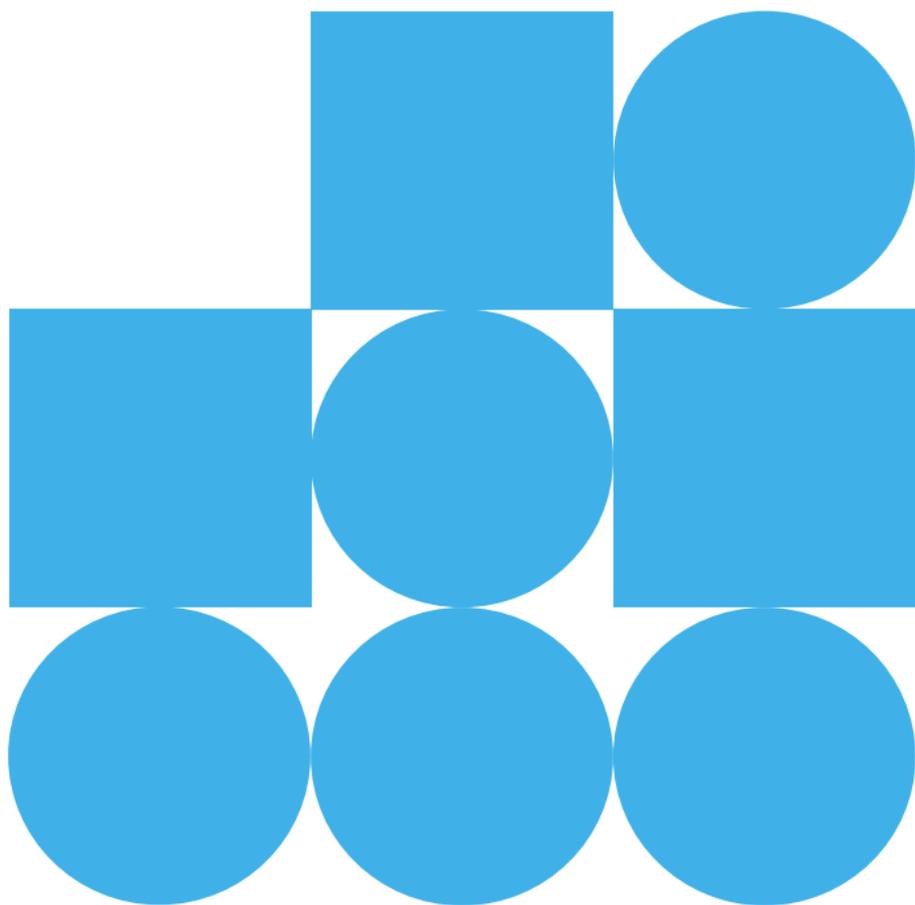


Educational Practices Series

32

Philosophy for children

by Keith J. Topping, Steve Trickey, and Paul Cleghorn



Editorial Board

Educational Practices Series

Co-chairs:

Mmantsetsa Marope

Director, UNESCO International Bureau of Education

Stella Vosniadou

The Flinders University of South Australia, Australia

Members:

Lorin Anderson

University of South Carolina, USA

Maria Ibarrola

National Polytechnical Institute, Mexico

Managing Editor:

Simona Popa

UNESCO International Bureau of Education, Switzerland

The International Academy of Education

The International Academy of Education (IAE) is a not-for-profit scientific association that promotes educational research, and its dissemination and implementation. Founded in 1986, the Academy is dedicated to strengthening the contributions of research, solving critical educational problems throughout the world, and providing better communication among policymakers, researchers, and practitioners.

The seat of the Academy is at the Royal Academy of Science, Literature, and Arts in Brussels, Belgium, and its coordinating center is at Curtin University of Technology in Perth, Australia.

The general aim of the IAE is to foster scholarly excellence in all fields of education. Towards this end, the Academy provides timely syntheses of research-based evidence of international importance. The Academy also provides critiques of research and of its evidentiary basis and its application to policy.

The current members of the Board of Directors of the Academy are:

Doug Willms, University of New Brunswick, Canada (President)

Barry Fraser, Curtin University of Technology, Australia (Executive Director)

Lorin Anderson, University of South Carolina, USA (President Elect)

Maria de Ibarrola, National Polytechnical Institute, Mexico (Past President)

Marc Depaepe, University of Leuven, Belgium

Kadriye Ercikan, University of British Columbia, Canada

Gustavo Fischman, Arizona State University, USA

The International Bureau of Education

The International Bureau of Education (IBE) was established in 1925, as a private, non-governmental organisation, by leading Swiss educators, to provide intellectual leadership and to promote international cooperation in education. In 1929, the IBE became the first intergovernmental organization in the field of education. At the same time, Jean Piaget, professor of psychology at the University of Geneva, was appointed director and he went on to lead IBE for 40 years, with Pedro Rosselló as assistant director.

In 1969, the IBE became an integral part of UNESCO, while retaining intellectual and functional autonomy.

The IBE is a UNESCO category I institute and a center of excellence in curriculum and related matters. Its mission is to strengthen the capacities of Member States to design, develop, and implement curricula that ensure the equity, quality, development-relevance and resource efficiency of education and learning systems.

IBE-UNESCO's mandate strategically positions it to support Member States' efforts to implement Sustainable Development Goal 4 (SDG4), quality education for all, and indeed, other SDGs that depend for their success on effective education and learning systems.

About the Series

The Series was started in 2002, as a joint venture between the International Academy of Education (IAE) and the International Bureau of Education (IBE). So far 30 booklets have been published in English and many of them have been translated in several other languages. The success of the Series shows that the booklets meet a need for practically relevant research-based information in education.

The series is also a result of the IBE's efforts to establish a global partnership that recognizes the role of knowledge brokerage as a key mechanism for improving the substantive access of policymakers and diverse practitioners to cutting-edge knowledge. Increased access to relevant knowledge can also inform education practitioners, policymakers and governments how this knowledge can help address urgent international concerns, including but not limited to curriculum, teaching, learning, assessment, migration, conflict, employment and equitable development.

Governments need to ensure that their education systems meet their core and indisputable mandate, which is to promote learning and, ultimately, to produce effective lifelong learners. With the aggressive pace of contextual change in 21st century, lifelong learning is a critical source of adaptability, agility to adapt, and the resilience required to meet challenges and opportunities. Yet, for many countries around the world, effective facilitation of learning remains a daunting challenge. Learning outcomes remain poor and inequitable. Intolerably high proportions of learners fail to acquire prerequisite competences for lifelong learning such as sustainable literacy, digital literacy, critical thinking, communication, problem solving, as well as competences for employability and for life. Systems' failure to facilitate learning co-exists with impressive advancements in education research, driven by research from diverse fields, including the sciences of learning, particularly the neuroscience of learning, and advancements in technology.

