

What must teacher education programmes do to open teachers' minds to philosophy?

SUE KNIGHT & CAROL COLLINS

School of Education, University of South Australia

Abstract

The question of why the 'Philosophy for Children' movement has failed to make significant educational inroads in Australia is an important one, particularly given the commitment and ongoing efforts of philosophers and educators alike who have worked hard in recent decades to bring philosophy to our schools. No doubt the explanation for this state of affairs involves a complex array of factors. In this paper we single out one factor as having particular importance, namely, the fact that, on the whole, teachers consider philosophical inquiry to be futile. More precisely, we argue that the explanation rests with teachers' underlying epistemological beliefs and that openness to philosophy depends upon teachers being disposed to engage in the practices of reason-giving and reason evaluation, being aware of the epistemic value of such practices and, concomitantly, having highly developed reasoning skills. Drawing on both anecdotal evidence and wide-ranging research from within cognitive psychology, we go on to make a case for change within teacher education programmes with the aim of opening teachers' minds to philosophy.

Key Words/Terms: Philosophy for Children, epistemological beliefs, evaluativism, teacher education

Introduction: Where Is Philosophy For Children Now?

More than twenty five years ago a small group of Australian philosophers and educators returned to their home states following a week-long Philosophy for Children training workshop led by Matthew Lipman and Anne Sharp.¹ We departed convinced that just as we had been inspired by the experience, so, in turn, we would inspire our educational leaders to support the introduction of this philosophy programme within our primary schools. Early successes were achieved in a number of states with, for example, departmental support in South Australia resulting in numerous introductory workshops for principals and the training of hundreds of teachers. Professional teacher associations grew up in a number of states, including South Australia, and subsequently a national coordinating body (then known as FAPCA) was constituted.² There seemed good cause for optimism.

The situation in 2010, then, can only be seen as a vast disappointment. Although those working with Philosophy for Children have exerted some influence on state-wide and national-level curriculum frameworks and succeeded in creating a small number of flagship schools, the Philosophy for Children movement has failed to make significant educational inroads in Australia.³ While the 'Educational Goals for Young Australians' describes successful learners as (in part) '...able to think deeply and logically, and obtain and evaluate evidence in a disciplined way...' (Ministerial Council on Education, Employment, Training, and Youth Affairs, 2008, pp. 8-9), no State or Territory education department sets aside a dedicated place in the curriculum for the development of these skills and dispositions. The proposed 'National Curriculum for Australian Schools', like the state curriculum frameworks, identifies these capabilities as educationally important, yet again would appear to stop short of specifying philosophy as the vehicle through which to develop such abilities. Moreover, no Australian teacher education programme has Philosophy for Children as a core curriculum course; the \$30 million National Values Education programme and the equally well funded Discovering Democracy programme were developed in the absence of input from Philosophy for Children advocates and indeed are altogether devoid of philosophical content. This is a bitter pill to swallow for those who, for over twenty five years, had continued to work to support teachers and promote philosophy in schools. The singular benefits of philosophy continue to be appreciated by the tiny minority

who have studied the subject at university level, by again a small minority of teachers, perhaps because they have managed to retain a child-like curiosity about the world or perhaps because, in philosophical thinking, they recognise a rigour and depth characteristic of good thinking. But for every one such teacher there are a hundred more who turn instead to deBono's creative thinking exercises or his 'Six Hats' programme or, authoritatively, to the list of ten 'Common Values for Australian Schools'.⁴ No doubt the explanation for this state of affairs involves a complex array of factors. In this paper we offer a partial explanation, singling out one factor as having particular importance and go on to suggest what might be done to diminish this influence.

