Educating Children to Think Critically in the Primary School Setting: The Place of Philosophy for Children

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Abstract

As official policy, *The New Zealand Curriculum* states that its "principle function is to set the direction for student learning and to provide guidance for schools as they design and review their curriculum" (Ministry of Education, 2007, p.6). Educating children to be critical thinkers is a compulsory element of *The New Zealand Curriculum*. Hence, as state employees, teachers are obligated to educate for it. Understanding what it is to be a critical thinker presupposes a teacher deciding how best to educate for it, and requires relevant information. As the guiding document however, it is deficient in this respect. It does not provide information for teachers as to what it is to be a critical thinker. Defining the term is contentious among theorists, exemplified by long-standing debate, which has not yet achieved consensus. This makes it all the more important that the Ministry of Education provides definitional clarity of the term, if it is indeed a serious educational objective. This thesis affirms the importance of educating children to be critical thinkers as part of a genuine education for induction into a democratic society. Hence, it provides the definitional clarity for teachers that *The New Zealand Curriculum* does not. This thesis argues that in the primary sector, such an education is best achieved through the guidance and support of the Philosophy for Children programme, and its community of inquiry pedagogy. Transforming the traditional classroom into a philosophical community of inquiry provides the best context, while the Philosophy for Children novels and teachers' manuals provide content that engages children in thinking critically. A successful transformation has potential barriers. However, overcoming barriers by thinking critically is characteristic of a philosophic paradigm!

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CHAPTER ONE:

Introduction: Aim and Scope of the Thesis

Situations arise that have a significant impact on our lives, and about which we are forced to make decisions. Making the best possible decision requires more than the toss of a coin; we are required to think beyond the simplistic and superficial. Personal situations include those relating to my role within groups such as family, friendship, and employment, where uncovering and making sense of complexities is required before resolving problematic issues. They relate also to my role as a teacher in the primary sector, striving to be judicious and fair within dynamic and challenging circumstances, and within which education policy is at times unsupportive. My study at Massey University of education, through philosophy, historical analysis, and the theory, policy, and practice of curriculum has heightened my interest in what it is to think critically. It is in these situations that this thesis has its origin, while its catalyst was *The New Zealand Curriculum* (Ministry of Education, 2007) (NZC).

NZC is the current official guide for teaching and learning in schools. It aspires to educate children to be critical thinkers. This is commendable if children are to be supported in satisfying their natural sense of wonder at the world, and in thinking through the problematic and puzzling issues that this generates. Such an educational aim supports their induction into a democratic society, where many different ideas exist.

Achieving this educational aim is advantageous to the individual, their local community, and to democratic citizenship. A citizenry that is composed of critical thinkers, who strive to live life based on sound judgements, is surely preferable to one that is dependent on, and held captive by, the ideas and

actions of just a few. Citizens who think critically about, and take action for, the well-being of the intellectual, emotional, and social domains of life and of the physical environment are more likely to be productive in multiple and dynamic ways. The development of these dimensions enables children to progress towards their potential as educated persons, who are capable of living well with others in a democratic society (Clark, 2004).

Educating *all* children to think critically is an important educational aim (Splitter & Sharp, 1995). However, so that teachers can educate for critical thinking they first need to know what it is to think in this way. They also need to know how best to educate for it to ensure that it is accomplished. Unfortunately NZC fails to provide conceptual clarity around what it is to think critically. This is concerning if such an aim is to rise above rhetoric and actually be achieved in schools. It also neglects to support teachers in how to accomplish this important aim. *Te Kete Ipurangi* (http://www.nzcurriculum.tki.org.nz), a Ministry of Education initiative provides information and resources intended to be of support in effecting NZC. Unfortunately, it fails also to provide an explanation. Furthermore, in seeking clarification the researcher's personal communication with contact personnel was not ultimately forthcoming (C. Ward, pers.comm.14.8.10). The report prepared for the Organisation for Economic and Cultural Development by the *Defining and Selecting Key Competencies* project (2004), from which critical thinking emerged as a key focus and which informed the Ministry of Education in its formulation as a key competency in the curriculum (Rutherford, 2005), does not conceptualise what it is to think critically either. What are teachers to do?

Many approaches that profess to improve thinking are on offer from which teachers can choose. Blooms Taxonomy, de Bono's Six Thinking Hats, Costa's Habits of Mind, and Gardner's Multiple Intelligences are such approaches, and are familiar to New Zealand teachers. The pedagogy tends to be mechanistic and formulaic. These programmes can be useful in some

situations such as in comparing approaches with children when exploring what thinking is or to inject a novel perspective during a single session. However, they tend to reduce the complex activity of thinking to a list of techniques, disconnected from the context of daily life (Peters & Marshall, 2004).

These techniques limit thinking in a manner that diminishes the child's control over developing autonomous thinking (Splitter & Sharp, 1995) undermining the attributes that are particular to thinking critically, such as questioning, making judgements, and revealing common assumptions in active pursuit of increased understanding. They incline children towards a passive role of acceptance of that which the teacher imparts and directs. Children perform these techniques uncritically within narrow parameters as dictated by each approach, much like 'dogs jumping through hoops'. The power imbalance that this generates and engenders between teacher and child confines a skills-based approach to primarily teacher-lead activities in classrooms and to children's acceptance of them in an uncritical way. This paradigm places the teacher in an authoritarian position and reduces the teacher's professional role of educator to one of deliverer (Peters & Marshall, 2004).

In contrast, educating children to think critically is central to the Philosophy for Children programme (P4C). Developed by Matthew Lipman, this programme provides numerous opportunities within a community of inquiry, for children to interact with ideas, challenging their own and other's thinking in the process (Lipman, Sharp, & Oscanyon, 1980). This programme is comprehensive, offering opportunities for thinking with breadth and depth. Though generally less familiar to teachers in mainstream New Zealand classrooms, the programme is used with groups of children labelled 'gifted and talented'. However, this is a programme for thinking that is appropriate to *all* children. Children depend on others to support and nourish their intellectual, social, and emotional development. As a significant

other, the teacher needs to be informed so as to enable this to the fullest extent because such development has an essential bearing on achieving a life as a democratic citizen.

The thesis critically examines various positions on how to encourage the process of learning to think critically through engagement with the school curriculum in the primary sector. By implication, this entails supporting teachers in their work with children. Educating for thinking cannot be left to chance. Thinking critically is not merely an isolated thinking episode to be practiced solely through discreet exercises. Indeed, to think critically is a complex task and requires explicit attention to encourage its development (Splitter & Sharp, 1995). Hence, a narrow skills approach to achieving this is rejected in favour of P4C and its methodology of a community of inquiry. It argues that this is one approach for educating to think critically that is most appropriate.

The central focus of this thesis is to address the conceptual and practical matters that NZC does not, making it timely and relevant to enacting NZC; it provides the background information needed for those involved in educating children to be critical thinkers. The study contributes to the development of educational understanding and curriculum development in schools regarding its implementation generally, and of educating children to think critically in particular. It is intended that this thesis provide insights into the theory and practice of achieving this aim for teachers, and for aiding responsible decision making about how to educate for it.

This thesis provides a conceptual and analytical basis from which to focus and support discussion between, not only education professionals, but also policy makers involved in making the aim achievable. Although the act of thinking critically has been separated out in the thesis, it is acknowledged that critical, creative and reflective modes of thinking interrelate and

complement each other, enriching both the outcome of thinking tasks and the enjoyment of the process (Lipman, 2003).

The following research question addresses the above considerations:

How can educating children to think critically best be achieved in the primary school setting?

Four sub-questions underpin the thesis:

- What is it to be a critical thinker?
- Why is being a critical thinker important?
- What does P4C have to offer when educating for thinking critically?
- What is likely to impede educating children to think critically?

There is a substantial body of literature from which a range of issues can be explored and examined to further our understanding of what it is to think critically and how to educate for it. Key findings from this literature identify the conceptualisation of what it is to think critically as unsettled and contestable. Considerable literature also deals with educating children for critical thinking through philosophical inquiry, debating its applicability to children. It deals with theoretical aspects and practical implications of doing so in schools. The literature which theorises democracy and educating for democracy in schools is also substantial and drawing on this has been supportive. However, limited space in the thesis has precluded a full exploration of this aspect.

The thesis is set out in seven chapters.

Chapter One discusses the aim and scope of the thesis.

Chapters Two, Three and Four address what it is to think critically, considering contextual and conceptual matters. Chapter Two provides a brief historical overview of the inclusion of critical thinking as an educational aim in New Zealand curricula, highlighting that its inclusion is not new. In Chapter Three, a discussion of the work of four significant critical thinkers over time is provided. Socrates, Galileo Galilei, Mary Wollstonecraft, and Claude Monet have been chosen from a list of many, as exemplars of those who have striven to understand their differing contexts from different perspectives, including questioning, science, gender, and art. The central place of thinking critically in a democratic society makes educating for it central to the education of children as developing citizens. Chapter Four conceptualises what it is to think critically through an investigation and critique of the definitions of prominent critical thinking theorists. These include Robert Ennis, John McPeck, Richard Paul, Harvey Siegel, Matthew Lipman, Sharon Bailin, and Barbara Thayer-Bacon. It also examines the ways in which it is important to the development of autonomous thinking.

Chapters Five and Six critically examine matters of praxis of achieving such an education. These chapters explore P4C as the most appropriate guide and support for teachers. In Chapter Five P4C is examined. It claims that through the practice of a philosophical community of inquiry, the programme embodies what it is to think critically. A description of the resources used in the programme is also included. What philosophy is, and the capacity of children to engage in it, is examined. Then in Chapter Six, practical matters involved in implementing P4C are discussed. The community of inquiry methodology and its links to democratic citizenship are explored. Pedagogical issues relating to the mix of students and the challenges to teaching and learning are considered. Conceptualising teachers and children as thinking participants of the community of inquiry as a potential barrier to implementation success is also examined.

Chapter Seven considers what action is needed to ensure the implementation of P4C in New Zealand classrooms. It discusses potential challenges to its widespread and successful implementation, arguing that current education policy is an impediment. Finally, the thesis concludes with a call for further research into how the community of inquiry paradigm and the roles that teachers and children assume compared to those of the traditional approach.

CHAPTER TWO:

Critical Thinking in the New Zealand Curriculum: An Historical Overview

The responsibility of the state for educating New Zealand children has been enacted through various mechanisms, a compulsory national curriculum being one of them. The design and development of each statement on curriculum, and supporting material, have been the result of historical circumstances. Curricula emerge out of changing societal and political needs and demands (Peters & Marshall, 2004), and ideally a consideration of pedagogical practices. Such factors influence how curricula are defined and the subsequent emphases that are included. Educating New Zealand children to think critically has been such an emphasis, expressed both explicitly and implicitly, since at least the 1980s.

This chapter traces the inclusion of critical thinking as a fundamental educational aim in New Zealand school curricula since 1984. Its inclusion is traced through the following documents: *A Review of the Core Curriculum for Schools* (Department of Education, 1984); *The Curriculum Review: Report of the Committee to Review the Curriculum for Schools* (Department of Education, 1987); *The New Zealand Curriculum Framework* (Ministry of Education, 1993), including separate supporting documents for seven learning areas; *The New Zealand Curriculum Draft for Consultation* (Ministry of Education, 2006); and *The New Zealand Curriculum* (Ministry of Education, 2007). The inclusion of critical thinking as an educational goal, signals a positive step towards educating children for life in New Zealand's democratic society. However, in support of the teachers who are charged with this responsibility in schools, the means by which this can be achieved needs very careful and informed consideration. As the following account illustrates, limited guidance for teachers is provided in these documents.

A Review of the Core Curriculum for Schools (1984)

This review occurred in response to the significant changes within New Zealand society, and their impact on the role of the school. Changing socio-cultural, political, and employment circumstances, together with the impact of rapidly developing information and communication technology, exposed issues and concerns that impacted on schools. In both primary and secondary schools, some content and programmes of study had been revised, or included in response to these changes. Curriculum planning in both sectors operated within distinct guidelines. Informing teachers' work in the primary sector was the *Syllabus of Instruction for Public Schools,* published in 1928. In the secondary sector, the regulations resulting from the Thomas committee's review and recommendations of 1945 guided teachers' work (Department of Education, 1984). No comprehensive national review had followed these, until 1984 when the decision to establish a coordinated core curriculum necessitated it (O'Neill, Clark, & Openshaw, 2004).

A Review of the Core Curriculum for Schools (Department of Education, 1984) specified education for thinking, including thinking critically. The document conceptualized curriculum as "the school programme planned by the teachers, within the framework of syllabuses, time allocations, appropriate teaching methods and the needs of the student" (*Ibid.,* p.6). Within this framework, the aims of education gave priority to educating young people for an effective life, possessing the essential knowledge, skills, attitudes and values to enable their full participation of the New Zealand democracy. They are expressed through "three broad aspects of growth: the intellectual, personal and social dimensions" (*Ibid.,* p.17). Educating children to think critically is implicit within the intellectual dimension, which stipulated that the ability to think and solve problems is to be developed and the urge to inquire is to be encouraged (*Ibid.,* p.17). In both the personal and social dimensions, students are to be supported in developing an understanding of

the world around them, including social and physical aspects. Through engagement with the curriculum, it was intended that young people would develop intellectual, personal, social, physical, emotional, aesthetic, and moral qualities (*Ibid.,* p.17). It was evident that such learning requires a level of thinking beyond the superficial.