The IBE's knowledge brokerage initiative seeks to close the gap between scientific knowledge on learning and its application in education policies and practice. It is driven by the conviction that a deeper understanding of learning should improve teaching, learning, assessment, and policies on lifelong learning. To effectively envision and guide required improvements, policymakers and practitioners must be fully cognizant of the momentous dialogue with research.

The IBE recognizes the advancements already made, but also that there is still much more work to be done. This can only be achieved through solid partnerships and a collaborative commitment to building on previous lessons learned and continued knowledge sharing.

The Educational Practices booklets are illustrative of these ongoing efforts, by both the International Academy of Education and the International Bureau of Education, to inform education policymakers and practitioners on the latest research, so they can better make decisions and interventions related to curriculum development, teaching, learning and assessment.

Previous titles in the 'Educational practices' series:

1. Teaching by *Jere Brophy*. 36 p.
2. Parents and learning by *Sam Redding*. 36 p.
3. Effective educational practices by *Herbert J. Walberg and Susan J. Paik*. 24 p.
4. Improving student achievement in mathematics by *Douglas A. Grouws and Kristin J. Cebulla*. 48 p.
5. Tutoring by *Keith Topping*. 36 p.
6. Teaching additional languages by *Elliot L. Judd, Lihua Tan and Herbert, J. Walberg*. 24 p.
7. How children learn by *Stella Vosniadou*. 32 p.
8. Preventing behaviour problems: What works by *Sharon L. Foster, Patricia Brennan, Anthony Biglan, Linna Wang and Suad al-Ghaith*. 30 p.
9. Preventing HIV/AIDS in schools by *Inon I. Schenker and Jenny M. Nyirenda*. 32 p.
10. Motivation to learn by *Monique Boekaerts*. 28 p.
11. Academic and social emotional learning by *Maurice J. Elias*. 31 p.
12. Teaching reading by *Elizabeth S. Pang, Angaluki Muaka, Elizabeth B. Bernhardt and Michael L. Kamil*. 23 p.
13. Promoting pre-school language by *John Lybolt and Catherine Gottfred*. 27 p.
14. Teaching speaking, listening and writing by *Trudy Wallace, Winifred E. Stariha and Herbert J. Walberg*. 19 p.
15. Using new media by *Clara Chung-wai Shih and David E. Weekly*. 23 p.
16. Creating a safe and welcoming school by *John E. Mayer*. 27 p.
17. Teaching science by *John R. Staver*. 26 p.
18. Teacher professional learning and development by *Helen Timperley*. 31 p.
19. Effective pedagogy in mathematics by *Glenda Anthony and Margaret Walshaw*. 30 p.
20. Teaching other languages by *Elizabeth B. Bernhardt*. 29 p.
21. Principles of instruction by *Barak Rosenshine*. 31 p.
22. Teaching fractions by *Lisa Fazio and Robert Siegler*. 25 p.
23. Effective pedagogy in social sciences by *Claire Sinnema and Graeme Aitken*. 32 p.
24. Emotions and learning by *Reinhard Pekrun*. 30 p.
25. Nurturing creative thinking by *Panagiotis Kampylis and Eleni Berki*. 26 p.
26. Understanding and facilitating the development of intellect by *Andreas Demetriou and Constantinos Christou*. 31 p.
27. Task, teaching and learning: improving the quality of education for economically disadvantaged students by *Lorin W. Anderson and Ana Pešikan*. 30 p.
28. Guiding principles for learning in the twenty-first century by *Conrad Hughes and Clementina Acedo*. 24 p.
29. Accountable talk: Instructional dialogue that builds the mind by *Lauren B. Resnick, Christa S. C. Asterham and Sherice N. Clarke*. 32 p.
30. Proportional reasoning by *Wim Van Dooren, Xenia Vamvakoussi, and Lieven Verschaffel*. 30 p.
31. Math Anxiety by *Denes Szűcs and Irene Mammarella*. 34 p.

These titles can be downloaded from the websites of the IEA → <http://www.iaoed.org> or of the IBE → <http://www.ibe.unesco.org/publications.htm> or paper copies can be requested from: IBE, Publications Unit, P.O. Box 199, 1211 Geneva 20, Switzerland. Please note that several titles are now out of print, but can be downloaded from the IEA and IBE websites.

Table of Contents

5	<i>The International Academy of Education</i>
7	<i>The International Bureau of Education</i>
8	<i>About the Series</i>
14	Introduction
16	1. Philosophy for Children: What is it?
20	2. Philosophy for Children: How to Do It
26	3. Creating Social and Emotional Effects
30	4. Creating a Community of Inquiry
32	5. Ask How Did We Do That? – Encouraging Metacognition
34	6. Ensuring Effects Last Over Time – Maintenance
36	7. Ensuring Effects Extend Beyond Class – Generalization
38	8. Ensuring Effects on Adult Life – Citizenship
40	Conclusions

This publication was produced in 2020 by the International Academy of Education (IAE), Palais des Académies, 1, rue Ducale, 1000 Brussels, Belgium, and the International Bureau of Education (IBE), P.O. Box 199, 1211 Geneva 20, Switzerland. It is available free of charge and may be freely reproduced and translated into other languages. Please send a copy of any publication that reproduces this text in whole or in part to the IAE and the IBE. This publication is also available on the Internet.

See the "Publications" section, "Educational Practices Series" page at: www.ibe.unesco.org

The authors are responsible for the choice and presentation of the facts contained in this publication and for the opinions expressed therein, which are not necessarily those of UNESCO/IBE and do not commit the organization. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of UNESCO/IBE concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Introduction

In many countries much classroom teaching consists of the teacher giving some information to the class, then asking questions of the class to check understanding or seek some extension of the basic ideas. The problem here is that there are too many children to deal with, and the teacher often ends up choosing the same vocal children to offer comments. Also, given pressure of time, the teacher often formulates his or her questions in a simple way, inviting just a yes or no answer, and gives little time for children to struggle to express themselves. Consequently, what the teacher gets is what children already know, not what they are trying to understand.

Some teachers are aware of cooperative learning, peer tutoring and other forms of peer learning, which emphasize talk between pupils rather than with the teacher. Of course, talking to a peer will not give the quality of interaction you would get with talking to a teacher, but peers are much more readily available. The problem here is that teachers often do not have time to structure the interactions between pupils in ways that are most productive. They may say they are doing peer learning, but an outsider looking into their classroom could easily see how the peer learning could be greatly improved.

