialogue, and thus become skilled at cooperative behaviour more generally.

In fact the CPI literature has contended strenuously, though somewhat anecdotally, for the social benefits of practising philosophy in a cooperative manner.[14] The criticism sometimes heard (for example, de Bono, 1994; see Burgh, Field & Freakley, 2006, for a rebuttal) that philosophy is inherently adversarial and thus socially divisive misses the mark: both the intention and the effect of doing CPI is to promote cooperative classroom experiences. Although measuring changes in values is highly problematic, and at best we can only investigate changes in behaviour or self-reports and infer changes in values from these, previous discussions have suggested that the practice of CPI leads directly to social and ethical growth (Splitter & Sharp, 1995, pp. 164–85). These intimations now have good research support.

Strong empirical support for the social benefits of CPI was provided by Trickey and Topping. In their study of children using collaborative philosophical inquiry for one hour a week for seven months, they noted that 'changes in intervention classes included: increased use of open-ended questions by the teacher, increased participation of pupils in classroom dialogue, and improved pupil reasoning in justification of opinions' (Topping & Trickey, 2007b, p. 73). They showed that these children demonstrated improved self-esteem as a learner; reduced dependency and anxiety; and greater self-confidence. They noted that 'half the students reported gains in "emotional intelligence", particularly relationships, social behaviour and empathy, self-confidence, and self-regulation of emotion. Two thirds of students reported generalization of effects outside the enquiry sessions. [And] student perceptions were largely confirmed by the teachers' (Trickey & Topping, 2006, p. 599).

Another relevant study is Collins' doctoral thesis (Collins, 2005), a pre/post controlled intervention study of 133 ethnically diverse students in five South Australian primary schools. Five Society and Environment teachers were trained in a three-day course to conduct weekly ethical inquiry sessions using collaborative philosophical inquiry. The sessions were run for two terms. The pre/post questionnaire tested students' justificatory thinking abilities and dispositions. Collins found that a philosophy intervention led to growth in the participants' ability and disposition to consider issues empathetically and to weigh consequences for all concerned.

The most striking Australian evidence is from Buranda State School. In a study of the school, it was concluded that:

> The changes at the school over the space of nine years include a significant increase in enrolments, improved programs and facilities, improved work practices, a very supportive school community and, most importantly, demonstrable, improved student outcomes … . Significantly improved outcomes have occurred in the social behaviour of the students. There are now few behaviour

> management problems. Students are less impatient with each other, they are more willing to accept their own mistakes as a normal part of learning and they discuss problems as they occur. Student interaction and behaviour outside of the classroom reflects the co-operative environment of the classroom community of inquiry. Bullying is seldom an issue. (Burgh *et al*, 2006, p. 202; see pp. 196–206; see also Hinton, 2003a, 2003b)

The school 'was awarded the Queensland showcase school of the year in 2003 and received an award for Outstanding National Improvement by a School in 2005' (UNESCO, 2007a, p. 86).

There is other evidence that a philosophical community of inquiry is an effective pedagogical approach to teaching values. Millett and Kay showed in a small study of 48 10–11-year-old boys over one semester that a philosophical community of inquiry was an effective tool for teaching values (Millett & Kay, 2001). This study used a measurement tool developed by Lovat and Schofield for their Hunter Valley study which showed that the impact of regular explicit teaching of values could be measured (Lovat & Schofield, 1998). Russell showed in a qualitative study using an emergent research design that 'children have a strong moral sense' and that this is fostered in a 'Philosophy with Children' type of community of inquiry (Russell, 2002).

Other Australian evidence is included in the 2008 report of the Values Education Good Practice Schools Project. This study of 143 schools investigated the impact of ten previously identified good practices. The schools were divided into 25 clusters, with each cluster focussing on one of the practices. Two of the 25 clusters used philosophical communities of inquiry, with both reporting positive effects on students. Positive effects were observed in student engagement with learning, active listening, and evidence of more care and respect in student-to-student interactions. 'Students themselves enjoyed the respectful attention they received working with philosophy in the classroom. In practice they experienced the mutual benefits of a values-centred classroom environment' (Commonwealth of Australia, 2008, p. 28).

In general, then, there is now good evidence supporting the view that the practice of philosophical discussion improves children's social behaviour, as Lipman contended (Lipman, 1988b, especially Chapters 5 and 6). Students develop care and respect for others, tolerance of differences and a greater capacity for self-direction. In Lipman's terms, collaborative philosophical inquiry offers schools 'a channel ... that will enable them to pass between the Scylla of authoritarianism and the Charybdis of vacuous relativism' (p. 73). It does indeed build students' 'capacity to exercise judgement and responsibility in matters of morality, ethics and social justice' (MCEETYA, 1999).