The purpose of schools is based on the aims of education, and is given expression within the intellectual, personal, and social dimensions (*Ibid.*,p.18). An intellectual purpose of schools is to "develop logical, creative, critical and analytical modes of thinking" (*Ibid.,* p.20), along with development of the capacity to "reason and make informed judgements" (*Ibid.,* p.19). This is important since schools are expected to respond to the needs and demands of wider society, and support a person's potential for full participation in a democratic society.

Although critical thinking is explicitly referred to in the review document, no defining statement of it in relation to both the aims of education and the purpose of schools, is given. This posed a problem for those wanting to understand both the concept of critical thinking and the teacher's role in educating for it. The fourth Labour Government which was elected at the end of 1984, however, did not act upon this review. Instead, it was focussing on managing economic recovery within the context of globalisation. Informed by free-market economic theories, economic reforms were part of a wider agenda of restructuring of New Zealand society (O'Neill, Clark & Openshaw, 2004).

The Curriculum Review: Report of the Committee to Review the Curriculum for Schools (1987)

This review emerged out of *A Review of the Core Curriculum for Schools* (1984). The newly elected Minister of Education within the fourth Labour government, Russell Marshall, re-launched the curriculum review process,

seeking wide public representation and consultation, including an invitation from the Minister to children and young people to respond. Public discussion and deliberation was supported by published material which outlined educational options for consideration. Information was also disseminated through educational institutions, community groups, the media and McDonalds. The intended purpose of the review was to be an effective step towards operationalising a national common curriculum for the primary and secondary sectors. It sought not only the cohesion and continuity of learning, but also the location of children at the centre of school programmes, highlighting that it was educationally driven and well intentioned.

Critical thinking is not specifically identified to in *The Curriculum Review: Report Prepared of the Committee to Review the Curriculum for Schools* (Department of Education, 1987). However, in order for thinking generally to occur, it presented a group of particular thinking tasks, which it referred to as skills. These skills interrelate with those that enable expressing, relating to others, and carrying out practical activities and studies. Skills that relate specifically to thinking are:

> skills of locating and acquiring knowledge; constructing new ideas, clarifying existing ideas, linking new and old ideas, changing existing ideas; reflection and evaluation; analysis, logical organization and presentation of thought; listening; associating, reasoning; creative use of intuition, problem solving (*Ibid.,* p.12).

Despite not being specifically referred to as thinking critically, these tasks require a high level of complex thinking characteristic of a critically-probing approach. The term 'curriculum' in this document is defined as "all the activities, events, and experiences that take place in the school's learning programme", which includes syllabi, or subject content, as just one component of it (*Ibid.*, p.123). The skills, it stated, enable children "to learn

and to apply (that) knowledge to their lives" (*Ibid.,* p.12). However well intentioned the list of thinking tasks, which were provided as a checklist for teachers in their planning, this review fell short of elaborating the terms associated with thinking. It failed to inform teachers through a lack of defining statements and provided no guidance for educating children in the best way possible.

Both *A Review of the Core Curriculum for Schools* (1984) and *The Curriculum Review: Report of the Committee to Review the Curriculum for Schools* (1987) were the result of different consultation processes, with the intended purpose of informing the design and development of a new national curriculum. These documents contrast with *The New Zealand Curriculum Framework* (1993a) and *The New Zealand Curriculum* (2007), which are prescriptive documents, mandatory for all schools.

The New Zealand Curriculum Framework (1993)

The proposals expressed in *The Curriculum Review: Report Prepared of the Committee to Review the Curriculum for Schools* (1987) were never enacted in full, being shelved by the administrative reforms of *Tomorrow's Schools.* However, a major restructuring of the national curriculum began in 1992 and lasted until 2000; *The New Zealand Curriculum Framework* (Ministry of Education, 1993a) (NZCF) set out the curriculum in broad terms, while separate documents covered the various curriculum areas.

NZCF acknowledged that, 'curriculum' has various meanings and referred to it in two ways: the 'New Zealand Curriculum' which, through supporting documents, defines "the learning principles and achievement aims and objectives" (*Ibid.,* p.4) required of all schools, and the 'school curriculum' is how each school operationalises the New Zealand Curriculum, "in consultation with the school's community" (*Ibid.,* p.4).

The creation of NZCF came in response to changes in New Zealand society and its economy, underpinned by an ideology which emphasised the maximisation of "the productive power of the individual and of the capitalist state" (Peters & Marshall, 2004, p.109). While the development of NZCF drew on the findings of various reviews of the 1980s its outcomes-based design, the contracting out of curriculum writing, and the perception of children as human capital within education policy became part of a wider political agenda (Neyland, 2004). The focus of this agenda was on achieving economic growth and international competitiveness, with education as a central means of achieving this end. NZCF was less informed by the principles and theory of a genuine education than by political and economic interests (Lee, O'Neill & McKenzie, 2004).

NZCF directed teaching and learning programmes in primary and secondary schools until February 2010, when *The New Zealand Curriculum* (Ministry of Education, 2007) became mandatory. NZCF differed markedly from the previous approach to teaching and learning programme design, since it prescribed the expected learning outcomes rather than specifying content, and served to regulate teaching and learning through continual assessment of performance rather than having a focus on mastery. Many concerned education professionals observed that this was at the expense of children's needs and interests, for example Neyland, 2004, Elley, 2004 and O'Neill, Clark & Openshaw, 2004.

NZCF states clearly that "students will: think critically, creatively, reflectively, and logically" (*Ibid.,* p.19). This was contained within 'Problem-Solving Skills', one of eight groupings of essential skills. These skills were to be developed through all areas of the curriculum, including the seven separate subjects for study, the essential learning areas: Language and Languages; Mathematics; Science; Technology; Social Sciences; The Arts; and Health and Physical Wellbeing. Thinking critically is expressed both implicitly and explicitly within the essential learning area descriptors: Language and Languages (*Ibid.,*

p.10), - children's ability "to discern critically messages from television, film, the computer, and other media" is fundamental to learning; Technology - "a wide range of skills, including those of ... critical thinking ..."(*Ibid.*, p.13); Social Sciences - children "will be challenged to think clearly and critically" (*Ibid.*, p.14); and The Arts (*Ibid.*, p.15), - enabling children to develop a critical awareness "through viewing, listening, and responding to creative works" (*Ibid.*, p15).

Supplementing NZCF were separate documents for each of the seven essential learning areas. These prescribed the outcomes expected of children for each subject of study. Addressing education for thinking critically is explicitly stated in some while in others it is less evident. It relates to developing children's ability to reflect, analyse, evaluate, appraise, and make judgements and is expressed in: Mathematics (Ministry of Education, 1992) at Levels 7 and 8, where Developing Logic and Reasoning requires that "within a range of meaningful contexts students should be able to critically follow a chain of reasoning" (*Ibid.*, p.26); Science (Ministry of Education, 1993b) at all levels, within an integrating strand of study, aims to "critically evaluate ideas and processes" (*Ibid.*, p.24); The Arts (Ministry of Education, 2000) in order to communicate and interpret at Levels 6 through to 8 students will "use critical analysis" (*Ibid.*, pp.35, 69 & 87) in dance, music and visual arts, "make critical judgements" (*Ibid.*, p.51) and "critically evaluate" (*Ibid.*, p.51) in drama and "critically reflect" in visual arts (*Ibid.*, p.87); Health and Physical Education (Ministry of Education, 1999) at Levels 7 within the Personal Health and Physical Development strand "Students will critically evaluate societal attitudes" (*Ibid.*, p.26) and within the same strand at Level 8 "Students will critically evaluate a range of qualitative and quantitative data" (*Ibid.*, p.28) and "critically analyse the impacts that conceptions of personal, cultural and national identity have on people's well-being" (*Ibid.*, p.28). Achievement objectives requiring that students "critically analyse" are expressed at Level 8 within the other strands, Movement Concepts and Motor Skills (*Ibid.*, p.29), and Healthy Communities and Environments (*Ibid.*, p.29);

and Technology (Ministry of Education, 1995) at levels 7 and 8 within the Technological Capability strand to "critically (analyse) evaluate (the) strategies and outcomes" (*Ibid.,* p.39) and within the Technological knowledge and Understanding strand and the Technology and Society strand at level 8 to (critically analyse and evaluate the strategies" (*Ibid.,* p.34) and "analyse and critically evaluate the social and economic impacts" (*Ibid.,* p.43). In addition, at all levels of the English (Ministry of Education, 1994) thinking critically is a separate dimension expressed as listening and speaking, reading and writing, and viewing and presenting processes (*Ibid.,* p.19). Within the three strands – oral, written and visual – thinking critically is required "In achieving the objectives of understanding and using" oral (*Ibid., p.30*), written (*Ibid.,* p.36) and visual (*Ibid.,* p.41) to analyse, evaluate, interpret and clarify.

Educating children to think critically through engagement with NZCF is problematic because NZCF does not make explicit what it is to think critically, how best to educate for it, or how it can be identified and evaluated as an achieved outcome, if indeed it can be. Teachers have been left unsupported once again, therefore potentially limiting children's learning.

The New Zealand Curriculum (2007)

The New Zealand Curriculum (Ministry of Education, 2007) (NZC) is the current policy document guiding the development of teaching and learning programmes in the primary and secondary sectors. It is the result of a review process, managed by the Curriculum Project group between 2003 and 2007. This process was informed by the *Curriculum Stocktake Report* (Ministry of Education, 2002), *The New Zealand Curriculum Draft for Consultation* (Ministry of Education, 2006) (NZC Draft) and associated material such as the *Defining and Selecting Competencies* (DeSeCo), a study for the Organisation for Economic Cooperation and Development completed in 2003.

After the inclusion of critical thinking in New Zealand curricula since the 1980s, its omission from the Curriculum Stocktake recommendations was particularly pronounced. On the completion of a review of the structure and effectiveness of the NZCF, the *Curriculum Stocktake Report* (Ministry of Education, 2002) recommended the reduction of the number of essential skills, including the Problem-solving Skills, which encompassed critical thinking. It recommended that 'creative and innovative thinking' be one of the new essential skills and attitudes.

A new framework of key competencies, which integrated essential skills, attitudes and values, was proposed in a report to the Ministry of Education (Brewerton, 2004). This report proposed that critical thinking be included within the Key Competency: Thinking, which is required for all learning. The key competencies as conceived for NZC originated in an international study initiated by the Organisation for Economic Cooperation and Development (OECD). Informing OECD member countries in policy development within the education sector, the study's report, *Key Competencies for a Successful Life and a Well-Functioning Society* (Rychen & Salganik, 2003) conceptualised competencies as more complex than skills, and included other cognitive dimensions, such as attitude. The report did not present a critical mode of thinking as a separate competency: it is of central importance having general application across all competencies.

The New Zealand Curriculum Draft for Consultation (Ministry of Education, 2006) (NZC Draft) emerged from, and was informed by, the *Curriculum Stocktake* recommendations and the findings of *DeSeCo.* Educating to think critically was specified in NZC Draft, being expressed both explicitly and implicitly in the vision, values, key competencies, effective pedagogy, and variously in all learning area descriptors. As a learning outcome it was included in all learning areas, though not at all levels.

Only those sections of NZC Draft, where the treatment of critical thinking differs from that of NZC, will be discussed here. Its inclusion in NZC is discussed more fully later in this chapter.

Key Competencies

Critical thinking is expressed within the reframed essential skills as the Key Competency: Thinking (Ministry of Education, 2006, p.11). The Key Competency: Thinking is one of five groupings of key competencies, which "are important generic capabilities needed by all young people" (*Ibid.,* p.7). The Key Competency: Thinking "is about using creative, critical, and metacognitive processes to make sense and question information, experiences, and ideas" (*Ibid.*, p.11). To question puzzling matters is a central element of thinking critically (Paul, 1990). Of concern is that this aspect is omitted in NZC.

Learning Areas

NZC Draft states explicitly and implicitly that all learning areas, including the additional Learning Languages and renamed Mathematics and Statistics, require children to think critically. This is expressed within both the descriptors and the achievement objectives in order to analyse, reflect, examine, evaluate, or make judgements, thus achieving the prescribed outcome. Additional to the Health and Physical Education descriptor is a definition for critical thinking. In a footnote it is defined as "the examining, evaluating, and challenging of assumptions about issues and practices" (*Ibid.,* p.17).

NZC Draft does not provide an overarching definition. It leaves educators to interpret what this complex mode of thinking is, in order to support children in making sense of and questioning information, experiences, and ideas, as contained in the Key Competency: Thinking. Replacing Problem Solving Skills,

including critical thinking, with the Key Competency: Thinking requires teachers to rethink their practice, without adequate support, so as to operationalise educating for critical thinking in the best possible way.