Philosophy for Children (otherwise known as P4C) can help develop cooperative and peer learning and transform them into a method for developing critical and creative thinking skills. The purpose of this booklet is to describe what Philosophy for Children (P4C) is and how to implement it in the classroom. It consists of seven sections, each with a main Principle, and brief summary of Research Findings, a description of practical Applications in the classroom, and suggested Further Readings.

In the first section we consider the effectiveness of P4C and how to start implementing it in a classroom – with differentiation according to the age of the students. In the second section we describe how to do it – and a practical example is given. In the third we broaden this to consider how P4C can develop social and emotional areas. In the fourth we describe the extension of these principles to form a community of inquiry in the classroom. However, by this point the job is only half done.

In section 5 we talk about how teachers might encourage students to reflect on the nature of their own thinking, in order to be able to better regulate it in the future – i.e., develop “meta-cognition”. Then

in section 6 we consider how to ensure P4C effects last over time, even when students are no longer experiencing it in class and perhaps are in a new school – “maintenance”. In section 7 we look at how to ensure P4C effects operate outside of the P4C class – in other classes that week (whether with the same teacher or a different one), and beyond school into events at home and in the community – “generalization”. In section 8 we reflect on how teachers can sustain P4C effects as students grow into adults and potentially become concerned citizens – and how their opinions can remain balanced and supported by reasons. Finally, in the Conclusion we consider in what circumstances P4C is valid and reliable.

1. Philosophy for Children: What is it?

Philosophy for Children (P4C) is a structured pedagogical method that invites and enables children to search for rational and justified answers to important questions that have no simple answers.

Research evidence

P4C is not about the lives or thoughts of the great philosophers, but about the practical business of enhancing critical and creative thinking. P4C capitalizes on children's natural curiosity to engage them in a philosophical dialogue, i.e., in a deep discussion of questions that have no clear answer and where different points of view can be developed, explained and justified. By engaging in discussion of conflicting points of view, children develop clearer reasons and justifications for their opinions, while they also understand how an argument is constructed.

P4C is in use in over 60 countries in the world, including developing countries. It has been used successfully from kindergarten, through elementary school, into secondary school, in colleges and universities, and in the workplace. P4C is different from other approaches to critical thinking in that it deals with difficult questions that would bewilder many adults, teacher direction is much subtler, can be applied to any subject or life material, has effects on social and emotional as well as on cognitive development, and can be applied outside of school to real life issues.

Two meta-analyses (Trickey and Topping, 2004; Garcia-Moriyon, Robollo, and Colom, 2005) showed a consistent and high level of effectiveness in terms of cognitive gain, school attainment and socio-emotional enhancement. P4C was found to result in higher performance on tests of cognitive skills compared to a control group both in a primary school in Scotland (Topping and Trickey, 2007), and in a secondary school in the USA (Fair et al., 2015). In England, P4C primary school pupils in 48 schools over a year showed higher reading and mathematics test scores than control pupils with disadvantaged students performing best (Gorard, Siddiqui, and See, 2017). Not only did thinking skills improve, but also attainments in other areas of the curriculum. This is important information to know for teachers

who have difficulty justifying the insertion of innovation into their curriculum because of displacement effects on "what has to be covered".

In the classroom

Teachers may feel that P4C sounds rather scary. First, it implies that the teacher does not know all the right answers, but instead is having their own thinking scrutinized by the class. Secondly it implies that the students are able to come up with good rationalizations, something that teachers may doubt that students are able to do. Indeed, teachers may wonder whether *they* would be able to come up with good rationalizations, let alone have the children do it. In fact, all these problems go away when you actually do P4C. The teacher says straight out at the beginning that she or he doesn't know all the answers – or even any of them. P4C is about the longer-term process of developing better thinking, not about instant better thinking.

So how might we tailor P4C for relevance to different age groups? It is used from kindergarten to the workplace, but surely it is not the same across this very wide age range. There are two kinds of developmental continuum at work. One is the development in students across the course of a year's program of P4C, as they become increasingly confident and fluent with the methods, more and more articulate, increasingly sophisticated with the conceptual vocabulary of thinking, and more careful in offering justification and evidence for their opinions. In section 4 we describe three stages of development of this kind.

The other is the developmental differences between different age groups, as in kindergarten, lower primary, upper primary, lower secondary, upper secondary, university and college, and workplace settings. For example, in kindergarten, the teacher will use a very short and simple story as a stimulus, model a few short questions appropriate to the age of the children, encourage pairs of peers to discuss but for a relatively short time, and have a longer plenary session which is rather more teacher-directed. By contrast, in upper secondary the teacher will use a long, complex and controversial story or video or picture as a stimulus, model a much larger number of much more complex questions, encourage peer discussion for a longer time provided it is constructive, and have a shorter plenary session which is more student-led. The teacher may also make the stimulus more focused on a problem in some area of the curriculum (such as science) or on a work-based issue. But care is needed to make sure P4C does not become too narrow, since otherwise meta-cognitive effects may only occur in a very small area of the student's

thinking. Thus, the basic process remains the same across the ages, but it is adapted to the age group in question.

P4C is thus much more based on principles of social constructionism (e.g., Vygotsky, 1962) than on relatively fixed stages of development (e.g., Piaget and Inhelder, 1969). It does not assume that the potential of any child is known in advance – but that this has to be discovered through interaction. This is discussed in more detail in Topping, Trickey, and Cleghorn, 2019, particularly chapters 5 and 6.

Suggested readings: Garcia-Morison, Robollo, and Colom, 2005; Fair et al., 2015; Gorard, Siddiqui, and See, 2017; Piaget and Inhelder, 1969; Trickey and Topping, 2004; Topping and Trickey, 2007a; Topping, Trickey, and Cleghorn, 2019; Vygotsky, 1962.

2.

Philosophy for Children: How it is done

The purpose of P4C is to stimulate philosophical dialogue in the classroom. It is important to do it as described below, rather than inventing it yourself. Once you have some experience with it, you can try adapting it step by step to your context.

Research findings

Philosophical dialogue is not just an exchange of opinions: rather it provides a context where students are challenged to justify their opinions. Philosophical dialogue stimulates deeper engagement between students and the subject matter and can take learning to a greater level of understanding (Topping, Trickey, and Cleghorn, 2019). However, it must be done in a certain way in order to work.