We begin with this point: on the whole, teachers consider philosophical inquiry to be futile. Our evidence is in part anecdotal, garnered from countless interactions with teachers and pre-service teachers. Although, like others across the country, we are fortunate to have been involved with several local primary school communities in which philosophy has been implemented successfully and thrived for many years, we have also witnessed, all too often, teachers display a distaste for philosophical inquiry. For example, we have been invited, on numerous occasions, to provide whole-staff professional development workshops aimed at introducing the Philosophy for Children program to primary teachers and supporting these teachers to develop the requisite skills to facilitate philosophical inquiry discussions with their students. The invitations are usually extended by principals keen to tap into the potential benefits philosophy may bring their students and the wider school community. Invariably, however, many among the staff seem resistant, and at times even hostile, to the prospect of a new school focus on philosophy and the possibility that they may be required to draw philosophical inquiry into their own teaching practice. Alongside citing concerns about workload and the overcrowded curriculum, many teachers express their frustration at losing precious teaching and learning time to discussing abstract ideas that are seemingly irrelevant to the concerns of the mainstream curriculum.

Similarly, during professional development workshops designed to encourage teachers to think through and discuss philosophical issues they then might take back to their classrooms, their frustration often appears to be compounded by a perception that there is little or no point in raising philosophical questions with children, or perhaps with anyone, because such questions have no answers, or at least that it cannot be shown that any one answer is any better than another. Such a view among primary school teachers is also consistently reported by highly skilled and dedicated colleagues working to bring philosophy alive in their classrooms, with or without support from others in their school communities, and by student teachers attempting to include philosophical inquiry questions and discussion-based lessons into their practicum teaching experiences. Indeed, their enthusiastic efforts to engage children in philosophical discussions are often questioned, disdained, or worse, stopped before they even begin on the grounds that philosophy has no place in the junior primary/primary classroom. Moreover, two local empirical studies (Collins, 1998; Lucas, 2000) lend direct support to such claims, reporting that when presented with a list of age-appropriate philosophical questions, only a tiny minority (12%) of primary school teachers indicated that they were likely to consider raising and discussing them with students.⁵

An Explanation: Teachers' Underlying Epistemic Beliefs

Here we argue that the explanation rests with teachers' underlying epistemological beliefs. Philosophical inquiry depends more on reasoning than it does on empirical research, although the latter also plays an important role. A willingness to engage in philosophical inquiry, then, depends upon a disposition to look for and furnish reasons; an underlying epistemological approach, which, within cognitive psychology, is described as 'Evaluativism'. The term comes out of a substantial body of research known as the Epistemological Levels research program, and is taken to describe an underlying epistemological orientation; a disposition to employ a particular set of procedures in the attempt to justify one's beliefs. Researchers within this programme argue that an individual's view of what counts as adequate justification for say,

ethical or scientific beliefs, changes over time, and that what is more, these changes form a common development sequence (Kuhn, 1992; King and Kitchener, 1994). There is also recognition within the theory that an individual's epistemic stance may vary across knowledge domains.⁶ We can offer only a brief summary of the Epistemological Levels theory here, but a fuller discussion can be found in Knight & Collins (2006).

Typically, structured interviews have been used to identify three broad stages of approaches to justification; three levels of epistemological development. The earliest stage has knowledge as simple, consisting of relatively unconnected facts, certain and absolute; handed down from authority, where the authority might take the form of an ideology, the mores of society, the dictates of an individual, or one's own or another's experience; experience which is held to speak for itself. On this view, appeal to authority constitutes adequate justification. Everyday examples of this approach can be found in claims such as the following : *Homosexuality is morally wrong because the church forbids it; Killing animals for food is morally right because it is part of our way of life; The theory of evolution is false because it contradicts the Bible; I know spirits exist because my dead father appeared to me in a vision; securing profits for shareholders, whatever the cost to wider society is morally right because business codes of conduct count the interests of shareholders as paramount.*

Philosophers, too, identify this approach to justification, and have been quick to point out its pitfalls. As is well known, we have no good reason to trust the edicts of a supposed authority unless we are able to confirm the truth or plausibility of those edicts on grounds which are independent of the authority's claims. *Mere* appeal to authority, then, is an inadequate justificatory approach. And it is also dangerous. History provides countless examples of ideas that were cruel and absurd, yet were followed to the point of death by countless individuals. Think of Nazism or the Cambodian killing fields. Moreover, the social dangers of blind adherence to business codes of conduct are all too obvious.