The policy document, *The New Zealand Curriculum* (Ministry of Education, 2007) (NZC) is the current official guide for educators, becoming mandatory in February 2010. It presents critical thinking as a learning outcome both explicitly and implicitly, in the vision, values, key competencies, effective pedagogy and learning areas, and are now examined individually.

Vision

Critical thinking is contained within the NZC vision for young people. Through the school curriculum they "will be confident, connected, actively involved, and lifelong learners" where "Critical and creative thinkers" (*Ibid.,* p.8) are listed among the characteristics of such a learner. This is presumably supported by the notion that educating to think critically will produce critical thinkers.

Values

NZC states, "students will be encouraged to value... innovation, inquiry, and curiosity, by thinking critically, creatively, and reflectively" (*Ibid.,* p.10). Furthermore, "their ability to critically analyse values ..." (*Ibid.,* p.10) and expand into related values, suggesting a comprehensive meaning increases the potential of extending into, and benefitting wider democratic society. Through encouraging, modelling, and exploring by and with the teacher, children are expected to develop an understanding that holding certain "values and acting on them that we are able to live together and thrive" (*Ibid.,* p.10), that they have an impact on the interaction with and response to the environment.

Key Competencies

The Key Competency: Thinking as expressed in NZC Draft (2006) remained largely intact in the NZC. It is concerned with making use of thinking processes, including those considered to be critical and creative, and to assist children in making sense of the world. Such thinking, NZC states, leads to "developing understanding, making decisions, shaping actions, or constructing knowledge" (*Ibid.,* p.12). The Key Competencies are vital "to sustained learning and effective participation in society" (*Ibid.,* p.4). They enable people "to live, learn, work, and contribute as active members of their communities" (*Ibid.,* p.12), and they need to be developed in challenging and supportive "contexts that are increasingly wide-ranging and complex" (*Ibid.,* p.12). Presumably this is to be enacted through teachers who understand what it is to be a critical thinker and why it is important to be so.

Learning Areas

The learning areas are: The Arts; Health and Physical Education; Mathematics and Statistics; Science; Social Sciences; Technology; and Learning Languages. These prescribe the outcomes expected of children for each subject of study. Critical thinking is included within these, either explicitly or implicitly. Educating to think critically relates to developing children's ability to reflect, analyse, evaluate, appraise and make judgements.

Critical thinking is expressed variously within the descriptors for the learning areas: English, to enable full participation "in the social, cultural, political, and economic life of New Zealand and the wider world" (*Ibid.*, p.18); The Arts, which develops conceptual thinking within a range of visual applications (*Ibid.,* p.21); Health and Physical Education, which "fosters critical thinking and action and enables students to understand the role and significance of physical activity for individuals and society" (*Ibid.,* p.23); Learning

Languages initiates children to "new ways of thinking about, questioning, and interpreting the world and their place in it" (*Ibid.,* p.24); Mathematics and Statistics, which develops "the ability to think creatively, critically, strategically, and logically" (*Ibid.,* p.26); Science, in which advances come from "logical, systematic work and from creative insight, built on a respect for evidence" (*Ibid.,* p.28); Social Sciences, such that children will develop in a way that enables them to "engage critically with societal issues" (*Ibid.,* p.30); and in Technology, which values "thinking and practices that are informed, critical, and creative" (*Ibid.,* p.32).

All learning areas are "important for a broad, general education" (*Ibid.,* p.16). Each requires thinking to be critical in order to analyse, reflect, evaluate, respond, and make judgements. This is also conveyed by the achievement objectives at levels 7 and 8 in the Arts, Social Sciences, Technology and Health and Physical Education. Furthermore, within the eight levels of the English learning area, listening, reading, and viewing require that students think critically about texts, indicating the successful use of processes and strategies. Learning Languages requires children to think critically at all levels as they make connections and compare and contrast particular elements of language learning.

Effective pedagogy

According to NZC, children in New Zealand classrooms are considered to be "at the centre of teaching and learning, asserting that they should experience a curriculum that engages and challenges them" (*Ibid.,* p.9). Teachers are required to employ pedagogy on the basis that:

> Students learn best when teachers: create a supportive learning environment; encourage reflective thought and action; enhance the relevance of new learning; facilitate shared learning; make connections to prior learning and

> experience; provide sufficient opportunities to learn; and inquire into the teaching-learning relationship (*Ibid.,* p.34).

Effective pedagogy entails designing "tasks and opportunities that require students to critically evaluate the material they use" (*Ibid.,* p.34) and requires a high level of thinking by teachers. Teachers need to encourage reflective thought and action, thereby supporting children to develop "their ability to think critically" (*Ibid.,* p.34) over time.

What do Teachers Need to Know to Educate for Critical Thinking?

As official policy, NZC functions to direct and guide the design of teaching and learning programmes in English-medium schools. It "applies to all students in those schools, irrespective of their gender, sexuality, ethnicity, belief, ability or disability, social or cultural background, or geographical location" (*Ibid.*, p.6). It applies to everybody who works with children within the education system. To enact this, teachers need to understand what it is to think critically, and how best to educate for it. They need to reflect on and make judgements about their practice so as to provide a teaching and learning programme worthy of the task, while taking account of children's learning needs and context (Lipman, 2003).

While educating children to think critically occupies a central place in NZC, the document falls short of supporting both teachers in their work and children in their learning. It does not define what it is to be a critical thinker or what it is to think critically. Aside from overarching statements about effective pedagogy, NZC does not address how best to educate for it. This neglect is most concerning, as academic literature on the topic is extensive (for example, Ennis, 1987; Siegel, 1990; McPeck, 1981; Lipman, 2003; Paul & Elder, 2006; Vaughn, 2010). Indeed, the situation is highly problematic because it is clear through this literature that it is contested, making it imperative that the Ministry of Education acknowledge this and define it for

teachers. Without firm guidance there is the potential for the aim of educating children to be critical thinkers to be considered irrelevant and unrelated to specific and explicit attention within teaching and learning programmes. Or it may be considered just too difficult or complex to address. Teachers ought not to be left uninformed as they attempt to operationalise the requirements of NZC in their classrooms. Others left to make sense of it include the Education Review Office, which is charged with the responsibility of monitoring schools and teachers as they develop successful programmes within NZC directives; School and Curriculum Advisors, whose role it is to advise and support schools in operationalising it; and school communities, who expect to participate in educating for it.

The Ministry of Education refers, not to mere thinking, but to thinking that is critical. 'Critical' is often associated with notions of negativity. So, does critical thinking as expressed in NZC relate to criticising and drawing attention to defects or to criticising work that does not conform to or that deviates from prescribed standards? Like the word 'curriculum', 'critical' also has more than a single meaning. This lack of conceptual clarity leaves teachers, and others, having to guess what the Ministry of Education is expecting of them. It demands guidance due to its location in a contested field. Resolving this lack of conceptual clarity demands further inquiry into underlying considerations than those expressed by NZC, as chapter four of this thesis demonstrates.

Thinking is dependent on functions that are conducted in the brain, which as yet are not fully explained. Thinking is required, even at the most basic level, for human survival. As such, everybody thinks; it seems certain that a person, even with monumental will, cannot choose to not think. Mostly, thinking happens beyond the realms of basic survival, and in the process, some individuals realise notable achievements. Four such thinkers is the focus of the next chapter. A brief survey of critical thinkers over time and place

locates thinking critically outside the confines of a school curriculum and can be traced back to at least the ancient Greek philosopher, Socrates.

CHAPTER THREE:

Critical Thinkers from Socrates Onward

Chapter Two provided a brief historical overview of the inclusion of critical thinking in New Zealand school curricula. However, critical thinking is not developed exclusively through engagement with school curricula, as a consideration of critical thinkers over time and place reveals. Interaction with and reaction to their social and natural environment prompted these thinkers to think beyond its presentation to seek out the elements underlying it (Delius, 2000; de Bono, 1976). The methods, systems of thought and discoveries of critical thinkers have shaped our thought and practice in such diverse areas as education, science, politics, art, and philosophy; in their individual and collective ways they signal great advances in human thinking and world perception (Tomlin, 1959).

This chapter examines four critical thinkers. Although many more exemplars could provide insight into the realm of the critical thinker and are worthy of inclusion (Delius, 2000), as models of critical thinkers the following are firm candidates. Common to each critical thinker presented in this chapter, and the reason for their selection is their analysis of common assumptions and world-views, of the underlying societal forces and power dynamics that impacted on their lives, and their personal commitment to societal improvement through their individual interests despite efforts to have them silenced. Socrates developed a method of inquiry, which identifies him, through the writing of Plato, as the quintessential critical thinker; Galileo Galilei constructed an alternative method of investigation and solved a problem of phenomenal magnitude which altered the perception of human centrality in the universe; Mary Wollstonecraft challenged the hegemonic thinking of Western society, arguing for a radical transformation of it through a national education system for all; and Claude Monet, whose challenge to

traditional ways of interpreting the natural world through paint on canvas was instrumental in the emergence and appreciation of modern art.

The chapter discusses the essence of their work and its impact on others. Included is a brief and general description of the context within which they developed their methods, ideas, and discoveries. This draws attention to the circumstances that form the setting for their ideas to develop. It also affords an understanding of underlying factors in such settings, which provided the catalyst for, inspired and enabled, their work (Dewey, 1984). To conclude the chapter, general points are extracted. These identify the resources - intellectual, social, and emotional – employed by these critical thinkers, and that provide strong models for children to emulate with informed teacher support within the school context.

Socrates (c.470-399BC)

Athens of Socrates' time was in social and political flux: the upheaval of a cycle of war and peace, its subsequent recovery and rebuilding, and changing world-views from increased exposure to different ideas through trade and travel were contributing factors (Melling, 1987). Growing skepticism induced a gradual move away from traditional mythology as a means of explaining the natural and social world (Tomlin, 1959). Concurrently, a group of philosophers, known as the sophists, gained prominence as peripatetic teachers who rejected mythology, and focused instead on ethical and social considerations (Frost & Bailey, 1973). Humans, not gods, became the central concern in making sense of the world, situating humans at the centre of not only causing social problems, but also in solving them (Bhasker, 1994).

Although the sophists sought to improve society through education, the content of education and their method did not concur with those of Socrates. Both promoted an understanding of social phenomena, including argument as part of this process, but in claiming to impart wisdom to the politically

ambitious, the sophists taught techniques of persuasion. The ability to use rhetoric in persuading others to accept a particular position was paramount; the consideration of its correctness was of diminished importance (Kraut, 1992). They emphasised the defeat of others in argument through convincing articulation, rather than the argument being a means to improving understanding, and gaining wisdom. Furthermore a commitment to justifying a judgement or position was not emphasised. For Socrates this type of education as an approach to life lacked wisdom and salience (Frost & Bailey, 1973).

Socrates theorized that ignorance underlies ethical and social problems. He contended that being aware of and acknowledging one's ignorance enables learning and understanding to occur. Admitting to his own ignorance, he sought to understand through the use of his intellect rather than through mythology or the passive acceptance of authority. Inviting others to do the same through dialogue, he modelled personal conviction and commitment to learning; he conveyed the dispositions of a critical thinker through his questioning methodology (Penner, 1992).

Socrates observed that people were unable to reasonably justify the claims that they made; justifying one's position with evidence provides a basis for conviction. He implored others to seek out, identify and explore underlying assumptions and conventions which are uncritically accepted within wider society. In so doing, puzzling and problematic social and political issues can be critically examined and solutions advanced (Penner, 1992).

Education for self-knowledge became his primary concern. He sought to encourage a propensity to inquire into how life ought to be lived. He initiated inquiry through dialogue with others by formulating careful and probing questions, where responses were subject to critique through further questioning. This supports clarifying meaning and addressing perplexing or unconsidered aspects at an even deeper level. When induced to defend ideas,

this process highlights confusions and self-contradictory or unreasonable judgements, allowing for reconsideration and self-correction. As the dialogue proceeds, a clearer understanding of the issue at hand draws closer, and alternative perspectives are proffered, despite not achieving complete resolution (Penner, 1992).

For Socrates, argumentation requires clear steps to ensure the coherent treatment of problematic issues and matters of import, particularly those of an ambiguous nature. To provide a clear and stable foundation from which the dialogue, or argument, can proceed, agreement needs to be reached in establishing a definition of terms, which could involve challenging conventional definitions. Examining common assumptions, analysing concepts, explaining word meanings, extracting the common elements, and evaluating arguments enables the communication of ideas between those in dialogue. The subject matter or problematic issue must obviously be the same for those taking part. This method guides and supports in the making of judgements and decisions (Dewey, 1984).

Socratic inquiry embodies an approach for living a meaningful life, and the means to achieving a healthy society. He advocated continually improving ones understanding of the social world and our place in it through a dialogic education. Self-understanding for the development of an ethical character motivates and enables ethical acts, benefiting all (Tomlin, 1959). Pursuing an understanding of self, and social and natural phenomena is central to achieving autonomy. Developing autonomy facilitates existing on one's own well-reasoned terms. This, Socrates thought, is achieved by the improvement and extension of thinking through scrutiny and counter argument; the Socratic method. He objected to uncritical acceptance of puzzling actions, contradicting ideas, and claims that contain inconsistencies; to Socrates, the unexamined life is not worth living (Plato, 1969).