Teachers need to leave a space for student speech by their own silence, so that children can articulate exactly what they mean to say. Respectfully listening to student opinions not only supports thoughtful conversations but is highly valued by students (Fair et al., 2015).

Teachers might:

- Give students “thinking time”
- Use second questioning
- Scaffold
- Ask all students
- Use careful listening and
- Withhold judgement.

Children should:

- Ask open and inviting questions
- Give evidence and examples
- Make comparisons
- Summarize and evaluate and
- Seek clarification.

The teacher can help develop the inquiry by:

- Focusing attention on important points
- Encouraging students towards appropriate behaviors (such as how to listen and how to respond to each other)
- Rewarding positive contributions with praise and
- Not being content with mere conversation.

The children should aim to:

- Focus attention on the speaker
- Don’t “put down” others
- Remember they are not forced to speak
- Respect others’ views, and
- Be truthful and open-minded.

Application in Practice

Seating: It is important that the students sit in a position from which they can see each other – and this depends on the layout of the classroom or teaching space. Some teachers use a circle, but sometimes this is not possible and a semi-circle or horseshoe shape is adopted.

Rules: Ground rules are set in advance that encourage showing respect for everyone. Teachers should involve the children in developing the ground rules, so they feel they “own” them.

The Awareness Exercise: This is a simple way of helping children focus full attention (remember the children may have just been doing something completely different). The noise in the mind subsides. The student becomes mentally, physiologically and emotionally in the best state for thinking and learning. “First give your attention to the sense of touch. Feel the weight of your feet on the floor . . . Your body on the chair . . . Your clothes on the skin . . . (Pause) Now, using sight, and without naming things in the mind, see colors . . . shapes . . . the space between the shapes. (Pause) Now using the sense of hearing, hear any sounds close at hand (e.g., within the classroom) . . . now let your hearing gradually run right out until the furthest sounds can be heard . . . (Pause) Now try to hold that awareness for a few moments.”

The Stimulus: The stimulus is to arouse the interest of the group. It could be a story, a poem, picture, a brief video or life incident which introduces a theme from which a philosophical question can be derived, and which also poses moral dilemmas or raises questions. There is often some ambiguity in it, or something on which there is no clear consensus. The themes might include: Friendship, Helping others, Cooperation, Fairness, Patience, Sharing, Forgiveness, Freedom, Anger, Beauty, Fear, Bullying, Happiness, Hope or Lies. Aesop’s Fables are a very useful source for stimuli – see the Library of Congress for examples (<http://read.gov/aesop/001.html>).

Questioning: Teachers model good questioning by asking for clarification, reasons and evidence (and by inviting the children to first think and then answer). This provides practice in listening, keeping to the point, assessing assertions and substantiating one’s own point of view. The ability to use “good” questions (by teacher or students) is very important. “Good” questions in this context are questions that are open, that help uncover more about the subject of the dialogue, and build knowledge of it. By using such questions, the dialogue becomes deeper; more meaningful. Questions might be:

- What reasons do you have for saying that? Can you explain more about that? (Clarifying)
- How do you know that? What is your evidence? (Seeking Evidence)
- Is there another point of view? Can you put it in another way? (Exploring Alternative Views)
- Why do you think that? What is the cause of that? (Probing the Superficial)
- If... then what do you think about...? You said... but what about...? (Scaffolding)
- How can we test that in practice? Is that consistent with what you first said? (Testing Implications)
- Can anyone summarize the main points for us? Where has our thinking taken us? (Evaluating)

Of course, as the students answer the questions, the teacher comments on the high-quality answers and/or those that lead to more and deeper thoughts. As P4C progresses, children can lead the questioning, building confidence as they learn – how to ask questions rather than focusing on answering questions.

Peer Work: Students are placed in pairs (or a three if there is an odd number in the class) and asked to discuss their thinking so far. This ensures students understood what was happening in the stimulus, and more importantly it contains the beginnings of the exploration of ideas from the stimulus. It is also an area for building student confidence. Those who may be unlikely to offer ideas and opinions to the whole class may be confident enough to speak to a peer partner or in a small group. An important role of the teacher here is to circulate and encourage, perhaps scaffolding if appropriate. During this time the dialogue moves from the concrete through the personal to the abstract.

Teachers need to be careful that they have enough time to get through all the stages. Of course, the teacher will have made the students aware of the time available at the outset of each stage. As students become more sophisticated and vocal, there may be time pressure and the teacher will need to close out each phase in order to advance to the next. If some discussions still leave a great deal of controversy hanging in the student group, the topic can be returned to in the next session of P4C to seek some kind of resolution.

An Example (with a young primary class)

Marvin Gets Mad

Themes are: anger, patience, loneliness, being sorry, wanting things, can animals have feelings?

Focusing/ Awareness Exercise

Get ready to listen.

1. Gather the class together in a circle. Pass round a “Hello, welcome to our philosophy group”.
2. Practise sitting still and connecting with the listening until the class falls quiet. What did they notice?
3. Remind the class of the rules for Philosophy, particularly listening to each other and “no put-downs”.

Stimulus: Story, Poem, Activity

Introduce the story Marvin Gets Mad. Look at the cover. What is in the picture? How do you think he is feeling? What do you think the story could be about? (Take different ideas). Have you ever been mad?

Now read the story to the class, enjoying the pictures and talking about facial expressions and feelings as you read, without losing the thread of the story.

After reading, recap events in stories with children. Get them to act out facial expressions. How did Marvin feel?
e.g., Finding the apple tree. (surprised, pleased)

Not being able to reach the apple.
(disappointed)

Waiting for the apple to fall. (patient)

Molly had eaten the apple. (disappointed)

Marvin getting madder, stamping and shouting “BAAAA”. (angry)

Ground swallowing him up. (surprised)

In the hole. (lonely)

Molly appears. (relieved, sorry)

Back to everything perfect. (happy)

Wanted the pear.

Construct questions that students can think about then talk to a partner about:

How do we know when we are angry?

How do we know when someone else is angry?

What kinds of things make you angry?

How do you feel after you have been angry?
Sorry? Relieved? What?

Can you pretend to be angry?

Can anger ever be a good thing?

Theme: ANGER

Story

Why do you think Marvin got mad?

How do you think Molly felt when Marvin got mad at her? Why?

How do you think the chickens, ducks and cows felt? Why?

If you had been Marvin, would you have got mad? What would you have done?

Personal

Have you ever been angry like Marvin? (Take examples)

What does it feel like?

Can you stop being angry if you want to?

How do you feel if someone is angry at you?

Are you ever sorry after you have been angry? Why?