The second epistemological stage sees individuals aware not only that the views of different authorities can contradict one another; but that a particular authority's earlier views may well conflict with that same authority's later pronouncements. Beliefs are then held to take on the status of personal possessions to which each individual is entitled. The result is that all views are taken to have equal legitimacy and one's own view may be as reliable as that of an authority. At this so-called *Relativist* stage individuals take the very act of holding a belief as justification for that belief; in other words, justification is held to be impossible, and therefore, logically, cannot be required. Again, philosophers have long recognized this approach to justification, and although there is continuing debate, particularly in the fields of Epistemology, Philosophy of Science and Ethics, about the nature of justification both in philosophy and science, there is general agreement that the relativist position is false; general acceptance that the judicious use of evidence and reason provides grounds for the comparison of conflicting viewpoints.⁷ It is clear too, that relativism is dangerous, whether in science (over the issue, say, of global warming) or ethics (in relation to child slavery or female genital mutilation).

Evaluativism is the third epistemological stage, and is identified as the epistemic endpoint. An individual operating at this epistemic level is held to understand that conflicting viewpoints (on global warming, say, or female circumcision) can be compared and evaluated on the basis of reason and empirical evidence. They acknowledge the possibility of genuine interchange with those who hold conflicting opinions, and the possibility that they themselves might come to modify their views on the basis of rational argument. In other words, evaluativists are disposed to engage in the practices of reason-giving and reason evaluation *and* to see the epistemic value of such practices (Kuhn, 1992).

An evaluativist then, when confronted with a philosophical question (say the metaphysical question, 'Do humans have free will?') will at least allow that the question is legitimate in that there are agreed upon processes of argument which, when employed judiciously, enable an inquirer to make progress towards an intersubjectively verifiable answer. But the same is not true of those individuals who adopt a relativist

stance. For a relativist, reason giving has no epistemic value: the very act of holding a belief provides the only justification that is possible, so that engaging in argument, in philosophical inquiry, is, in epistemic terms, a frivolous pursuit. For an absolutist too, argument is epistemically superfluous. An absolutist may (or may not) take the free-will question as legitimate, as being answerable, but in any case will deny that philosophical inquiry, the process of argument, has any role to play in the determination of an answer. For both absolutists and relativists then, philosophical inquiry is futile.

One further finding from Epistemological Levels research is of interest here. Kuhn (1992) has shown a correlation between evaluativism and level of reasoning proficiency, measured in terms of the ability, when prompted, to provide genuine evidence for a theory, (i.e., evidence which is both distinct from the theory and relevant to its correctness) and the ability to generate genuine counter arguments and rebuttals. Unsurprisingly, it seems that the more one engages in the processes of reasoning the more skilled one's engagement becomes (Kuhn, 1992). Lipman too, has pointed to this connection between epistemological stance and proficiency in reasoning skills, suggesting that an individual with poorly developed reasoning skills is unlikely to appreciate the power of reasoning, so that when faced with a philosophical question is likely to retreat to an appeal-to-authority or relativist approach to justification. Conversely, he argues, highly developed reasoning skills make it possible for an individual to engage in fruitful philosophical inquiry, thereby coming to realise the justificatory value of the processes of argument (Lipman, 1985).

Whether or not we accept the linear developmental model of the cognitive psychologists, it would seem to follow that where teachers adopt either absolutist or relativist approaches to justification; where they see no epistemic value in looking for and furnishing reasons, and, as seems likely, also operate with underdeveloped reasoning skills, they are unlikely to be receptive to the idea of adding philosophy to the school curriculum. Openness to Philosophy for Children would seem to depend upon teachers thinking as evaluativists, that is, being disposed to engage in the practices of reason-giving and reason evaluation, being aware of the epistemic value of such practices and, concomitantly, having highly developed reasoning skills.