It is the profound influence that Socrates had on others that ultimately cost him his own life. Due to his drive for self-knowledge and understanding and his desire for others to achieve this he was perceived as a threat to the social order and was consequently found guilty of corrupting others and not acknowledging the accepted gods. Refusing to cease his inquiring approach ultimately denied him his life (Tomlin, 1959).

However, the Socratic method has survived through the writing of Plato, and down through the centuries to the present, where disciplines such as education (Lipman, 2003; Fisher, 2003) and cognitive behavioural therapy (Edelman, 2002) employ the method of Socratic questioning and inquiry. This method has formed the basis of inductive logic through its search for common elements as a source of establishing profound understanding of human purpose, and was ultimately fundamental in the development of science (Dewey, 1984).

Galileo Galilei (1564-1642)

Centuries later, and also perceived as a threat to the social order and world-view, Galileo Galilei developed and defended his methods and discoveries despite personal risk. Through his work, Galileo unintentionally threatened the official world-view and the dominance of religious doctrine. In a society under the absolute authority of the Roman Catholic Church, his ground-breaking scientific work replaced the geocentric theory of Ptolemy (Weinert, 2009). In *Dialogue Concerning the Two Chief World Systems*, written in 1632, Galileo defended the Copernican theory which held that the earth and other planets revolve around the sun.

He was not content to accept the authority of established ideas if he considered them to be based on weak or dubious reasoning, or if he identified inconsistencies. Nor did he think that claims based purely on abstract thinking ought to be uncritically accepted (Frova & Marenzana,

2006). He argued against theories of astronomy postulated by Aristotle and still salient in the seventeenth century, such action being provocative given the adherence to Aristotle's ideas within religious doctrine.

Profoundly curious about natural phenomena, Galileo was driven to seek answers to problems. Using observation, and supported by mathematics, his claims could be empirically justified. He developed a method of scientific investigation which prioritised observation through the senses, included the making and testing of hypotheses and the gathering of empirical and measurable evidence, and used mathematical reasoning to solve physical problems (Weinert, 2009). So trusting of the capacity of mathematics to underpin much of his work, it became central to his inquiries; he thought that natural phenomena and the universe ought to be understood through mathematics (Tomlin, 1959).

Wanting to enlighten and so improve the lives of others through new understanding, he made public his thinking and findings. However, his claims met with hostile reaction from the Catholic Church, contradicting its position and teachings. Within the context of religious dogmatism, Galileo's claims were not tolerated. The Church perceived Galileo's claims as a challenge to its authority. Disputing established church doctrine, he also suggests that the Bible ought not to be taken literally but rather as metaphor (Frova & Marenzana, 2006).

Despite the observable evidence that he offered by simply looking through his telescope, he was coerced into renouncing his findings. Acceptance of his findings took time, and his method of inquiry has prevailed in scientific study (Weinert, 2009). Galileo's work ultimately altered the perception of our place in the universe.

Mary Wollstonecraft (1759-1797)

One hundred years after Galileo, Mary Wollstonecraft risked her own position in society by challenging the very social order and world-view that determined it. Sensitised by the ideals of the Enlightenment, Wollstonecraft championed an agenda for social and political change that favoured all citizens (Tomaselli, 1995). The Enlightenment ideals included; a secular society, which valued reason above unexamined religious tradition; freedom of thought; increased individualism in order to autonomously shape one's identity and life; and social improvements for the oppressed. In the last two decades of the eighteenth century, two revolutions attempted a societal transformation through the establishment of these Enlightenment principles; the American against the English; and the French against its aristocracy (Spencer & Krauze, 2006).

Mary Wollstonecraft's significant contribution was to include women in this project of radical societal change. Unconventional and daring to challenge oppressive treatment of women, Wollstonecraft advanced a system of thought that sought to explain the underlying power structures of society that supported this oppression. She argued for the inclusion of women in a transformed society, in which they would possess equal recognition as reasoning human beings and full citizens (Wollstonecraft, 1975). Wollstonecraft was, as were all women, denied citizenship and rights equal to those of men. Women were expected to live by a social code, which subjugated and marginalised them; political and social structures were barriers, preventing full participation in a male dominated society. Political mechanisms such as property rights served to disadvantage women, and to exclude them from participating autonomously in economic, cultural and political life. Social institutions, such as education and marriage, regulated the lives of women by defining their role and personal qualities. Qualities such as passivity, dependence, and weakness favoured patriarchal dominance thus supporting the expectation that women obey men and act in

a way pleasing to them (Wardle, 1951, cited in Poston, 1975). Under patriarchal control a woman's intellectual, social and emotional dimensions were suppressed.

In her book, *A Vindication of the Rights of Woman* published in 1792 (cited in Poston, 1975), she argued that women are just as capable as men to think in reasoned way about matters in the social and political domain. She argues that both men and women equally ought to be treated as rational human beings. She challenges the accepted notions of femininity, claiming that they are socially constructed, not biologically determined (Wollstonecraft, 1792, cited in Poston, 1975). Generally accepted as the natural social order, these social expectations were in absolute conflict with Wollstonecraft's argument and agenda for change. She challenged and attacked the social structure, judging it unjust, and that neither men nor women had the right to dominate over the other, each being of equal status as fellow human beings. Her position was controversial, and potentially threatening to the existing social relationships and prevailing balance of power (*Ibid.*). Nevertheless, she was committed to change and provided an alternative model through education.

The underlying cause of society's oppressive treatment of women, she argues, is an unsatisfactory education system, being one that focuses on the inculcation of a mistaken social code for males and females. It lacked a curriculum which valued male and female students learning together through an equal and comprehensive curriculum. Wollstonecraft argued that women present as inferior to men due to a substandard education, not because they are naturally so. She challenged the social order by including a focus on the development of natural and reasoning capabilities in women (Rauschenbusch-Clough, 1898, cited in Poston, 1975). Championing the education of women, she argued that when well-educated they potentially benefitted not only themselves and the family unit but also wider society. However, the success of this project demanded that women realise and acknowledge that they possess the capacity to think independently, clearly

and logically so as to attain their rightful place in society as full citizens. Women needed to be active agents of change (Wollstonecraft, 1792, cited in Poston, 1975).

Her work contributed a socio-political framework, to early feminism and continues to be relevant as women strive to live in a way that fulfils their role as full and active citizens (Tomaselli, 1995). While there have been many gains for women since the time of Wollstonecraft's work, her work has significant relevance in contexts where the recognition of women's rights continues to be ignored or threatened.

Claude Monet (1840-1926)

In the wake of the French revolution, painter Claude Monet encountered an art establishment in France. It adhered to a staid painting technique and method, and an inflexible approach to genre. Furthermore, public appreciation was conventional and constrained by the influential art establishment.

He re-thought the aesthetic qualities of visual art, rejecting the traditional approaches to colour usage and brush technique of academic painting in studios. Historical subjects were superior to that of landscape and still life. Instead he worked away from the confines of the studio, painting in the natural environment. Aided by new technology, such as paint in tubes, he experimented with colour, brushstrokes, and subject matter. Additionally, the scientific developments of M.E. Chevreul (1987), whose principles of colour usage and optical effects Monet utilized in achieving an individualistic style and played an important role in his creative imagination. Rejecting academic dogmatism in favour of innovation, he became a key exponent of the Impressionist art movement in France from the 1870s.

Monet was an active participant in a community of thinkers in art who addressed problematic aesthetic matters. Shared aims and principles of the group focused on the use of colour and innovative brushstrokes to represent action and life (Huyghe, 1974). In particular, the group of artists deliberated over the representation of the subject of the painting as it altered in light and colour by changing atmospheric conditions. Through investigation, experimentation, sustained observation and analysis, Monet sought to resolve specific artistic challenges, attempting to master the painting of water, steam, fog, rain, and such like. His work with paint on canvas was a radical departure from both the aesthetic doctrine and dictates of public appreciation. However, Monet and his fellow artists were collectively motivated and committed to their inventive style and overarching challenge to aesthetic thought.

Monet aimed to capture moments that reflected depth and beauty as the eye sees it, rather than what was expected to have been seen as the brain interprets it on looking at the subject (*Ibid.*, 1974). In painting the play of light on colours and the continual changes that this effects over time, he relied on his visual perception. He observed, studied, and achieved the effects of the variations of light on his subject matter at different times of the day or year. The dominant characteristic of his work is not the form of the subject matter itself but rather the light, colours, and brushstrokes (*Ibid.*, 1974). This is evident in his painting *Impression, sunrise*, 1872 and in his series work, for example *Rouen Cathedral*, 1892-1894. Monet's work became increasingly abstract as visual judgements were made, extending the limits of his creative endeavours. Ultimately the impression that it created overwhelmed the subject of the painting. A portrayal of the subject through accurate detail was of less importance.

Monet's willingness to experiment and innovate produced non-conformist and unconventional visual art, laying the foundation for others to experiment and create different aesthetic approaches and techniques within a widened

genre framework. He contributed much to the development and appreciation of modern art through the role that he played in the rejection of outmoded tradition in art, and the establishment of an alternative. As Impressionism emerged out of Classism, modern art emerged out of Impressionism. In a new environment of aesthetic possibility to see, portray, and appreciate visual art and subject matter differently, artists such as Van Gogh, Gauguin, and Picasso further developed new and individual styles (*Ibid.*, 1974).

Critical Thinkers: Qualities to Emulate

While their achievements were extraordinary in their individual ways, it is not expected or necessary that we all achieve ends of such a grand scale. However, they provide models to emulate the intellectual, social and emotional resources that they possessed in achieving them. The significant ideas and discoveries generated from thinking critically ultimately changed the way the world is perceived (Kekes, 1993); they critiqued and challenged traditional thought and power hierarchies, judging them implausible and not substantiated by sound reasons. These critical thinkers demonstrated a commitment to creating a better way forward for all within their focus areas. By exposing the common assumptions and ways of thinking that underpinned social organisation they have broadened and deepened our understanding. As social beings, each one of us possesses the capacity to influence and impact on others through the type of thinking that we engage in and our subsequent actions (Tomlin, 1959).

These thinkers developed their ideas and discoveries within various historical contexts. Through the interaction with and response to their environment they implicitly engaged in critical thinking as they dared to think within the realm of wonder. Driven by curiosity and a strong need to make sense of puzzling and problematic matters, they dared to question when others did not, which challenged unexamined thinking of the time. They fully and confidently engaged the intellect and imagination, displaying

mental toughness in a hostile environment and subsequent pressure to conform. They were at the limits of human thinking, achieving a highly complex and advanced level while theorizing about how they ought to interact with the world or how it ought to be understood (*Ibid.*, 1959). The extent to which the intellectual and social limits were expanded, particularly for subsequent generations, is illustrated through their work and the legacy of change that this instituted (*Ibid.*, 1959).

They proceeded through a process of inquiry, as does the Philosophy for Children programme discussed in chapters five and six of this thesis. They recognized a puzzling issue, ruminated over it, and possessed the will to act upon it, committing to substantial intellectual labour. Their work challenged the authority of the social, cultural and political order or academic community and against the odds, and with personal risk they persevered and changed the way we understand. Their commitment to understanding of the world more fully ensured that their work continued. They possessed social, emotional, and intellectual courage in resolving problems, possessing and supported by self-efficacy. They may not have set out to change the world, but they engaged in a level of thinking which led to significant inquiry and the generation of ideas, discoveries, and solutions that ultimately *did* change certain aspects of it.

Within communities of thinkers they shared common concerns and together questioned and challenged assumptions and conceptual understanding, observing and imagining, and considering how things ought to be and could be. Their work signalled the development of traditions of thought which are cogent and relevant today and which are influential and important in achieving a society based on democratic principles of justice, respect and freedom. The traditions of thought that they have helped to produce have clearly informed the Philosophy for Children programme.

If children are to learn how to think critically, and emulate as best they can the intellectual, social and emotional dispositions of Socrates, Galileo, Wollstonecraft and Monet, then teachers need to be very clear, conceptually, about what it is to think critically. Conceptual understanding will support children acquiring these qualities and is explained in the next chapter.

Chapter Four:

What is it to a Critical Thinker and to Think Critically?

The four critical thinkers discussed in the previous chapter - Socrates, Galileo, Wollstonecraft, and Monet - each had the capacity and conviction to think critically about diverse issues, to advance alternatives and to take action. While their achievements and historical contexts are distinct, the process of inquiry that they embarked upon connects them all. Possessing an acute awareness of ideas coming into conflict, they were concerned about the impact that traditional thinking had on the ability of people to achieve an autonomous life, whether the focus be through ethics, art, science and the like. Alternatives were constructed through the analysis and evaluation of the problems that they perceived and observed; they thought that ultimately better conditions could be achieved. Collectively they set the standard for others to follow.