Future Research

As we have shown, a small number of validated studies into the effects of CPI have been conducted (Topping & Trickey, 2007a, 2007b, 2007c; Trickey & Topping 2004, 2006, 2007; Garcia-Moriyon *et al.*, 2005), and these have produced strong empirical support for the practice of CPI, in terms of both cognitive and social effects. Nevertheless, further rigorous studies are needed to test these findings in depth. Clearly, if CPI is to be widely

introduced—and the 2009 UNESCO Manila decision suggests that it will be—it is a matter of great significance whether such findings can be replicated on a broad scale in a rigorous way and across cultures.

The ground-breaking work of Topping and Trickey in Scotland had various key features:

- it was a quantitative study with a focus on an ethnically homogeneous local area;
- it looked at primary school students aged 10 to 12;
- the intervention used Cleghorn's 'Thinking through Philosophy' (Cleghorn, 2002);
- the students and their teachers had had only a short exposure to philosophy.

Future research would best add to our understanding of CPI if it had the following features:

- the research uses a mixed methods methodology;
- the survey population is ethnically and geographically diverse;
- the survey population includes both younger and older students;
- the study uses a diverse set of curriculum materials;
- students in schools where philosophy is an established part of the whole school program are studied.

Trickey and Topping have shown that teachers previously untrained in the discipline of philosophy or the pedagogy of CPI can become effective teachers in this mode of teaching, but more research is also needed into the experience of becoming a teacher of CPI.[15]

It is desirable also to investigate the impact of CPI from the viewpoint of psychological theory (see Gazzard, 1983; Gazzard, 2000; Golding, 2004). Educators and professional philosophers have often doubted that children or even teenagers are psychologically capable of engaging in the abstract and conceptual questions of philosophy. However, the argument for this claim has often been a shallow one. The UNESCO study made these observations on children's psychological capacity for doing philosophy:

> [I]f a teacher does not create, within the classroom, a space in which children can express their thoughts freely and spontaneously and formulate their existential questions, children may say little about them. If we do not organize classroom discussions, some children will not learn how to discuss, and this is true simply because the ability to discuss is a learned skill. If we do not introduce children to the community of enquiry, they will not learn to ask each other questions, to define their terms, or to argue rationally when others disagree with them. And as long as we believe that children are not capable of doing philosophy, they will not demonstrate the ability to do it, simply because their teachers did not provide the necessary conditions: psychological (such as promoting confidence within the group), pedagogical (the community of enquiry), or didactic (such as setting philosophical goals that relate to the intellectual demands of a discussion). (UNESCO, 2007b, p. 8)

The UNESCO study adds that 'the confidence placed in the children's potential for rational thought increases their "zone of proximal development", to borrow another term

from the Russian psychologist Lev Vygotsky' (UNESCO, 2007b, p. 8). Vygotsky is an important influence on advocates for CPI. They contend that the beneficial cognitive and social effects of the CPI pedagogy can best be explained through an understanding of Vygotskian shared learning, in particular through Vygotsky's notion of the internalisation of shared thinking whereby participants' experience at the inter-personal level in group work is internalised by individuals and integrated into their intra-personal thinking processes (Vygotsky, 1962, 1978; Splitter & Sharp, 1995; Sutcliffe, 2003; Lim, 2004; Reznitskaya, 2005; Cam, 2006a). By emphasising the classroom as an inclusive cooperative community in which students learn to think for themselves through intellectual and social interaction with both the teacher and peers, learning becomes a continuous reconstruction of experience and leads to the development of dispositions and capacities (as opposed to an emphasis on the learning of skills or the construction of knowledge). Reznitskaya argues that a social learning perspective represented by CPI helps to explain the acquisition of what she calls argument schemas—abstract knowledge structures that underpin our ability to engage in social argumentation. She notes, following Vygotsky and George Herbert Mead, that 'argument schemas are developed through socialization into argumentative discourse' and that 'the richer and more stimulating the experience, the more refined and complete the argument schema' (Reznitskaya, 2008).[16]

Conclusion

Collaborative philosophical inquiry is a pedagogy which—the research literature shows—brings improved reading, writing, maths, science and problem-solving skills. In addition, it brings important social benefits. In particular, the work of Trickey and Topping is now an international benchmark for evidence on the impact of teaching school children to think together and to think better. And findings such as those surveyed here seem to justify important changes in national education policies. As they observe:

> Unlike many educational methods, P4C has relatively good quality and quantity of evidence for effectiveness. This has implications for action in policy and practice at the level of the individual teacher, the school development plan, local educational authority prioritization, and leadership from national government. However, in the strategic allocation of scarce resources, the question of cost-effectiveness is also pertinent. (Trickey & Topping, 2004, p. 377; see also Haynes, 2002)