Plausibility Considerations

We are suggesting then that Philosophy for Children's lack of mainstream success in Australia can be explained, in part at least, in terms of teachers' underlying epistemological dispositions. At first sight this may seem unlikely. After all, Australian teacher registration is conditional upon completion of a four year University degree. And surely any such degree will be structured to ensure that graduating students come to acquire proficiency in the modes of justification characteristic of the area under study. And surely it goes without saying that no area of study is characterized by absolutist or relativist justificatory methods. Most, if not all, Australian universities uniformly adopt such sets of graduate outcomes, and each of these sets of qualities includes the ability to think critically within a knowledge domain.⁸ We might expect then, that on the whole graduating teachers would understand the epistemic value of evaluativist practices, be disposed to employ these practices, and have developed the necessary reasoning skills to do so. Surely this is not an unrealistic expectation, given the length of teacher training degrees.

Yet epistemological levels research shows that the evaluativist stage is attained by only a small fraction of those studied (Hofer and Pintrich, 2006). Ordinary degree students, even at the end of their programs, appear to operate at absolutist or relativist levels (King and Kitchener, 1994; Kuhn, 1992). Moreover, a recent local study of the justificatory reasoning tendencies of final year undergraduate students across a broad range of degrees, including the Primary/Junior Primary Education degree, has shown that the majority of the participants exhibited absolutist and relativist tendencies in the moral and scientific domains (Meyer, 2009, p.225). While this study did not test for reasoning skill proficiency, the well established correlation, noted earlier, between epistemological level and reasoning proficiency would make it likely that the identified majority of final year students who employed absolutist and relativist modes of justification would also operate with poorly developed reasoning skills.

On the basis of the evidence we have described here, it seems plausible to suggest that Australian teachers' epistemological beliefs act as a barrier to the widespread uptake of Philosophy for Children. This conclusion should not come as a surprise. Over a decade ago, Richard Paul, Linda Elder and Ted Bartell (1997) led a study of teacher education courses in 66 colleges and universities, in order to assess, '...the extent to which students in teacher preparation courses in California are being taught in ways that facilitate skill in critical thinking and the ability to teach it to others.' (p.2). Paul *et al* use the term 'critical thinking' to refer to 'thinking that explicitly aims at well founded judgment and hence utilises appropriate standards in the attempt to determine ... [truth]' (p.2). This is what we have described as evaluativist thinking.

Information about how faculty members tend to think about critical thinking and the way in which their views influence their teaching was collected through in-depth interviews made up of both closed and open-ended questions. Among the quantitative findings were the following:

Though the overwhelming majority (89%) claimed critical thinking to be a primary objective of their instruction, only a small minority (19%) could give a clear explanation of what critical thinking is. ...[An even smaller] minority could clearly explain the meanings of basic terms in critical thinking. For example, only 8% could clearly differentiate between an assumption and an inference, and only 4% could differentiate between an inference and an implication.

When asked how they conceptualised truth, a surprising 41% of those who responded to the question said that knowledge, truth and sound judgement are fundamentally matters of personal preference or subjective taste (Paul et al, pp. 3-4).

Paul and colleagues go on to report that:

[A] significant percentage of faculty interviewed:

Do not consider reasoning as a significant focus of critical thinking

Cannot specify basic structures essential to the analysis of reasoning

Cannot give an intelligible explanation of basic abilities in...critical thinking...

Inadvertently confuse the active involvement of students in classroom activities with critical thinking in those activities (Paul et al, pp. 3-4).

On the basis of these findings, Paul *et al* deliver a damning conclusion:

Careful analysis of the interviews indicates that... most faculty have not carefully thought through any concept of critical thinking, have no sense of intellectual standards that they can put into words, and are, therefore by any reasonable interpretation, in no position to foster critical thinking in their own students or to help them foster it in their future students – except to inculcate into their students the same vague views that they have (Paul et al, p.5).