Accordingly, getting clear about what a critical thinker is and what it is to think critically is vital if teachers are to educate successfully for it. Within the field of critical thinking, conceptualising it has been the subject of debate since at least the 1980s. Philosophers of education have defined the terms 'critical thinking' and 'critical thinker', as the following discussion shows. However, defining them has been problematic, and no consensus has so far been reached among them. This chapter provides a sketch of their various positions. Drawing on this work, the thesis then presents a reconceptualisation of what it is to be a critical thinker and to think critically. Additionally, its importance to children's education for democracy is discussed.

Conceptualising Critical Thinking: A Focus on Skills

Conceptualising what it is to think critically is not a straightforward matter. Gaining the fullest understanding possible and appreciating its importance to both becoming an educated person and to the ultimate wellbeing of society are vital if children are to be served well. The concept is complex, and theorists have advanced a variety of theories. As yet those working in this field have reached no agreed definition, and so debate continues (for example between Ennis 1987; Siegel, 1990; McPeck, 1981; Paul, 1990).

The disciplines of behavioural psychology, education and philosophy have been active in the theorising of critical thinking: psychology, and its descriptive methodology and focus on observable behaviours; education, with its emphasis on thinking skills; and philosophy, which has sought to understand critical thinking through the analysis of arguments. They have each contributed, at both the theoretical and practical level, to better understand what it is to think critically with some theorists also developing particular teaching and learning programmes. While these disciplines agree upon the importance of educating children to be critical thinkers, their diverse perspectives and motivations, have led to different emphases on pedagogy.

Critical thinking is a mode of thinking that entails more than: criticising and drawing attention to defects, criticising work that does not conform to or that deviates from prescribed standards, or advancing oppositional positions without clear justification (Bailin, 2003). The definitions of critical thinking proposed in the following section are discussed in relation to the educational aim of educating children to be autonomous beings within a democratic society. By placing different emphases on this complex mode of thinking, a range of conceptualisations has emerged. The theories of the most influential are presented here. Ennis (1987), Siegel (1990), McPeck (1981), and Paul

(1990) are considered first, followed by Matthew Lipman (1991), Sharon Bailin (2003), and Barbara Thayer-Bacon (2000).

Ennis, Siegel, Paul, McPeck have been influential philosophers of education in the field of critical thinking. Each in their own way has made a significant contribution since the 1970s to this contentious and unsettled field, offering an understanding of the nature of critical thinking. They have constructed their theories upon the work of previous theorists, particularly John Dewey, extending and enriching our understanding of critical thinking. Each emphasises the judgement of thinking against particular criteria that ultimately can describe such thinking as principled thinking. However, despite some similarities in their theories, they also differ in distinct ways.

Ennis (1987) defines critical thinking as reasonable and reflective thinking that is focused on deciding what to believe and do. He emphasises skills as the basis of critical thinking which can be learned in isolation and transferred to different fields of study. A disposition to think critically has more latterly been included in his definition (1996). Underlying his general definition are three dimensions: a logical dimension, which involves the judgement of the meanings embedded in words and sentences; a dimension which involves a knowledge of criteria to be utilised in making judgements; and a pragmatic dimension, which examines the purpose and content of the judgement. For Ennis the process of critical thinking is deductive whereby skill in assessing reasons functions within particular fields of study.

Like Ennis, Paul (1990) emphasises a skills approach to improve the processes of thinking critically - the ability and disposition of the thinker to critically evaluate beliefs, their underlying assumptions, along with the world-views in which they are embedded. Paul conceptualizes critical thinking in a weak sense, in which the thinker is self-centred. In contrast, he conceptualises a strong sense of critical thinking, which involves the thinker including other dimensions, such as the consideration of other beings and the

environment. He argues that the aim of thinking critically is to extend thinking into the realm external to one's self.

Siegel (1990) positions himself in opposition to that of Paul's position, concerned that a relativistic approach underlies a weak- and strong-sense conception of critical thinking, cautioning against open-mindedness leading to tolerance without sufficient reason. Siegel instead conceptualises the critical thinker as someone possessing a critical attitude, characterising such a person as one who is "appropriately moved by reasons" (p.23). He emphasises the specific nature of critical thinking in that the thinker understands why assumptions need to be examined. This is vital in their judgement of good reasons. Judgements that are based on good reasoning, he claims, determine what they believe and claim, and how they act.

Unlike Ennis and Paul, McPeck (1981) holds that critical thinking can only occur within specific subject domains and their associated content because "thinking is always about something. To think about nothing is an impossibility" (p.3). A substantial understanding of a subject's content and how it is structured is required for critical thinking to be employed. He minimises the need for a critical spirit and the associated necessary dispositions. This theory is more limiting than those of Ennis, Paul and Siegel, although Ennis acknowledges that a level of understanding within a field of study is required before critical thinking skills and dispositions can apply. His account relates more to argumentation within a given discipline; for McPeck, the process of critical thinking is inductive.

That the debate has been, and is still, inconclusive highlights the complexity of 'thinking critically' as a concept. The various conceptions each possess valid points, and common aspects, assisting a profound understanding. Each stresses acquiring skills to enable thinking critically. A questioning and reflective approach in the process of assessing reasons is strongly emphasised by Ennis and Paul. The 'reason assessment component', which

stresses the development of skill in assessing reasons is emphasized by Siegel. Each emphasizes the importance of the disposition to think critically by engaging with the necessary skills: Ennis expresses this as a tendency, Paul as being intrinsic to the thinker, Siegel as possessing a 'critical spirit', and McPeck as having the propensity to think critically. They all agree that educating to think critically is a fundamental educational aim (Siegel, 1988).

Lipman (2003) argues for a broader conception than Ennis, McPeck, Paul and Ennis who focus on the outcome of critical thinking. For him it is a process of thinking that produces a product, such as a solution to a problem, a decision from choices and meaning from interpretation as a result of making judgements. He defines critical thinking as "thinking that facilitates judgement because it relies on criteria, is self correcting, and sensitive to context" (p.212). The criteria that Lipman refers to are reasons which through inquiry with others can be exposed as unsound and self-corrected. He argues that as contexts change critical thinking recognises the need to be sensitive to different parameters.

Thayer-Bacon's (2000) position and emphasis differs. She argues for the transformation of critical thinking in which its process and the thinker are emphasised, along with its product. She advances a new conceptualization of critical thinking, transforming it into constructive thinking which expands critical thinking to include intuition, imagination and emotions. Thayer-Bacon acknowledges the structural divisions which exclude many groups from communities. She argues that emotions such as empathy and compassion are necessary components within pluralistic and democratic communities, and important in her transformation of critical thinking. They give strength and purpose in constructing judgements and their justification action against marginalisation.

Bailin, Case, Coombs and Daniels (1999) conceptualise critical thinking in terms of intellectual components. These include having knowledge of

standards of critical thinking, of strategies to use, background knowledge, and the possession of thinking habits and critical concepts. They argue that quality of thought distinguishes critical thinking from uncritical thinking. Critical thinking requires the ability to assess the relevance of the reasons as good evidence for making judgements, holding beliefs, or taking action, thus accomplishing something as an indicator of their thinking process. Bailin (1988) argues that critical thinking and creative thinking are closely linked and reliant on each other when generating counter examples, constructing an argument and identifying assumptions. Bailin et al. (1999) argue, as does Lipman, that educating for critical thinking ought not be done so as isolated skills but as initiation into practices that are complex.

Critical Thinking: A Reconceptualisation

This thesis argues for a broad conceptualisation of what it is to think critically. Through our interaction with, and reaction to, the social and natural environment problematic matters and puzzling issues arise. These activate us to think critically. Aiming to more fully understand and make sense of these requires that we think beyond the superficial. Thinking critically probes under the surface, investigating the layers of commonly accepted practices and ideas. It challenges common assumptions including those about traditions and customs, exposing narrow, unjustifiable and biased thinking. Thinking critically involves thinking tasks such as finding and solving problems; making judgements, decisions and choices, while analysing, evaluating and assessing; exploring, inquiring and examining; comparing and contrasting information for relevance; and reasoning logically in relation to these thinking tasks.

Thinking critically is not inflexible thinking. It is open to rethinking one's position and self-correcting when reason or new evidence requires. Probing and searching questions are fundamental to thinking critically as they direct the process of understanding and coming to know. Thinking is profoundly

and dynamically involved in the domain of daily life, driving how we interact with and react to others and events. We are empowered by thinking critically in order to understand what ought to happen as a way forward. Thinking critically, and the wisdom that develops through it, is evident in the considered choices that we make. By thinking critically the social, emotional and intellectual dimensions of our lives are connected and strengthened (Alston, 2001).

Like Thayer-Bacon (2000), this study positions thinking critically and critical thinkers as inseparable and that conceptualising one entails that the other is at the same time conceptualised as an integral part. So what is it to be a critical thinker who thinks in this way?

Conceptualising Critical Thinkers

As collaborative: critical thinkers challenge others to think critically, in pursuit of deeper understanding. They demand justification for opinions. Within a community of inquiry they explore and inquire through a dialogic process in much the same way as Socrates. They develop and appreciation for the differing positions and ideas of others through dialogue with them. Being open-minded, flexible and reflective enables them to be confident in self-correcting their thoughts when reasons or evidence demand. Such dialogue can be written, spoken, or visual in form, or it can be internal dialogue, as they reflect on their own thinking. They engage with others to further develop ideas, appreciating that information and understanding can change as contexts change (Alston, 2001). They seek educative experiences and opportunities that enable both autonomous and interdependent thought (Adams, Clark, Codd, O'Neill, Openshaw & Waitere-Ang, 2000). Critical thinkers formulate and offer justification for their position. They evaluate their thoughts in a social context, where the positions and reasoning of others are valued through group dialogue (Lipman, 2003).

As motivated: critical thinkers strive to improve their thinking, knowing that it can shape and influence the quality of their lives and are reflective of their own thinking about issues and experiences. Critical thinkers are committed to learning actively seeking out learning opportunities to extend and expand understanding in more profound and dynamic ways. They view this as fundamental to their development. They explore and link information and understanding for an holistic result. Such understanding supports or adjusts the way they interpret their experiences, and their engagement in discussion for further development of their ideas. They understand that information and levels of understanding are provisional and dependent on context for meaning (Alston, 2001). They formulate and offer their opinions, in pursuit of meaning. They accept and welcome the scrutiny of their ideas and opinions by others as a way of enriching their interaction with the environment (Oliver, 2000).

As empathetic: critical thinkers are aware of the varieties of human problems, human understanding, communication and interaction (Alston, 2001). They see the obstacles in accomplishing meaning, but in being able to work through the struggles of coping with identity, social roles, social representation, and ideology, which underlie daily experiences from childhood onwards. They can understand that the very human limitations posed by expectation, explanation, and pressures at times subvert their best accountings of thinking processes and effects. They are able to envision ways of making meaningful connections between thought, activity, expression, and relationship, enabling them to make sense, overtime, of their own participation in the world. They recognise that free, active, and connective participation in the activities of critical thinkers will enrich their capacity to understand their experiences.

As curious: critical thinkers puzzle over and inquire into perplexing, ambiguous and problematic matters. They are alert to and curious about their place and that of others, in the world, possessing a critical spirit (Siegel,

1990), striving to make sense through perseverance and interaction with others. They have an acute awareness of their own values and view of the world. They possess a sense of natural wonder and curiosity, and are independent in her thinking. Critical thinkers analyse and synthesise the information at hand to accomplish thinking tasks such as answering a complex question, solving a problem, making decisions, resolving issues, devising plans and uncovering assumptions (Bailin, Case, Coombs & Daniels, 1999).

As inquirers: critical thinkers possess an inquiring approach, as those discussed in chapter three demonstrated. They ask deep and probing questions to uncover and examine assumptions, to seek clarity of the available information, to pursue connections and to search for consistency with the information and understanding that they possess. Matters arise in a variety of every day situations, and do not always elicit easy resolution or conclusion. Critical thinkers possess an inquiring approach and ask probing questions, accepting that solutions evolve rather than expecting definitive answers in all circumstances. They accept the possibility of multiple solutions, thinking that one will ultimately be wisest or adequate. Critical thinkers foster clear communication within a community to inquire, discuss and debate support further learning. By thinking critically they are able to connect the social, emotional and intellectual dimensions of their life, ultimately impacting directly on their actions. They are active listeners within communities of thinkers (Alston, 2001). They possess an open-minded approach, revising ideas when evidence supports a change in position, and value participating in discussion with others during this process (Clark, 2004). They strive to support their reasons logically, and evaluate the ideas and arguments of others on this basis. They are alert to and recognise faulty reasoning in others. They are committed to precise and systematic thinking.

As autonomous: critical thinkers have the capacity and will to choose, set life goals and follow the own conception of a life that they deem appropriate for them selves while taking into account the collective lives of their community. They are able to utilise what they learn and understand so as to support living an authentic and autonomous life, both as an individual and as a member of a pluralistic society. With many possibilities available for living such a life within a democracy, critical thinkers are open to choices and cognisant of limitations, and reason so as to judge the best way of achieving their life goals; to achieve autonomy and freedom of thought.