Do you ever pretend to be angry?

Philosophical

Can anger be a good thing? When?

What is anger?

What did we talk about today?

How well did we do in our thinking and talking? (Use thumbs up or down to show)

Whose partner had a really good thought?

What made it a really good thought?

This week think about being angry. What makes you angry? What happens when we get angry? Can we stop being angry? Come back next week to tell us what you have thought – and done.

What have we talked about?

Thought for the week

Suggested readings: Fair et al., 2015; Garcia-Moriyon, Robollo, and Colom, 2005; Gorard, Siddiqui, and See, 2017; Lennon, 2017; Trickey and Topping, 2004; Topping and Trickey, 2007a; Topping, Trickey, and Cleghorn, 2019.

Think, Pair, Share

Dialogue/ Discussion Plan

3.

Creating social and emotional effects

As children develop better reasoning skills and begin to appreciate that other people have different points of view, they become kinder and more considerate of each other.

Research evidence

The experience of having one's ideas carefully listened to is likely to strengthen self-esteem and confidence. Children learn to avoid dismissing different views without examining them properly. They learn that they can disagree without falling out. P4C also increases motivation and helps children become more effective learners and thinkers. Children may see more clearly the causes of the habitual behavior of others or themselves. This is very empowering, because at that point choice becomes evident. In addition, they will have learned better social skills and been given the opportunity to practice them (Giménez-Dasí, Quintanilla, Ojeda, and Lucas-Molina, 2017).

Thus, P4C can contribute to the improvement of social and emotional intelligence as well as cognitive intelligence. This includes such aspects as:

- **Self-Awareness** – Knowing how and what you are feeling and how it impacts on one's life, and having realistic expectations of one's abilities
- **Emotional Self-regulation** – Handling emotions so they facilitate the task in hand, and having self-imposed boundaries
- **Motivation** – Having knowledge of motivating factors and forces, having perseverance
- **Empathy** – Having knowledge of how others are feeling and using that knowledge in interacting with them, having a rapport with a wide variety of people
- **Social Skills** – Being able to read social situations, and using these skills to persuade, lead, negotiate, compromise.

Daniel Goleman (e.g., 1966, 1969) quoted studies showing that a young person's life chances are at least as much affected by emotional intelligence (EQ) as they are by IQ. He asks "Shouldn't we be teaching these most essential skills for life to every child – now more than ever?"

Application in Practice

Introduce Social and Emotional Stimuli: Use dialogues on themes involving social and emotional issues. In this way a range of responses around "emotional" questions can be consciously examined and evaluated in a safe environment. When the students are later involved in a problem in a real-life situation, the effect of the dialogue is a brief "pause" – just enough to choose an appropriate behavior!

Model Alternatives to Impulsivity and Distractibility: Teachers can model responses to social and emotionally stressful incidents by describing a problem they had, how they handled it, and how on reflection they should have handled it. An important goal of education is self-regulation to improve the management of impulsivity and distractibility. This helps a student move towards making conscious decisions about particular responses rather than just acting mechanically and habitually. (I've got a temper. I acted that way last time in response to a similar situation and I'll act that way next time.) Of course, things don't change instantly, but over time a shift should be evident.

Query the Justification for Long-Held Beliefs: Students may have learned opinions from their parents or peers without giving them any thought. Also, they can be very vulnerable to false information. The torrent of fake news on various social media makes this even worse. It is easy to believe stories that correspond to existing beliefs. As some politicians have realized, reasoned argument can be less successful than a simple appeal to emotional prejudice. Teachers can take examples of fake news and test them in the course of classroom dialogue. Sometimes students can entertain opposing thoughts without apparent discomfort – P4C drives conceptual change by helping children become more consistent in their thinking.

Develop a Culture of Equal Respect and Participation: A strong school culture of participation and collaboration supports the learning of skills and can lead to enhanced self-esteem and a greater sense of self-efficacy. Participation is a key factor in promoting the emotional wellbeing of school-age children and the morale of both teachers and students. Participation increases following regular collaborative inquiry. The undivided, unconditional attention of other students is likely to promote positive feelings. Such attention makes students feel worthwhile and understood.

Allow Time to Reorganize Thoughts: When students express their ideas in class, they must organize and process their thoughts. They may discover gaps in their understanding and encounter explanations

better than their own. But that means that they don't only have to justify one new thought, they have to reorganize a lot of associated thoughts that were not well justified. A lot to do in response to one question!

Praise Good Examples Among Students: Students are likely to learn from each other during this process. For example, a student might hear another student asking for evidence and then be more likely to internalize this behavior and do the same. Teachers can praise student behavior they hope others will copy.

Don't Be Afraid of Perplexing Questions: Real discussion best takes place when the questions perplex the teacher as well as the students. If the questions chosen for discussion are perplexing for all participants, including the teacher, then communication is likely to be more interactive and more meaningful.

Don't Be Afraid of Controversial Questions: Teachers may feel a little nervous about introducing a topic which could be seen as controversial, whether for political, religious or other reasons. However, these are exactly the kind of questions to generate a heated discussion, so do not shy away from them.

Suggested readings: Chapter 7 of Topping et al. (2019) discusses this at more length. Also see: Giménez-Dasí, Quintanilla, Ojeda, and Lucas-Molina, 2017; Goleman, 1996, 1999; Topping and Trickey, 2007b; Trickey and Topping, 2006, 2007; <https://www.eschoolnews.com/2018/09/19/how-controversial-topics-inspire-deeper-learning>.

4.

Creating a Community of Inquiry

A community of inquiry is a group engaged in exploring ideas through philosophical dialogue, where students think together and build on each other's ideas.

Research evidence

In schools the group is usually a class, but it is also possible to use P4C with subgroups within the class at different times (Dunlop, Compton, Clarke, and McKelvey-Martin, 2013). Often the group has evolved its dialogic technique to a degree of sophistication. The process of dialogue facilitates deeper engagement between the participants and the topics of discussion. Participants organize their thinking through questioning, hypothesizing and suggesting alternative explanations. Students justify their views with reasons, drawing inferences, making deductions, identifying underlying assumptions and dealing with contradictions. Ill-defined concepts are clarified, sweeping generalizations avoided and decisions informed by reasons and/or evidence.

Matthew Lipman and his colleagues (1980) described the process in a community of inquiry as being similar to sailing a yacht against the wind. The boat has to tack, forming a zig-zag pattern across the wind, but there is still forward movement. Similarly, the strands of dialogue can go this way and that way, but importantly there is forward movement in understanding. The group will know more about the issue by the end of the dialogue than they did at the beginning, although there may be no “right” answers. The community should develop over time to be largely self-governing, with students leading the questioning and dialogue.