The question arises whether or to what extent Paul et al's findings would hold, a decade on, for Australian teacher education institutions. While no comparable Australian studies have been undertaken, there are a number of sources of evidence to which we can appeal. As part of her 2009 study, Meyer carried out a comprehensive analysis of reports from recent inquiries into Australian teacher education,⁹ finding in these reports no overt aim directed at the development of the skills and dispositions we have characterised as evaluativist thinking (Meyer, 2009). In addition, we can turn to findings from research into pedagogical practices that appear to be associated with the development of evaluativism. Two such practices stand out. First, the explicit teaching of critical thinking skills, especially through the use of a mixed instructional approach which combines engagement in subject related reasoning tasks with a separate stream designed to teach for a range of general reasoning skills and dispositions (Abrami, P., Bernard, R., Borokhovski, E., Wade, A., Surkes, M., Tamin, R. & Zhang, D., 2008). Secondly, we can point to engagement in collaborative, logically based discussion of ill-structured problems, sometimes referred to as *dialogic*

teaching (Lyle, 2008). Very briefly, research from within cognitive psychology and the Philosophy for Children movement over the last four decades demonstrates that engagement in such discussions enhances (among other things) individuals' epistemological development (Lyle, 2008; Gracia-Moriyon, Rebollo & Colom, 2005; Collins, 2005; Trickey & Topping 2004). Much of this research relates to a particular dialogic teaching approach known widely as the 'Community of Inquiry' (Lipman, 2003; Splitter & Sharp, 1995). In such forums attention is drawn to the procedures of critical thinking, as well as to the power of such procedures, so that both skills and epistemic understandings are fostered. Meyer (2009) also found that the 'Community of Inquiry' approach and instruction in reason-giving and evaluation were both independently associated with an increase in pre-service teachers' tendency to engage in argument with others on controversial issues and a decrease in the tendency to avoid engaging in such argument.

We need to ask then, to what extent these pedagogical practices have a place in current teacher education programmes in Australian universities. The question is hard to answer; a web-search is unlikely to reveal the detail we need, although clearly, this conference presents an ideal opportunity for data gathering. We do have some data, however, in Meyer's (2009) search of university web sites which revealed only six compulsory courses in teacher education programmes involving one or both of the identified practices. On this basis we conclude, tentatively, that not enough is being done in Australian teacher education courses to develop the skills and dispositions of evaluativism so that graduating teachers are unlikely to display openness to the idea of taking philosophy into their classrooms. Generalising from Paul's findings, even where there are such courses, they are likely to stand alone in their advocacy for the skills and dispositions which make for evaluativist thinking. Worse, they might well be undermined by the epistemological approaches underlying other courses in the programme. As a result, their developmental effects are likely to be limited.

An Example

This is the situation in which we find ourselves. Within the University of South Australia's School of Education we teach two compulsory courses aimed at developing the skills and dispositions of evaluativism. One of these courses, *Society & Environment Education*, aims to develop pre-service (junior primary/primary teachers') justificatory reasoning in the scientific and moral domains. Students are not only introduced to environmental and social science content and associated pedagogy, but also encouraged to appreciate the importance of making sound scientific and moral judgements about social and environmental issues. The course stresses explicitly that judgements are properly made on the basis of logic and evidence, which in the moral domain includes an understanding that ethics is grounded in harm and well-being, that humans, and to some extent other species, share common capacities for suffering, and that facts and circumstances must be taken into account when making moral decisions (Knight & Collins, 2010). We also introduce students to the dangers of absolutism and relativism. In the second of our courses, *Ethics, Education and Critical Inquiry*, we begin by asking pre-service teachers to reflect on their goals as teachers and what they see as the purpose of education. We discuss the role that values play in teaching and look more closely at the elements of moral decision making and the dangers of absolutism and relativism. We teach explicitly for the skills of logical cogency including recognising, furnishing and evaluating arguments and demonstrate the power of deductively valid and inductively strong arguments. The course also includes a 'philosophy across the curriculum' component designed to demonstrate how unearthing the philosophical underpinnings of maths, science, technology and so on, not only contributes to learning in those curriculum areas but also serves to develop reasoning skills and dispositions.¹⁰ Importantly, both courses employ a dialogue-based 'Community of Inquiry' approach and advocate this approach as the best method for developing evaluativist reasoning skills and dispositions in children.