A Frame of Reference for Critical Thinkers

Critical thinkers are not told what to think; they prefer to do their own thinking. This thesis argues that in being autonomous they think critically in terms of intellectual, social and emotional guidelines. Within a frame of reference reasons can be scrutinised as sound or not, ensuring that the integrity of thinking critically is maintained. In this way reasons are substantiated which then inform and justify the judgements that critical thinkers make. Consequently, their judgements impact on, define and determine the subsequent thinking tasks and inform which actions are to be taken. The actions that follow may involve further consideration of the matter at hand or not, defending a claim or theory, acting in a more practical way, solving a problem or suchlike. Making judgements in terms of a frame of reference informs the way critical thinkers choose to achieve their goals. A frame of reference includes the following:

Critical Thinking, Creative Thinking and Reflective Thinking: are each synthesised by a critical thinker. This is not necessarily a conscious move however on behalf of the thinker, but rather one that occurs as a complex brain function in response to a triggering stimulus. These modes of thinking are interdependent, each acting on the other when carrying out thinking tasks, such as problem solving, issue analysis and decision making. In a sense,

of thinking, a critical thinker is a self-critic, making it possible to know which aspects of thinking in certain contexts need to be altered, improved or enhanced.

Critical thinking enables and enriches creative thinking, and cannot be separated out from it (Bailin, 1988; Lipman, 2003; Thayer-Bacon, 2000). Both are generative and require scrutiny as part of the process of selecting the best. They are reflective in their thinking and have sharp awareness of their own opinions, understanding and ideas. Through creative thinking they propose innovative ideas and retain mental vitality, both of which assist in adapting to an ever-changing demands of society (Alston, 2001). Thus, thinking that is both reflective and creative supports critical thinking. Reflective thinking causes critical thinking to react.

Through inquiry a critical thinker makes judgements, drawing also on creative and reflective thinking in the process. Creative thinking generates ideas (Alston, 2001) and reflective thinking evaluates the relevance and adequacy of the thinking being carried out. Critical thinkers develop wisdom for guiding social, emotional and intellectual dimensions of the individual and community (Kekes, 1993). This wisdom evolves over time through reflection and deliberation of learning experiences. Critical thinkers display an aptitude for being resourceful (Clark, 2004).

Conviction: critical thinkers conclude that one solution is better than all others for any given problem, while one position is wiser and more insightful than all competing positions for every issue (Ruggiero, 2003). Critical thinkers examine and analyse possibilities in order to identify the most worthy solution or wisest position. The aim is to determine the best and wisest among many, and to justify the choice with evidence or reasoning. Critical thinkers form convictions, understanding that these are subject to scrutiny and can be corrected if or when new evidence or reasons demand (Quine & Ullian, 1978; Ruggiero, 2003). If critical thinkers are not committed

to a position after due consideration, then potentially, relativism has usurped critical thought (*Ibid.,* 2003). A relativistic approach is not characteristic of critical thinkers. The process of analysis and evaluation, and of challenging their own and others' positions determines that not all positions are deemed acceptable.

Consistency: critical thinkers seek consistency knowing that an idea, theory, or statement cannot be both true and untrue at the same time and in the same manner. Once identified, critical thinkers correct such contradictions, basing their judgements on reasoning or empirical evidence. Good reasoning does not lead to contradictions, thus convictions can be formed with due consideration, without conflicting judgements (Lipman, 2003; Quine & Ullian, 1978).

Democracy: critical thinkers exercise substantive and focused thinking, which has continual impact both on their personal life, the lives of those around them, and successful participation in a democratic society. Critical thinkers value and are guided by concepts of democracy such as fairness, respect for self, other persons, and the environment, and freedom (Mill, 2002). They serve to direct critical thinkers in both thinking and acting. Critical thinkers engage in a fair-minded manner so as to serve the interests not just of themselves, but also those relevant to others (Paul, 2003). Critical thinkers demonstrate respect for human dignity, opting for persuasion rather than coercion: exerting power over others is not the aim of such thinkers. Caution and reflection prevent a sophistic approach does not coerce others by clever articulation of one's position, and rhetoric does not replace action, as already mentioned in Chapter 1 of this thesis. The qualities that characterise critical thinkers ultimately enhance the functioning of a democratic society (Adams, Clark, Codd, O'Neill, Openshaw & Waitere-Ang, 2000).

Guided by democratic principles and cognisant of the rights and responsibilities that living with others entail, they possess a propensity for being innovative in particular areas. A critical thinker displays self-regulating behaviour, taking responsibility for their actions and showing care and respect for others. They are alert to the influence and impact of other's ideas and actions as they examine and judge the social, political and economic ideals that exist in society (Adams et al., 2000). They take responsibility for their actions and show care and respect for others.

Importance of Thinking Critically

Thinking critically is of value at both a personal and societal level. Thinking critically underpins our autonomy, enabling us to be self-determining and self-governing within a myriad of contexts constituting a pluralistic and democratic society, such as deciding on relationships, recreational activities and which party to elect for government, how to interpret advertising, media reports and public policy, and what affect do these have on the collective as well as on the individual. Thinking critically facilitates an autonomous intellectual, social and emotional life.

Educating children to be critical thinkers is congruent with the aims of a genuine education, as induction into their society and which conceptualises children as an end in themselves. Such an education prioritises the intrinsic worth of intellectual, social, and emotional development (Lipman, 2003). The development of these dimensions enables children to progress towards their potential, who have the capacity and will to choose to act in ways that lead to meaningful and fulfilled lives. It also enables children to access our traditional disciplines such as mathematics, the arts, science and literature in the pursuit of becoming an educated person. Critical thinking is vital if personal autonomy is to be achieved and preconceived roles are not assumed to be correct without examination.

Thinking critically is a necessary component in living an autonomous life based on justice, freedom, and equal respect, at both an individual and collective level. Within a democratic society, these principles in turn underpin the laws that entitle its members, including children, to certain rights. In satisfying these entitlements, reciprocated responsibilities and duties are necessary. Critical thinking is vital when choices involving right and wrong, good and bad, are to be enacted. Making sense of, and responding to, societal pressures, requires thinking critically through reflective processes that enable learning from experiences.

Consequences need to be considered, duties and obligations closely examined or principles considered in determining a course of action, and in determining which take precedence if any becomes more important in particular contexts. Finding a single way of balancing all considerations, a simple method of dealing with complex issues is not possible. A critical thinker possesses the will to think critically and act on it; they have a 'critical spirit' (Siegel, 1988).

Thinking critically, and the will to act upon it, is linked to the development of human autonomy and freedom. Thinking critically supports the practice of living a productive life in a pluralistic society based on democratic principles. In such a society the social order ought to be subject to debate; philosophical questions challenge aspects that are contrary to those democratic ideals that uphold human dignity, such as justice, freedom, and the right to participate (Bernstein, 1991; Mill, 2002). Pursuing philosophy has both individual and collective value because of the consequences of doing so (Gregory, 2002).

Not all puzzling choices and actions can or ought to be governed by rules that simply need to be followed. Proceeding toward solutions can include inventive and innovative ideas. Being a critical thinker is important in living an autonomous life; skill in critical thinking suggests that such a life can be

lived; and therefore educating for critical thinking is fundamental in achieving it.

Some problems or issues draw contradictory responses from various sources; deciding which justifies believing, if any, requires inquiring into it for reasonableness and deciding if it is supported by relevant evidence. Such an inquiry demands both the acknowledgement of context and use of the principles, which underlie thinking critically as no uniformity of kind and degree exists within the problematic. Such criteria are self-chosen, and selected on the basis of observation, experience and theories of how the world is.

In life we can be much like dodgem cars on a racing course, whose way forward is interrupted and hindered by a bump with another. If we passively accept this as inevitable and do not consider how it can be improved or always wait for another to tell us what to do, more of the same is the likely outcome. With the bumps of life we want children to reflect on what has happened, to analyse, evaluate, and make a judgement about how best to proceed so as to find a way forward with more understanding and insight.

As children strive to make sense of the world around them they need to be supported and educated to think for themselves about matters and issues of concern. This provides a basis from which to reasoned judgements that will help to determine how they live their lives through the choices and decisions that they make. It will enable and empower them to be active agents in reacting to the demands and changes that they encounter. It is an important responsibility of educators to nurture intellectual, social and emotional development.

Philosophising has the potential of adding to the wellbeing of a pluralistic democratic society. Philosophy appeals to principles that guide what ought to be in relation to human thinking and resultant behaviour. The social world is

not absolutely predictable for absolute certainty is not attainable. There is no one set of rules that dictate every course of action for all participants in a pluralistic liberal society, although there are some accepted values that guide actions and behaviour; taking a stand and presenting a justifiable position is imperative if stereotypical thoughts, prejudices, and assumptions are to be obstructed and challenged. To not do so is contrary to the principles of democracy, for if the content of one's thoughts are always to be dictated by the thoughts and actions of others, democratic participation succumbs to a social order characterised by limitations on liberty due in part to complacency and passive acceptance on the part of its citizens; a social order where citizens are subject to the power and authority of others who may possess ethical motives and serve in the best interests of others. Or they may have dubious motives.

Educating Children to be Critical Thinkers

A critical thinker does not become so automatically on reaching adulthood (Passmore, 1970; Siegel, 1990). The capacity of both children and adults to be critical thinkers is enhanced through thoughtful modelling, support, and guidance from other critical thinkers. One learns to be a critical thinker in the company of other critical thinkers. This is not to suggest that the contexts or concerns that require thinking critically are the same for children as for adults however: experiences, age, and developmental stages are influencing points of difference, as is an understanding of the world and world-view. However, if children are educated to be critical thinkers from an early age, and with all things being equal, they will be well placed to achieving autonomy.

It is unlikely that children can be specifically taught to think, for as Splitter and Sharp (1995) state "as conscious beings, whether awake or asleep, they are thinking all the time" (p.7). However, thinking can be improved,

enhanced and enriched through programmes such as Philosophy for Children. Thinking can be highly complex and engaged in intellectual tasks, such as when something is analysed or evaluated, or it can be low-level thinking, when inconsistent, vague, or illogical.

As critical thinkers children are better equipped to begin to direct their lives and proceed so as the thoughts and actions of others do not continually hold them intellectually, socially, or emotionally captive. It is less likely that assumptions and ambiguities go unrecognised or unchallenged, impeding such a life. Rather, children are empowered to develop as autonomous persons who are: cognisant and respectful of others and the social and natural environment, have the desire and capacity to evaluate and make reasoned judgements, and act in responsible ways while understanding and respecting the rights and responsibilities that this entails as a citizen of a democratic community (Alston, 2001).

A intellectually and emotionally safe environment that promotes and encourages thinking critically is required, and needs to be expertly guided through a variety of tasks that involve thinking, such as inferring, analysing, comparing and classifying. Although educating children to be critical thinkers through the school curriculum is a recent aim, educating children to be critical thinkers fulfils a fundamental aim of education for life. The Philosophy for Children programme locates children at the centre of its educational endeavour presenting the best embodiment of critical thinking (Lipman, 2003). Designed and developed so that the social setting and collaboration with others is central supports democratic teaching and learning processes, and it fulfils the principles and vision of *The New Zealand Curriculum* (Ministry of Education, 2007) including citizenship and community aims.

Participating in philosophy within a community of inquiry enables the development of ability in modes of thinking, such as the critical, creative,

caring, and reflective. Indeed, critical thinking is central to its practice. The following chapter argues that the Philosophy for Children programme facilitates thinking critically as conceptualised in this thesis. Children are located at the centre of this educational endeavour. Educating children to become critical thinkers is a child's right, and is the teacher's responsibility to educate for it as a genuine and fundamental aim of education.

CHAPTER FIVE:

Critical Thinking in the Classroom: Philosophy for Children

The previous chapter explored and clarified conceptual issues surrounding what it is to think critically, thus addressing its omission in *The New Zealand Curriculum* (Ministry of Education, 2007) (NZC). In addition, the chapter endorsed the importance of teachers educating children to think critically as an essential part of induction into a democratic society and as a child's educational right in terms of intellectual freedom. Fundamental to achieving this aspirational aim in the school setting is operationalising it through the most appropriate and effective approach. In light of its conceptualisation, the process of thinking critically cannot be reduced to a set of discreet skills or thinking rules. Thinking critically about problematic issues or puzzling matters within diverse contexts proceeds through complex activities, such as analysing, evaluating, or reasoning.

How to systematically introduce children to thinking critically is a matter which educators must address. One such programme is Philosophy for Children (P4C). This chapter explores some of the key ideas of P4C. The programme presents the best embodiment of critical thinking, because its pedagogy prioritises intellectual, social and emotional development (Lipman, 2003). It emphasises freedom of thought, community of inquiry, and expression, and places considerable weight on the principles of democracy, as mentioned in chapter four. P4C situates children at the centre of the educative process. The teacher is both *in* authority and *an* authority, having responsibility for guiding and supporting the intellectual, social and emotional development and safety within the classroom, as well as possessing sound understanding of the subject matter. P4C educates children to be critical thinkers, through philosophical inquiry within a thinking and

democratic community, presupposing that children are capable of doing philosophy. The idea that children can philosophise has its supporters and detractors. Hence, the suitability of philosophy as a means for educating children to be critical thinkers is examined by considering the conflicting positions expressed by Murris and others. In short, can children do philosophy? Although P4C caters for the primary and secondary sectors, the primary sector is the focus of this thesis.