Application in Practice

How to Disagree: If someone disagrees, they must find a good reason to express that disagreement (as against simply saying that the other person is “wrong”). Praise pupils who disagree thoughtfully and respectfully.

First Stage of Development: The first stage of development is much as described in earlier sections, but may take several months practice to come to full fruition. Teachers must be patient!

Second Stage of Development: At a later date, after weeks of inquiries and when the first group of dialogical skills have been taught and practiced, the second stage is introduced. Two related additions are made – Think/Pair/Share and Connections/Tensions. For TPS, the facilitator gives “thinking time” for students to reflect silently on what themes could be drawn from the stimulus. The class is then put into pairs to exchange their thinking about themes and give reasons or explanations for their thinking. Later comes “sharing” where pairs can share with the whole class. At this point the teacher puts all suggestions on the board. For CT, the students are asked if they can see any connections between them. They must give a reason for the connection suggested. These connections are indicated visually by a colored line drawn between linked ideas. When all connections have been exhausted, the process is repeated but with the idea of tensions. Tensions are not necessarily opposites, but are ideas that clash. These also must have evidence and are indicated by a different color, and thus a “thinking map” is built up.

Third Stage of Development: This stage has the students frame their own personal and philosophical questions from the ideas/themes generated. The first task is to choose a theme, and this can be done through a simple voting procedure. As an example, let's assume the theme chosen is Honesty. Three or four philosophical questions on honesty are needed. Is the question related to the theme and personal experience? If not, how might the question be improved? Should it be discarded? Is it philosophical? Is it too obvious? Is it worth discussing? What makes it so? A further development is to have cooperative groups formulate and agree on questions. Each group should write down several questions and have a discussion about which is the most interesting and why. They then choose one to offer to the class and the teacher writes all the contributions on the board.

As each of these stages of developmental progress, the students are offering increasingly complex questions and answers as their conceptual development advances – but of course as they are discussing many different topics over time, they are developing many arguments rather than one.

Suggested readings: Dunlop, Compton, Clarke, and McKelvey-Martin, 2013; Lipman, Sharp, and Oscanyon, 1980; Topping et al., 2019, chapter 3.

5. Ask How Did We Do That? Encouraging Metacognition

Students who are able to reflect on their learning and thinking processes (i.e., show metacognition) are more effective learners than those who are not so able.

Research findings

In this section we look at how regular practice in philosophical inquiry encourages metacognitive reflection on thinking and learning. As students encounter alternative views from other students which are well thought through and have some rational foundation, by a process of comparison this gives them food for thought about the nature of their own thinking (Cam, 2006). As P4C develops, students will increasingly ask themselves about the nature of their utterances before they actually say them. Of course, the whole point of metacognition is that it should not only lead to insights on how you have thought at this moment, but should also lead to thoughts and strategies about how you might think better in the future (Worley, 2018). Thus, as metacognition develops, so also should self-regulation of quality of thinking. In this way, children become more effective thinkers in the short term, but also develop habits of reflecting on their thinking which is likely to have long-term effects.

Application in Practice

Encourage students to think about their own and other's quality of thinking, and how to improve it.

Thumbs: Students are asked to give their evaluation of the dialogue by showing a thumbs up sign, a thumb shown horizontally or a thumbs down sign (indicating good, okay or not good). To stop students copying each other, say "One, two, three – show me!", so all indicate at once. The most important thing then is for the teacher to choose some differing responses and ask the person "why?" (We are indebted to Phil Cam, 2006, for this idea).

Focusing on Targets: As sessions progress, a range of cognitive targets will have been introduced. The group performance in relation to the ones in focus in that lesson can be explored. For example, if the target was "Giving Evidence/Reasons", then students are asked to give an

opinion as to how they think the group performed and why. What was seen in the dialogue to support their view? Might it be improved further? How? In this way students are building a picture of the qualities and skills that constitute good philosophical inquiry.

Thinking About Thinking: After the dialogue, the teacher should ask students to take a broad higher-level look at the dialogue that just unfolded. Did they like it or not? What was good about it and what was less good? What did they start thinking about and what did they end up thinking about? How did the quality of thinking progress during the session? What might we try to improve in the future? Why? Do people have different ideas? The teacher can write some of the answers on the board to help the debate. Of course, this could develop into a whole dialogue of its own, so it might need to continue into another session.

Attitude to Metacognition: The teacher asks the children what they feel about challenging tasks. When faced with something that seems difficult, are they filled with enthusiasm and want to attack it as soon as possible, or are they worried they might in some way "fail" and consequently try to avoid the task? Is there any difference between boys and girls here? Do the enthusiastic ones sometimes fail anyway?

Metacognition Across the Curriculum: Which children have started thinking about how they think in lessons other than P4C? This generalization of metacognition suggests that it is becoming a habit that will be useful in the future. Of course, it might also lead to some criticism of the pedagogy in other classes.

Suggested readings: Cam, 2006; Topping et al., 2019, Chapters 3 & 5; Worley, 2018.

6. Ensuring Effects Last Over Time Maintenance

If teachers really try hard to work on maintenance of gains, they may immunize their students from any unwanted potential effects of later school life to an even greater extent.

Research findings

There is evidence that gains from P4C last over time. In Scotland, the primary school pupils who did P4C went on to a secondary school where they had no such experiences. Nonetheless, their performance on a test of cognitive ability was still well ahead of their control group (Topping and Trickey, 2007c). In Texas, the secondary school pupils who engaged in P4C were tested three years later – again, they showed greater gains than their control group who did not participate (Fair et al., 2015). Remember, this is where P4C had not been done in the follow-up period. So, if teachers really try hard to work on maintenance of gains, they may immunize their students from any unwanted potential effects of later school life to an even greater extent.

Application in Practice

Thought for the Week: It is not useful if students hold the view that thinking is something only done in philosophy class! As part of the ending routine in your regular P4C session, teachers can ask the children to think of their “Thought for the Week” (TftW) – one thought which they will try to apply in and out of school between now and the next P4C session. Each child may have a different thought. This reinforces the idea of keeping looking for practical evidence to support the thinking.

Results of Thought for the Week: When the children return to the next P4C session, start by asking for reports on how they applied their TftW. For example, where the TftW stemmed from the question “what is honesty”, and then during the week there was further individual thought and self-observation of the child’s own actions, the individual may see there is a difference between his/her thoughts and actions. This leads to further thoughts and questions, and so on around the cycle, always digging deeper into more subtle aspects of the question

and its implications. So, this part of the process reinforces recent learning and relates the theoretical to the real world in which the student lives.