On a number of measures, including contribution to tutorial discussions, content of assignments and continued involvement in the South Australian Philosophy Teachers' Association, the courses appear to have

made an impact on students' epistemological understandings and their openness to philosophical ideas and argument. In addition Meyer's (2009) pre-post test intervention study showed that engagement in these two courses, '...was associated with significant increases in evaluativist reasoning tendencies and significant decreases in absolutist and relativist reasoning tendencies in all three domains [moral, physical science and social science]' (p. 236). Yet, we know there is a significant proportion of students whose epistemological understandings remain unchanged and who leave the courses believing, as they did when they entered it, that philosophical inquiry is futile.

Conclusion

If Philosophy for Children is ever to flourish in our primary schools, we need to do better. We urge philosophers of education to consider and act on the argument we have made for change within teacher education. For unless we are prepared to do more to open teachers' minds to philosophy, another speaker may well be in this place twenty-five years from now lamenting the general absence of philosophy in our classrooms.

Notes

- ¹ In this paper we use the term 'Philosophy for Children' to refer to the well known philosophy curriculum developed in the U.S. by Matthew Limpan and colleagues, and to more general practices of school-based philosophical inquiry.
- ² The Federation of Australasian Philosophy in Schools Associations (FAPSA), formerly known as the Federation of Australian Philosophy in the Classroom Associations (FAPCA); State associations include the South Australian Association of Philosophy in the Classroom (SAAPIC) and the Victorian Association for Philosophy in Schools (VAPS).
- ³ We can point to Phil Cam's involvement in the development of Queensland's 'Productive Pedagogies', the introduction of senior secondary philosophy subjects in many Australian states including South Australia, Western Australia and Victoria, and Buranda State School's high profile as a philosophy-based school.
- ⁴ See for example, de Bono, E. (1990), *Six thinking hats*, (London, Penguin), and the *Australian Values Education Framework* available online: <http://www.curriculum.edu.au/values/> (accessed 1/9/2010).
- ⁵ The questions in these studies were ethical in nature and related to the topics of animal rights and contemporary indigenous issues. For example: 'Is it ok to eat eggs lain by battery hens?'; 'Should the Australian Government apologise to Aboriginal Australians
- ⁶ Kuhn, Cheney and Weinstock (2000) explained such variation as demonstrating transition between epistemological levels.
- ⁷ See for example, James R. Beebe's 'Moral Relativism in Context, on moral relativism. Relativism about science is disproved by the arguments behind the widely accepted theory of Holism, stressing as it does the intersubjectivity of experience.
- ⁸ As an example see the full list of the University of South Australia's Graduate Qualities and associated indicators, see: <http://www.unisa.edu.au/gradquals/staff/indicators.asp> (accessed online 1/9/2010).
- ⁹ See, for example, *The Future of Schooling in Australia* (2007) available online at: education.qld.gov.au/publication/production/.../federalist-paper.pdf (accessed online 1/9/2010); and *Teaching and Leading for Quality in Australian Schools* (2007) available online at: <http://www.aitsl.edu.au/ta/webdav/site/tasite/shared/Publications%20and%20Covers/Teaching%20and%20Leading%20for%20Quality%20Australian%20Schools.pdf> (accessed online 1/9/2010).
- ¹⁰ See our paper, 'Enlivening the curriculum: the power of philosophical inquiry' for a full discussion of the 'philosophy across the curriculum' approach (Knight & Collins, in press).