Undoubtedly, the addition of philosophy enriches the curriculum, with its distinctive questions and intellectual strategies. The main objections to this addition are likely to be the claim that cognitive norms and skills are already adequately taught in the current curriculum disciplines, especially in English, mathematics, science, society and environment; and the old chestnut of the crowded curriculum, or 'what do we throw out to allow this new stuff in?' The first objection is not a good argument as it stands: all that follows is that philosophy might be taught alongside these other disciplines, since it too teaches thinking skills. The 'crowded curriculum' objection carries little force because: if this position were adopted consistently there would be no change in education; CPI is an approach that can be used within any of the disciplines currently taught; CPI improves

effective learning in other school subjects; and if the curriculum is thought to be overloaded, then the best strategy is to prioritise those pedagogies that best achieve the aims of schooling. The research evidence suggests that CPI is a most efficient and effective strategy for cognitive advancement, so CPI has a good case to rank highly in this prioritisation.

CPI has the advantage that it is a low-cost easy-to-implement pedagogy. It is also, as Will Ord has observed, a pedagogy that 'both teachers and pupils really enjoy—it's challenging, meaningful, and allows for failure to be framed (properly) as an integral part of learning'.[17] However, one important obstacle to its introduction is the lack of appropriate teacher training and teaching resources. The research evidence strongly supports at least the inclusion of the pedagogy of philosophical community of inquiry in the pre-service training of teachers.[18] It also provides a strong argument for widespread in-service training in CPI, the creation of thinking syllabi, and the production of a wider range of context-appropriate curriculum support materials.[19] The case for the introduction of philosophy into all levels of schooling can be further strengthened by evidence that it can be integrated with the literacy curriculum and/or other curriculum areas.[20]

Changing education to make collaborative philosophical inquiry a priority cannot be achieved quickly or easily, and much work will need to be done on many levels. Nevertheless, there are good grounds to support this as a long-term policy direction. In a recent wide-ranging discussion of the contemporary school curriculum, Howard Gardner has observed (Gardner, 2004): 'How best to begin to introduce rigorous multiperspective thinking into our classrooms is a challenge that we have only begun to confront'. He considers that 'the 'theory of knowledge' course required of students in the International Baccalaureate' is one way to achieve this. Collaborative philosophical inquiry is surely another way. Gardner also emphasises the importance of 'Knowledge of and ability to interact civilly and productively with individuals from quite different cultural backgrounds—both within one's own society and across the planet'. Again, there is good evidence that collaborative philosophical inquiry promotes civil and productive interaction. Education policy-makers need now to pay careful attention to collaborative philosophical inquiry as a demonstrably effective pedagogy and to seek ways to investigate further its claim to a place in the curriculum.

Notes

1. Gregory (2007b) provides a valuable bibliography of the extensive English-language literature on philosophy in schools.
2. For example, Scruton, 1996; Blackburn, 1999; Cohen, 1999; de Botton, 2001; Fearn, 2002, 2005; Solomon, 2003; Phillips, 2005a, 2005b; Law, 2007. This publishing trend arguably began with Gaarder's *Sophie's World* (1995), which sold 30 million copies in over 50 languages.
3. We are following the example set by Trickey & Topping, 2006. Others prefer to talk of 'philosophy with children' (PwC). Still others speak of 'philosophy in schools'. As Gregory 2007b observes, 'no theoretical or practical differences distinguish these programs from each other'. See also Golding, 2006.
4. See the ICPIC website, ⟨http://www.icpic.org/⟩.
5. Until recently Australian schools have chosen not to include philosophy in the standard curriculum (see Wilks, 2005; Cam, 2006a; Millett in UNESCO, 2007a pp. 84–87; Millett,

2008, 2009), and even now philosophy is usually included only in the final years of the secondary school curriculum and then not in all states.