Ask for Linkage with Previous Topics: Over time, topics will be discussed which are related to each other. The teacher should ask students what they can remember of a previous session which was related to today’s topic. Do they remember some particularly good question or statement from that session? How does it relate to the current topic?

Suggested readings: Fair et al., 2015; Topping et al., 2019, chapter 8; Topping and Trickey, 2007c.

7. Ensuring Effects Extend Beyond Class Generalization

Generalization of learning is more likely to occur if activities are built to extend that learning to other contexts

Research findings

Teachers will feel more confident committing time and energy to philosophical inquiry if improvements in thinking are found to cross subject boundaries, whether planned for or not. Maximizing this generalization of learning beyond the context in which it is learned is crucial (although those with more knowledge of a particular discipline might be better at thinking within that discipline) (Reznitskaya, Glina, Carolan, Michaud, Rogers, and Sequeira, 2012). Generalization of learning is more likely to occur if activities are built to extend that learning to other contexts. Adey and Shayer (e.g., 1994) maximized generalization by building in “bridging” activities. Building in generalization activities was also central to Feuerstein’s Instrumental Enrichment program. Importantly, the cognitive ability of eleven-year-olds was highly correlated with their subsequent performance in national academic tests when they were aged sixteen (Feuerstein et al., 1980).

Generalization may also be apparent in teacher behavior. Teachers tend to extend the practice of inquiry to other subjects outside the “philosophy hour”, whether consciously or not. Besides the teachers consciously moving to a more inquiry-based method, many teachers notice that the students themselves naturally began to ask more and better questions in other subject areas. Generalization can also be achieved when an inquiry is used as part of another curricular area, such as to start a historical project.

Application in Practice

Use P4C across the Curriculum: Of course, it is easier for an elementary school teacher than a secondary school teacher to implement P4C in other lessons, as in the latter case you are more dependent on the enthusiasm and cooperation of other teachers. However, P4C can address challenging contemporary themes that go beyond the narrow confines of the curriculum. An example would be

the issue of climate change. This might allow the enthusiasm of other teachers to be harvested.

Use the “Spectrum of Meaning” Floor Set: The idea of a spectrum of meaning is to communicate that concepts are not always (and probably seldom) straightforward, and that for many things there is a range of possibilities. A floor set is an activity done as a whole group using cards and a piece of ribbon or rope about 4 meters long. It is good to get students moving and thinking sometimes! The ribbon or rope is laid across the floor in the middle of the students, who ideally are in a circle. It represents the spectrum of ideas that are about to be explored, with the extremes at each end. If the concept to be explored is pollution then a card saying “Pollution” will be put at one end of the ribbon and another saying “Not Pollution” at the other. Students are then each given a statement describing an action connected with pollution (e.g., “I empty my car ashtray into the road”). Time is given for students to think then they have to place their statement (one at a time) on the spectrum (ribbon), showing how strongly that action is toward the pollution end or the not pollution end – and say why they are placing it at that point. When all cards have been placed and the reasons given, others can challenge and say why they think the card should be in a different place (see Topping et al., 2019, Resources Website: www.routledge.com/9781138393264, download 14).

Use the “Spectrum of Meaning” Group Set: This is similar to the above except that it is carried out in several groups, each containing a smaller number of students. At the end there is a plenary where the findings of different groups are compared and contrasted. This gives interesting opportunities to discuss the different patterns of thinking in the groups. Alternatively, you can have different groups addressing different topics. You can do this with the dimension extremes labelled “Fact” and “Opinion”, for example.

Suggested readings: Adey and Shayer, 1994; Feuerstein et al., 1980; McGuinness, 1999; Rahdar, Pourghaz, and Marziyeh, 2018; Reznitskaya, Glina, Carolan, Michaud, Rogers, and Sequeira, 2012; Sutcliffe, 2003; Topping et al., 2019, chapter 5 and download 14.

8. Ensuring Effects on Adult Life Citizenship

Citizenship in later adult life requires the ability to discriminate between statements which are rational and factual and those which are not, suspending judgement on those where this is not clear.

Research findings

Consider communities of inquiry acting as classroom microcosms of larger democratic institutions – and how these communities seek truth in the post-truth era. In 2016, the Oxford Dictionary chose “post-truth” as its word of the year, defining it as “relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief”. Associated with this we have “fake news”, defined by the Collins English Dictionary as “false, often sensational information disseminated under the guise of news reporting”. Fake news involves the deliberate publication of fictitious information (especially on social media) designed to mislead people for the financial or political gain of others. False claims are 70% more likely to be shared on Twitter than the truth. True stories take about six times longer than false ones to reach 1500 people (Vosoughi, Roy, and Aral, 2018). It takes a few minutes to create a viral story, but hours of investigative work to debunk it. Never before has critical thinking been so necessary. If students are to become thoughtful analytical members of a participatory democracy, critical thinking will be essential (Di Masi and Santi, 2016).

Application in Practice

Use P4C with Hot Topics: Once students are more familiar with P4C, you can unleash them on hot topics such as climate change (see if the geography or social studies teachers are interested!). Does it exist and if so, what might be done about it?

Use P4C with Topics Which are Hot for Pupils: Not all pupils will be excited by such large phenomena as global warming, but they may be much more excited by a topic near to their hearts, like “should mobile phones be allowed in schools?”.

Use P4C with Habitual Beliefs: Have students identify long-held or habitual beliefs that they used to have, but which they have now changed in the light of new (reliable) information coupled with better thinking. Have them share these with the group, because other students might not yet have changed their minds.

Use P4C to Identify Cognitive Bias: Beliefs tend to be the result of cognitive bias – we all look for information which supports our existing beliefs. See if the students can identify each other’s cognitive biases – but this is better done via peer work, or people will feel foolish.

Suggested readings: Di Masi and Santi, 2016; Topping et al., 2019, chapter 10; Vosoughi, Roy, and Aral, 2018.

Conclusions

Philosophy for Children is a multi-component program, i.e., it is composed of a number of elements or pieces. The existing research evidence for the whole program is positive. As we have seen, P4C over an academic year was found to have positive cognitive effects in primary and in secondary schools, even in different countries and cultural contexts (Topping and Trickey, 2007a; Fair et al., 2015). These effects endured for several years (Topping and Trickey, 2007c; Fair et al., 2015), even after transfer of school with no intervening experience of P4C (Topping and Trickey, 2007c). P4C was also found to have effects on attainment in traditional curriculum subjects in primary schools (Gorard et al., 2017). These findings are supported by studies with different research designs finding positive effects in classroom behavior (Topping and Trickey, 2007b), self-concept (Trickey and Topping, 2006), and teacher and student perceptions (Trickey and Topping, 2007).