References

- Abrami, P., Bernard, R., Borokhovski, E., Wade, A., Surkes, M., Tamin, R. & Zhang, D. 2008, Instructional interventions affecting critical thinking skills and dispositions: a stage one meta-analysis, *Review of Educational Research*, 78: 4, pp. 1102-1134.
- Beebe, J. (2010) 'Moral Relativism in Context, *Nous*, 44: 3, pp. 1-34.
- Collins, C 1998, *Philosophical inquiry in the Classroom: Clearing the obstacles for teachers to build communities of inquiry*, Hons thesis (Adelaide, University of South Australia).

- Collins, C. (2005) *Education for a Just Democracy: the Role of Ethical Inquiry*, PhD thesis (Adelaide, University of South Australia).
- García-Moriyón, F., Rebollo, I. & Colom, R. (2005) Evaluating Philosophy for Children: A meta-analysis, *Thinking*, 17: 4, pp. 14-22.
- Hofer, B & Pintrich, P 1997, The Development of Epistemological Theories: Beliefs about Knowledge and Knowing and Their Relation to Learning, *Review of Educational Research*,. 67: 1, pp. 88-140.
- King, P & Kitchener, K 1994, *Developing reflective judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults* (San Francisco, Jossey-Bass).
- Knight, S. and Collins, C. (2006), Cultivating reason-giving: the primary purpose of education?, *International Journal of the Humanities*, 3: 2, pp.187-194.
- Knight, S. & Collins, C. (2010) *ETHIC: A procedure for ethical decision making within Society & Environment*, *The Social Educators' Association of Australia, Biennial Conference Proceedings* (Adelaide), available online: <http://www.seaa.org.au/adelaide2010.html> (accessed 1/9/2010).
- Knight, S. & Collins, C. (in press) Enlivening the curriculum: the power of philosophical inquiry, *Theory and Research in Education* (forthcoming 2010).
- Kuhn, D. (1992) Thinking as Argument, *Harvard Educational Review*, 62: 2, pp. 155-178.
- Kuhn, D., Cheney, R. & Weinstock, M. (2000) The development of epistemological understandings, *Cognitive Development*, 15, pp. 209-228.
- Lipman, M. (1985) *Philosophy and the Cultivation of Reasoning*, *Thinking* 5: 4 pp 33-42.
- Lipman, M. 2003, *Thinking in Education* 2nd edn, (Cambridge, Press Syndicate of the University of Cambridge).
- Lucas, J. (2000) *Aboriginal and Torres Strait Islander studies as an anti-racist strategy: raising ethical questions*, Hons thesis, (Adelaide, University of South Australia).
- Lyle, A. (2008) Dialogic Teaching: Discussing Theoretical Contexts and Reviewing Evidence from Classroom Practice, *Language and Education*, 22: 3, pp. 222-240.
- Meyer, T. (2009) *Developing Justificatory Reasoning: The Importance for Teacher Education*, PhD thesis, (Adelaide, University of South Australia).
- Ministerial Council on Education, Employment, Training, and Youth Affairs (2008) *The Educational Goals for Young Australians*, Melbourne, Curriculum Corporation.
- Paul, R, Elder, L & Bartell, T (2001) *Executive Summary: Study of 38 Public Universities and 28 Public Universities to Determine Faculty Emphasis on Critical Thinking in Instruction*, available online at: <http://www.criticalthinking.org/research/Abstract-RPAUL-38public.cfm> (accessed online 1/9/2010)
- Splitter, L. & Sharp, A. (1995) *Teaching for Better Thinking: The Classroom Community of Inquiry*, (Melbourne, The Australian Council for Educational Research).
- Trickey, S. & Topping, K. (2004), Philosophy for Children, *Research Papers in Education*, 19: 3, pp. 365-380.