The Philosophy for Children Programme: Its Origin, Resources and Application

P4C emerged from the concerns of American Professor of Philosophy, Matthew Lipman. Like John Dewey and Lev Vygotsky, he thought that learning required more than memorising, or guessing what the teacher wants to hear. He emphasised educating children for reasonable thinking. In the late 1960s he became concerned that children's interest and curiosity were not being retained throughout their school years, that education was not serving them well, and that the ability to reason and make sound judgements was weak. He thought this to be problematic if they were to exercise their rights and fulfil their responsibilities as democratic citizens. This was particularly relevant to the civil rights struggle of the time. If they were to draw distinctions and judge right from wrong, good from bad, truth from falsity, then they needed to engage in sound reasoning. He theorised that educating children to be skilful thinkers who were committed to making sound judgements would ultimately improve the intellectual, emotional and social fabric of a democratic society. In other words, an education for thinking critically was warranted (Lipman, 2003).

Lipman (1993) concluded that his concerns could be addressed through philosophy and children's literature. If children's curiosity could flourish through philosophical stories, which required them to think in complex ways

about issues that were important to them, their interest would more likely be retained and their thinking be improved. Consequently, in 1969, Lipman published *Harry Stottelmeier's Discovery,* which introduced a range of philosophical problems to children aged ten to twelve years. Trialling the novel with success, he realised that positive effect would be left to chance once it became a book among many on a library shelf. Determining that a broader approach was required led to the establishment of the Institute for the Advancement of Philosophy for Children (IAPC) with Dr Ann Margaret Sharp whose interests were in philosophy of education. Through their mutual interests and commitment to "genuine" education, P4C developed beyond this first novel. Their collaboration has continued for more than thirty years, producing the P4C resources, teaching programmes, a professional journal, and conferences. Others have also collaborated with them over time, and IAPC remains active in educating children through philosophy. In New Zealand this is promoted by the Philosophy for Children Association of New Zealand (P4CNZ) (http://www.p4c.org.nz/).

P4C consists of two resources designed for children from Years 1 to 13: seven children's novels, each with an accompanying teacher's manual. The novels and manuals follow a logical sequence, dealing with philosophical problems, which lead to the increasingly advanced philosophical treatment of issues. A foundation is set in each novel on which philosophical ideas and problems are built in subsequent novels. The novels invite children to actively engage in philosophy. They do not teach the history or the academic terms of philosophy, although the novel used with senior students introduces all branches of academic philosophy (Lipman, Sharp & Oscanyon, 1980).

The novels are about children who like to explore ideas through discussion about personal encounters and experiences that puzzle them. These discussions mainly take place with other children although adults do feature as skilled facilitators and participants involved in a philosophical inquiry. Thinking is challenged within the group through questioning, often leading to

the modification, or self-correcting, of ideas (Lipman & Splitter, 1992). These discussions model the pedagogy used in P4C, the community of inquiry (CI). The CI follows a Socratic approach of questioning within dialogue to develop skill in reasoning (Lipman, et al., 1980). The concept of CI was first used by Charles Sanders Pierce for use in scientific inquiry; Lipman saw its potential for use in schools.

The novels are written for different ages, covering the primary and secondary sectors of schooling. They introduce a range of philosophical problems for children to explore, including "ill-defined and essentially contested concepts" (Lipman, 2003, p. 156). As a stimulus for the P4C session, a chapter of the novel under study is cooperatively read. Puzzling issues or problematic matters triggered by the story for the children are recorded as questions. To focus discussion, children then check for connecting themes among them, selecting one for further examination. At this point, clarification of the thinking behind the selected question is sought from the child who asked it, forming a baseline from which the inquiry begins, in the dialogic style of Socrates. Here "many intellectual instruments, such as mental acts, reasoning skills, propositional attitudes, initial and follow-up questions, and judgments" (*Ibid.*, p. 156) are employed.

The teacher's role is vital, though complex. As a group member the teacher participates in and follows the line inquiry. As the facilitator, the teacher guides the group into an inquiry, and sensitively manages its unpredictable course, keeping it in line with the initial question. The objective is not to reach concrete conclusions or indeed consensus within the group but rather to move discussion towards increased clarity. Through a process of reflection, previously held ideas are often modified and lead to new or refined understanding. There is no predetermined outcome in a community of inquiry (Lipman, Sharp & Oscanyon, 1980).

Accompanying each novel is an instructional manual for teacher use. These are designed to prepare teachers for each P4C session and to guide the teacher through a philosophical inquiry. They support teachers by providing: the leading philosophical ideas for focus, which are often concealed in each novel; philosophical background for teachers for the development of their own thinking; exercises and activities for use with children that extend thinking and enhance the inquiry process by reinforcing philosophical concepts; and guidance in moving the inquiry from the concrete happenings of the story to the philosophical ideas (Lipman, Sharp & Oscanyon, 1984). The manuals are not inflexibly prescriptive and can be used creatively by teachers to supplement the inquiry process, taking the children's needs and interests into account. They are an essential resource for teachers who have not had formal training in the field of philosophy (Lipman, Sharp & Oscanyon, 1980).

The novels relate to particular year groups. Each builds on the aspects of philosophy written into the previous novel. The language used in the novels is not philosophically technical and the stories are age-appropriate. A strength of the stories is that the issues portrayed are common to those experienced by children in their daily lives and with which they are likely to identify (*Ibid.*, 1980). Each is based on a general philosophical foundation. Each manual includes exercises and discussion plans for enhancing and extending the main ideas of each novel (Lipman, 2003).

Elfie (Lipman, 1988), written for Years 1 and 2, introduces children to inquiry-based learning within the classroom community. It provides opportunities for children to identify, question, and explore complex aspects of their experiences, such as good/bad, real/unreal, and change/certainty. It focuses on language acquisition, such as making comparisons, distinctions, and connections in formulating questions, giving reasons, and telling stories. *Getting Our Thoughts Together* (Lipman & Gazzard, 1988) provides support and guidance for teachers in educating for this.

Kio and Gus (Lipman, 1986), is written for Years 3 and 4. It is designed to stimulate thinking about human's relationship with the natural environment. It focuses on the use of reasoning to support ideas about animals, people, and things in nature, and concepts that support an understanding of these, such as time, growth, and space. Recognising relationships such as part-whole and means-end are also included. *Wondering at the World* (Lipman & Sharp, 1986) is the teacher's manual accompanying this novel.

Pixie (Lipman, 1981) is written for Years 5 and 6. It deals with how language is used to support thinking clearly, including the importance of relationships such as analogical, causal, and logical. It focuses on structures of semantics and syntax such as concept formation, ambiguities, and inference. *Looking for Meaning* (Lipman & Sharp, 1984) provides support and guidance for teachers.

Harry Stottlemeier's Discovery (Lipman & Splitter, 1992), written for Years 6 and 7, models a community of inquiry for children, providing an example of how to proceed in settling puzzling issues. The logic of language highlights the different perspectives each character has and how this supports others in understanding the issue at hand. This novel introduces a range of philosophical problems, relating to logic, ethics, aesthetics, metaphysics, and epistemology. *Philosophical Inquiry* (Lipman, Sharp & Oscanyon, 1984) supports the teacher in the use of this novel. It also includes an overview of what it means to educate children for thinking through philosophy.

Lisa (Lipman, 1985) is written for Years 7 and 8. It explores ethical questions through inquiry between the characters. Different models of skilful ethical reasoning are provided through the characters of the novel. They explore themes such as right and fair, caring, and autonomous thinking. The teacher's manual is *Ethical Inquiry* (Lipman & Sharp, 1985). It introduces the process of ethical inquiry and provides exercises and tasks designed to

enable children to practice skilful thinking about matters of ethical importance through the leading ideas, beginning with how humans are to live.

Suki (Lipman, 1987) is written for Years 9 to 11. It enables children to reflect on their experiences through inquiry into aesthetics. It considers philosophical issues relating to language and meaning in literature and art, such as what makes a work worthy of appreciation. It stimulates thinking, discussion, and writing about nature, life and death, and creativity. Further, it supports overcoming obstacles that can be encountered in writing through the exercises and discussion points of the teacher's manual, *Writing: How and Why* (Lipman & Sharp, 1980).

Mark (Lipman, 1980) is written for Years 12 and 13. It focuses on social and political inquiry, with an emphasis on the American Constitution. Although it aims to expose children to conflicting issues and concepts central to the Social Sciences, this limits its use in New Zealand (http://www.p4c.org.nz/). *Social Inquiry* (Lipman & Sharp, 1980) accompanies this novel.

P4C is now in over thirty countries, including New Zealand (Gerritsen, 2000; Oliver, 2000). P4C in New Zealand is promoted by the Philosophy for Children Association of New Zealand (P4CNZ), an organisation, which, along with similar associations in Australia and Singapore, is part of the overarching Federation of Australasian Philosophy in Schools Association (FAPSA). Teacher education comes under its auspices, and is an affiliate of IAPC. P4C has been translated for use in many countries such as those of Latin America, Austria, and Romania.

Educating children to be critical thinkers through philosophy has stimulated others to use additional resources as a stimulus, such as current events, art works, and children's stories.

P4C and its pedagogical method is a sound means for educating children to be critical thinkers. P4C supports an enriching education through active participation by teachers and children within a community of inquiry. In New Zealand schools it tends to be perceived and treated as a self-contained programme, and is usually used with small groups of students, most often those considered to be gifted and talented. However, its methodology can and ought to be infused throughout all learning areas to engage all children in quality thinking, by enhancing the development of critical thinking in *all* children. The programme teaches children the benefits of doing philosophical thinking by first modelling to them, and then actively engaging them in philosophical thinking (Lipman, Sharp & Oscanyon, 1980).

What is Philosophy?

One of the first questions to ask about P4C is 'what is philosophy?' Translated from Greek, 'philosophy' means, to love wisdom. A mere translation, however, does not sufficiently explain what philosophy is, although a defining statement is not easily arrived at. Philosophy developed out of a sense of wonder at, and a need to explain, the origin of the world and the things within it. Making sense of this, the early philosophers proposed theories, seeking to convince others through argumentation based on reason rather than mythology. Some theorised its origin was to be found in numbers, others explained it through the elements earth, water, fire, and air, while still others theorised that the world was comprised of atoms (Delius, 2000).

Later, social issues and human nature provoked this sense of wonder. Socrates endeavoured to deepen understanding about social phenomena through a process of inquiry, which examined accepted practices and traditions. By questioning others, he sought to uncover assumptions of which people were unaware, and which impeded social cohesion. He also sought clarity of and justification for the reasons that influenced the decisions and

judgements that people made. This method of inquiry has become central to the process of a philosophical inquiry (Tomlin, 1959).

Philosophy was further developed through the thinking systems of others, such as Plato and Aristotle. What now caused a sense of wonder had extended into wider aspects of human interest. Plato utilised Socrates' dialogic form to develop and write about his own systems of thought. Also using the analogy as a logical device, he theorised about such matters as politics, knowledge, and education. Aristotle contributed much to logic, developing the syllogism and classifying on the basis of similarities and distinctions (*Ibid.*, 1959).

Over time philosophy developed as a field of study and included a growing body of literature. Connections and distinctions between the questions that philosophers inquired into and wrote about led to categorising them into what are now considered the main branches of philosophy; logic, epistemology, metaphysics, aesthetics, and ethics. Problems were further categorised into bodies of knowledge, or disciplines such as mathematics, physics, visual art, and sociology. The branches of philosophy are foundational to the disciplines in the seeking of truth or falsity (*Ibid.*, 1959).

At present, philosophy is practiced at both academic and applied levels. An academic level encompasses an esoteric approach, where the systems of thought and theories of others are studied, and are accepted or rejected, or modified and extended. At an applied level, philosophy is less technical (Gregory, 2002; Lipman, 2003), where theorising about common everyday issues occurs, as is the case with P4C. At both levels the philosophical inquiry process remains a response to a sense of wonder at, and a need to explain the world and our place in it (Kekes, 1993).

Philosophy proceeds as sustained and systematic thinking about problematic matters. Critical thinking is pivotal to doing philosophy. In addressing

questions and problems it probes beyond the superficial (Gregory, 2002), revealing and challenging conformist, biased, and habitual ways of thinking. Uncritical and inflexible thinking narrows focus and hinders sound judgement. While creative thinking extends thinking into realms not yet explored. It generates and develops ideas through imagination and innovation, producing various solutions in the process from which the best can be selected. Reflective thinking reviews experiences, ideas, and information in a considered and evaluative way. Pondering on such matters and thinking about the thinking that has occurred in this process facilitates self-correction when reason or new evidence presents itself (*Ibid.*, 2002). Confronting one's thinking in this manner raises further questions, and compels further reflection of the matter at hand (Kekes, 1993).