Thus, we might say that P4C has been found to be a valid program, worthy of consideration by any teacher in any country. But how reliable is it? – how resistant to the vagaries of different classrooms, different teachers, different schools, different socio-economic areas, different countries? The reviews of research studies found that P4C was very reliable (Trickey and Topping, 2004; Garcia-Moriyon, 2005), but are published studies a true indication of what will happen in your classroom? This brings us to the question of implementation fidelity (also known as implementation integrity). In the Gorard et al. (2017) study, some schools did not complete the program as they had agreed. Unsurprisingly, given their low implementation fidelity, they did not get the same positive results as the other schools. P4C will only work if you do it properly. If you don't do it properly and don't get good results, don't blame the program!

References

- P. Adey and M. Shayer. Really raising standards: *Cognitive intervention and academic achievement*. 1994. London: Routledge.
- P. Cam. *20 thinking tools*. 2006. Camberwell, Australia: ACER Press.
- D. Di Masi and M. Santi. Learning democratic thinking: A curriculum to Philosophy for Children as citizens. *Journal of Curriculum Studies*, 2016, vol. 48, issue 1, pp. 136-150.
- L. Dunlop, K. Compton, L. Clarke, and V. McKelvey-Martin. Exploring “the world around us” in a community of scientific enquiry. *Primary Science*, 2013, vol. 126, pp. 17-20.
- F. Fair et al. Socrates in the schools from Scotland to Texas: Replanning a study on the effects of a Philosophy for Children program. *Journal of Philosophy in Schools*, 2015, vol. 2, issue 1, pp. 18-37.
- R. Feuerstein et al. *Instrumental enrichment: An intervention programme for cognitive modifiability*. 1980. Baltimore, MD: University Park Press.
- F. Garcia-Moriyon, I. Robollo, and R. Colom. Evaluating Philosophy for Children: A meta-analysis. *Thinking*, 2005, vol. 17, issue 4, pp. 14-22.
- M. Giménez-Dasí, L. Quintanilla, V. Ojeda, and B. Lucas-Molina. Effects of a dialogue-based program to improve emotion knowledge in Spanish Roma preschoolers. *Infants and Young Children*, 2017, vol. 30 issue 1, pp. 3-16.
- D. Goleman. *Emotional intelligence: Why it can matter more than IQ*. 1996. London: Bloomsbury Publishing.
- D. Goleman. *Working with emotional intelligence*. 1999. London: Bloomsbury Publishing.
- S. Gorard, N. Siddiqui, and B. H. See. Can Philosophy for Children improve primary school attainment? *Journal of Philosophy of Education*, February 2017, vol. 51, issue 1, pp. 5-22.
- S. Lennon. Questioning for controversial and critical thinking dialogues in the social studies classroom. *Issues in Teacher Education*, 2017, vol. 26, issue 1, pp. 3-16.
- M. Lipman, A. M. Sharp, and F. Oscanyon. *Philosophy in the classroom*. 1980. Philadelphia, PA: Temple University Press.
- C. McGuinness. *From thinking skills to thinking classrooms*. 1999. London: Department for Education and Employment.
- J. Piaget and B. Inhelder. *The psychology of the child*. 1969. New York, NY: Basic Books.
- A. Rahdar, A. Pourghaz, and A. Marziyeh. The impact of teaching Philosophy for Children on critical openness and reflective skepticism in developing critical thinking and self-efficacy. *International Journal of Instruction*, 2018, vol. 11, issue 3, pp. 539-556.
- A. Reznitskaya, M. Glina, B. Carolan, O. Michaud, J. Rogers, and L. Sequeira. Examining transfer effects from dialogic discussions to new tasks and contexts. *Contemporary Educational Psychology*, 2012, vol. 37, issue 4, pp. 288-306.
- R. Sutcliffe. Is teaching philosophy a high road to cognitive enhancement? *Educational and Child Psychology*, 2003, vol. 20, issue 2, pp. 65-79.
- K. J. Topping and S. Trickey. Collaborative philosophical enquiry for school children: Cognitive effects at 10-12 years. *British Journal of Educational Psychology*, 2007a, issue 77, pp. 271-288.
- K. J. Topping and S. Trickey. Impact of philosophical enquiry on school students’ interactive behaviour. *International Journal of Thinking Skills and Creativity*, 2007b, vol. 2, issue 2, pp. 73-84.
- K. J. Topping and S. Trickey. Collaborative philosophical enquiry for school children: Cognitive gains at two-year follow-up. *British Journal of Educational Psychology*, 2007c, vol. 77, pp. 781-796.
- K. J. Topping, S. Trickey, and P. Cleghorn. *A teacher’s guide to Philosophy for Children*. 2019. New York & London: Routledge. Resources website freely available: www.routledge.com/9781138393264
- S. Trickey and K. J. Topping. Philosophy for Children: A systematic review. *Research Papers in Education*, 2004, vol. 19, issue 3, pp. 363-378.
- S. Trickey and K. J. Topping. Collaborative philosophical enquiry for school children: Socio-emotional effects at 11-12 years. *School Psychology International*. 2006, vol. 27, issue 5, pp. 599-614.

S. Trickey and K. J. Topping. Collaborative philosophical enquiry for school children: Participant evaluation at 11 years. *Thinking*, 2007, vol. 18, issue 3, pp. 23-34.

S. Vosoughi, D. Roy, and S. Aral. The spread of true and false news online. *Science*, 2018, vol. 359, issue 6380, pp. 1146–1151.

L. S. Vygotsky. *Thought and language*. 1962. Cambridge, MA: MIT Press.

P. Worley. Plato, metacognition and philosophy in schools. *Journal of Philosophy in Schools*, 2018, vol. 5, issue 1, pp. 76-91. <https://www.ojs.unisa.edu.au/index.php/jps/article/view/1486/939>.

About the authors

Keith J Topping is Professor of Educational and Social Research, School of Education, University of Dundee, Scotland.

Steven Trickey is Scholar in Residence, School of Education, American University, Washington DC, USA.

Paul Cleghorn is Educational Consultant, Aude Education Consultancy, Scotland.

A world
where each
and every person
is assured quality
education and
relevant lifelong
learning.

THE IBE VISION



United Nations
Educational, Scientific and
Cultural Organization



International Bureau
of Education