6. Perhaps the best introduction to the theory of CPI, and to the 'community of inquiry' method as a classroom practice, is Splitter & Sharp, 1995. See also Sharp, 1987, 1991; Haynes, 1997; Sprod, 2001; Fisher, 2003; Splitter, 2003; Gregory, 2004, 2007a; Burgh, Field & Freakley, 2006; Roemischer, 2006.
7. Another, less influential stream comes from the German mathematician and philosopher, Leonard Nelson (1882–1927), who developed a pedagogy of 'Socratic dialogue' (Nelson, 1965). See also UNESCO, 2009a, p. 162, for a summary: 'The Socratic Dialogue is a philosophical practice for everyone, in which a small group of people led by a rigorous facilitator carry on a dialogue over many hours in order to get to the bottom of some fundamental question of general interest and find an answer. The question at the centre of the dialogue is not handled in the abstract, but must apply to the actual experience of one or more of the participants, a particular experience which has been selected by the group and is accessible to all'. Saran & Neisser, 2004, provide an up-to-date introduction to this approach, which seems broadly similar to the P4C tradition of Lipman.
8. Thanks to Alison Freeman for providing this.
9. For example, taking just Australian studies: Wilks, 1992; Haynes, 1993; Sprod, 1992, 1995, 1997; Splitter & Sharp, 1995; Cam, 1999; Imbrosciano, 1997; Haynes, 1998; Knight & Collins, 2000; Millett & Kay, 2001; Hinton, 2003a, 2003b; Bleazby, 2004; Collins, 2005; Burgh, Field & Freakley, 2006; Millett & Flanagan, 2007. See also Morehouse, 1995; Lim, 1998.
10. See Tapper, 2007, on reasoning and inference. One good test of whether thinking is taught is whether students understand the idea of an inference. Nel Noddings comments on American education that 'The neglect of critical thinking is not limited to poor urban and rural schools. It is pervasive … . The neglect of topics that call forth critical and reflective thinking pervades our system of education' (Noddings, 2006, p. 2). Although CPI (P4C) was first developed in the US by Lipman, American schools have very largely failed to follow his lead and philosophy plays little part in American schooling. 'Philosophy courses are offered in some secondary schools in the United States, although they are not prescribed by the national school system. They are in fact complementary courses left to the initiative of each academic establishment, or to the good intentions of a few teachers' (UNESCO, 2007b, p. 77). In a critique of British schooling, Stephen Law argues strongly in favour of 'a syllabus that includes periods in which open, philosophical discussion of important moral, cultural, political and religious question[s] takes place'. His argument rests in part on the demonstrated social benefits of CPI (Law, 2006, p. 166; see also pp. 36–39).
11. Millett (2008) has used the analogy of a pizza base to describe philosophy. The base can take many different toppings and the pizza can be taken away and consumed in many different settings: that is, philosophy through CPI provides transferable cognitive tools. Without the base, any tools taught tend to be disconnected and transferability is more difficult.
12. See Trickey & Topping, 2004, 2006, 2007; Topping & Trickey, 2007a, 2007b, 2007c.
13. For a valuable Scottish study of values in primary schooling see Powney *et al.*, 1995. Knight and Collins note that subsequent to the Adelaide Declaration, Australian governmental advisory committees 'pointed to what they see as a "values vacuum" in our schools' (Knight & Collins, 2006, p. 33), and that in 2002 a large-scale study was initiated which informed 'the development of a framework and set of principles' for the nation. The study identified two main approaches to values education: character education, in which societal values are taught overtly, and a 'development of moral reasoning' approach (DEST, 2006; cited in Knight & Collins, 2006, p. 33). The study indicated that these could be synthesised, but also identified a set of nine 'Common Australian Values', which were to be taught in Australian schools.
14. See for example Sharp, 1991; Cam, 1994, 2003b; Lipman, 1988b, 1995; Splitter & Sharp, 1995; Haynes, 1998; Burgh & Freakley, 2000; Sprod, 2001; Russell, 2002; Fisher, 2003; Hinton, 2003b; Burgh, Field & Freakley, 2006; De La Garza, 2006; Glaser, 2007.

15. This is the subject of current doctoral research at the University of Queensland by Rosie Scholl ('Transforming Pedagogy through Philosophy for Children'). See Scholl, Nichols & Burgh, 2009.
16. Reznitskaya's notion of an argument schema follows schema-theoretic views of cognition, the classic example of which is Schank and Abelson's 1977 description of a 'restaurant schema', an abstraction of multiple experiences of eating out that 'contains such elements as ordering, eating, and paying for food'.
17. Personal communication. Will Ord is a former Chair of SAPERE.
18. For some discussion of the issues, see Splitter, 2006; Roberts, 2006; and Echeverra, 2006.
19. For British examples, see Cleghorn, 2002; Fisher, 2003, 2005; Weate, 1998; Law, 2003a, 2003b, 2004a, 2004b. For American examples, see Lipman, 1974, 1976, 1978, 1980, 1981, 1986, 1988a; Sharp, 2000. For Australian examples, see Cam, 1995, 2003b, 2006b; Golding, 2002; Millett & Tapper, 2007, 2008a, 2008b. See also Mark and Eunice Nowacki's innovative LogicMills program as an adaptation to the cultural context of Singapore (⟨http://www.logicmills.com/⟩); results of a research study of their program will be reported in the near future.
20. For an example of such integration, see Knight & Collins, 2000; see also Burgh & O'Brien, 2002.

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