Philosophy is concerned with questions of ultimate significance, exploring the limits of, while deepening, our understanding (Danto, 1971). Such questions include: Who are we?; Why are we here?; What is it to be a good person, or good society?; How ought we to live?; How do we know things?; and Can we ever be certain about things? As such, they are of common concern (Gregory, 2002). Philosophical questions are about puzzling, powerful, and contestable themes and ideas, such as truth, beauty, knowledge, freedom, rights, equality, and justice (Mill, 2002). Questions are of a conceptual nature, relating to and having practical application in everyday life. Philosophical questions cannot be addressed through observable and measurable devices as science does with the physical world, nor can they be answered through the senses, or in terms of religious faith. Rather, philosophers apply reason in proceeding towards a settled position. Philosophical questions have been, and are considered still, to be of great importance to the human condition because they are of fundamental concern in the pursuit of how life ought to be lived (Bernstein, 1991). Socrates dictum, the unexamined life is not worth living, remains cogent in philosophy.

Within a community of inquiring thinkers, ideas are subjected to scrutiny and criticism. The thought of others is explored, concepts are examined and defined, opposing positions contested, and debate is engaged in. Collective inquiry is fostered through either written or spoken dialogue, where ideas are expressed and critiqued about the way things ought to be, in relation to the way things are (Murris, 2000). The degree and kind of impact that this has on a quality life depends on the quality of thinking, and correspondingly, the quality of the questioning (Bernstein, 1991).

Philosophy does not direct others as to what to think. It requires open mindedness, emphasising self-correction of its participants' thinking when reason or new evidence demands. Philosophical thinking enables a wise approach to life and living, where 'wise' describes the action of living through accumulated and reflective learning, depth of understanding, and sound judgement.

Philosophy is an inquiry process. It problematises perplexing issues by analysing them, and then generates ideas that guide or determine subsequent courses of action (Brenifer, 2003). Despite conclusive answers being unlikely, some answers are considered to be better than others based on sound and reasonable judgement. Therefore, philosophy involves making the best judgement possible, necessitating reasons as evidence to support one's position. It is easier to ask philosophical questions than to answer them, although what others have to contribute to the solution process impacts on one's position in one way or another. Doing philosophy requires free-thinking and the expression of ideas with others which are subjected to critical analysis; denying this denies the possibility of uncovering hidden truths (Mill, 2002). The thinking associated with the many dimensions of the human condition, the type of questions and problems that are subsequently generated, and the method of inquiry into these, give philosophy its unique character and value. The following explores the P4C programme. Although it

has an academic grounding, the applied and less technical approach to philosophy is central to this programme (Lipman, 2003; Murris, 2000).

Can children do philosophy?

Lipman and others have successfully challenged the long-held view that children cannot do philosophy (Lipman, et al., 1980) as 40 years of children doing philosophy through P4C can attest. Children can and ought to do philosophy, as a process of inquiry, though which skilful thinking can be developed. However, concern exists among some philosophers and educationalists that children are not capable of doing philosophy. John White (1992), Richard Fox (2001), John Wilson (1992), and others have expressed concerns which centre on how the act of philosophizing is interpreted and on the assumptions made about the motivation behind children's questioning and how they are addressed.

Generally, it is considered that doing philosophy is too difficult for children. White (1992) stressed a need for demonstrating logical thought and reasoning to a high level in order to be philosophising. Murris (2000) acknowledges that for children, the absence of factors such as life experiences, the necessary language to articulate, and the power to do so, may preclude the philosophical depth possible for experienced philosophers. However, young children ask questions that are spontaneous and philosophical in nature. Fox (2001) argues that children are active beings not thinkers. But children are curious about themselves, others, and their environment, possessing a serious approach to and genuine need for meaning. Children develop logical thought and capacity for reasoning through interaction with ideas and this needs to be nurtured and encouraged from an early stage. Otherwise, not allowing them the opportunity to engage with philosophy until they can philosophise is akin to not allowing them to go in the water until they can swim.

White and others are concerned that children's need to understand how to use concepts rather than what the concepts mean drives this questioning, and that they are not ready to understand the underlying principles of concepts such as death, friendship, and the like to the extent that philosophers are. Murris (2000) argues that children use concepts in their daily activities; through their questions they are attempting to understand these concepts within the context of their own lives. In this way, they are conceptualising their social and physical environment; to deny them the opportunity of doing so is to deny acknowledgment of children as thinking beings. Children are accruing self-knowledge, finding out about themselves and their place with others (Splitter & Sharp, 1995).

Children have few preconceived notions relating to such concepts as justice, love, death, and truth. Critical, creative, and reflective thinking supports autonomous intellectual development as children start to formulate their own understanding and developing values through gradual conceptual understanding. Making sound judgements about themselves, others, the world around them, and the ideas generated about it, such as those relating to ethnicity, class, and gender, are strengthened through the practice of philosophy. Philosophical inquiry with others provides an opportunity for children to think within the frame of reference outlined in chapter four, .

The role of the teacher has also come under scrutiny, and is a cause for caution. However, in fulfilling the expected role in P4C, the teacher is both an authority and in authority, as described at the beginning of this chapter. Philosophy is practiced with guidance and support. Such a teacher is sensitive to the needs of children as the programme develops, avoiding problems of extended 'speeches' or domination by a few children during the inquiry process (Lipman, 2003).

Not acknowledging the philosophical questions that children ask surely destine them to a narrow understanding of the world that they live in. If they

are not encouraged to ask questions, they rely on being told what to think; with no further encouragement to satisfy their puzzlement, how will they know that what they are being told is worthy of hearing? To the extent that philosophy involves thinking, questioning, and engaging with the ideas of others, to not engage children in this way is to severely limit their education. Furthermore, it calls into question how children and adults are conceptualised, and how this permits exclusion for some, while inclusion for others in a philosophy programme (Murris, 2000). Such a question and how it relates to a democratic approach to teaching and learning, as is the case in P4C, is worthy of further examination. Unfortunately space does not permit that here.

As children develop a grasp of their environment and life events, the ability to think well and to explore solutions to problems demands flexibility, open mindedness, and the support of those who can extend this thinking. P4C supplies the context within its novels for concept development; the manuals support teachers in the identification of these concepts, if unsure.

How does the programme contribute to the education of children?

The Philosophy for Children programme has a great deal to offer children. It impacts in positive ways on children and their lives, and the their engagement with the school curriculum, because intellectual, social and emotional development is enhanced through its methodology and its focus on thinking. These dimensions of children's lives can best be addressed by encouraging them to engage in activities in which they are engaging and applying them (Lipman, et al., 1980). The Philosophy for Children programme engages children in critical, creative and reflective thinking about everyday issues and concepts that puzzle them. It develops the thinking and reasoning processes that lead children to a better understanding of the world around them.

Intellectual Development

Participation in the Philosophy for Children programme involves children in substantive cognitive work that requires personal will and effort. This contributes to sustained concentration and improvement in student achievement. While engaged in the inquiry process, children participate in higher-order thinking that includes critical, creative and reflective thinking. It demonstrates the importance that participation plays when dealing with challenging ideas that are proceeding towards increased clarity and understanding (Allen, 1988). Addressing puzzling issues occurs through asking open-ended questions, seeking clarification, giving reasons or being reasoned with, providing examples and counter examples, making comparisons and exploring alternatives, giving justification and thinking about thinking. These features differentiate a philosophical discussion from a conversation (Haynes, 2002) and enable the development of thinking.

Through guided quality thinking, the programme encourages autonomy in children, thereby entrusting them with some responsibility for their own learning. Self-directed learning that emphasises improvement through goal setting and self-regulation during the learning phase is considered to be a positive factor in children's learning. These factors can flourish in an inquiring environment where children are empowered to make good judgements and wise choices (Lane & Jones, 1989). The inquiry process provides opportunities for children to question what they are learning and to discover personal meaning in it. This enables the children to engage with the curriculum in achievable and interesting ways, and facilitates profound and sustained learning. It has been noted that integration of this process into all curriculum areas has a significant impact on basic skill acquisition (Lipman et al., 1980) and the transfer of learning to many contexts.

The Philosophy for Children programme strongly supports the English curriculum. The stories successfully stimulate inquiry highlighting the

capacity of children to think at a deep level (McCall, 1989). Through analysis of the text, the improvements of comprehension and inferential thinking have been attributed to the programme. Active listening to the stories prompts inquiry as children work at grasping the meaning of the text, skills that can be transferred when seeking an understanding of the world around them. Evidence of good listening is present when students make reference to others' ideas during an inquiry. Speaking skills are improved as students seek answers to puzzling issues from others and attempt to communicate their ideas as clearly as possible, and in an increasingly organised way and using new vocabulary and language structures acquired through the inquiry process. The sharing of ideas supports planning for writing (Haynes, 2002).

Social Development

The social context that is created in the community of inquiry is intended to be empowering for children, inclusive, and challenging. It can be adapted to different groups of children according to the specific needs of the group and the professional judgement of the teacher. For example, as children gain a sense of belonging to the group and ownership of the ideas discussed, growth in self-esteem emerges (Haynes, 2002). It continues to grow as they gain confidence in their ability to participate meaningfully and are challenged to extend their own thinking beyond given information. The inquiry process encourages students to think for themselves and with others. This directs the flow of the inquiry and enriches the outcome for its participants. Predetermined transference of knowledge by adults is not the objective of this programme (Lipman et al., 1980). Children support others in the learning process.

The range of social skills, particularly those associated with democratic values which are developed within the community of inquiry, is a strength of the Philosophy for Children programme. In the community all children are regarded as valued and worthy participants, both personally and

intellectually. They learn to appreciate the contributions of others and to consider different ideas. In such a learning environment children are free to take risks, confident that they will be listened to and that their ideas will be respected (Gazzard, 2000). When gaining insight and making judgements, they understand that while others critique their ideas they can modify their own thinking on the basis of others' ideas. The social skills that are developed enable students to successfully work within a group, collaborating to manage differences of opinion and values (Haynes, 2002). In such a community, individual motivation to learn is enhanced making it less likely that learning is impeded by the needs of children who lack motivation or display disruptive behaviour (Olley, 2001, cited in Rodwell, 2001). However, the community of inquiry provides the ideal space for inquiry into such behaviour, supporting positive change where a need is identified.

Emotional Development

Emotional development and future emotional wellbeing have been connected to philosophy (Gazzard, 2000). Being collaborative in character, the community of inquiry requires interpersonal relations with others, as teachers and children share and critique ideas. It is within this social context that emotional development is supported. P4C attends to the development of caring thinking (Lipman, 2003).

As confidence in the group strengthens and self-esteem grows, children become effective and confident thinkers, assuming ownership of their ideas. As it is the ideas that are challenged within the community of inquiry rather than the person, dignity remains intact, and personal hurt is avoided. Children are free to express their ideas assisting the development of vocabulary needed for emotional self-expression. This has the potential of lessening the need to act out in ways that are detrimental to the wellbeing of self and others; for example, the expression of frustration or unhappiness. Adherence to democratic principles includes rather than alienates individual

children as members of the community. The non-competitive environment and attention to sensitive and empathetic relationships with others supports and builds trust and respect for self and others within the community of inquiry (Splitter & Sharp, 1995).

P4C with its emphasis on critical, creative, caring, and reflective thinking about issues of ultimate significance supports the development of the intellectual, social and emotional dimensions of children. It helps children connect what they learn with what they do in their lives and how it relates to others and the environment. When these factors are combined, ideas about their place in the world begin to emerge and they are better able to make a positive and valuable contribution to it. In collaboration with others, children with a background in this programme can think and more confidently approach decision making about societal issues in a well-reasoned way. They have the potential of participating in society in a way that is based on good judgement; for it is good judgement that ultimately dictates wise action (Oliver, 2000).

CHAPTER SIX:

Implementing the Philosophy for Children Programme in the Classroom

Implementing the Philosophy for Children programme (P4C) in the classroom requires that teachers be *an* authority in its content and structure. The last chapter addressed this. Successful implementation of P4C also requires that teachers be *in* authority as they fulfil the complex task of establishing a philosophical community of inquiry. As classroom guide, facilitator and participant this requires an understanding of the methodology that is central to P4C.

This chapter examines the community of inquiry explaining the concept and its methodology. Included is a discussion of the roles of the community's participants, and the democratic principles which underlie these. The practical issues of establishing such a community are also addressed. Evaluation and assessment matters are considered, which opens up the discussion of potential barriers to the successful implementation of P4C. These barriers can be addressed and overcome at the classroom and school level. There is no set way of implementing this programme, but there are commonalities that impact on its success for sustained critical thinking to occur.

What is a Community of Inquiry?

Charles Sanders Peirce (1877, cited in Buchler, 1955) conceived of the community of inquiry in the late nineteenth century as a forum for discussion around hypotheses within the scientific community. John Dewey (1997) later endorsed it as a process that supported learning through the active participation of children in the exploration of life experiences. The term

"community of inquiry" was formally applied to education by Matthew Lipman as a new paradigm for the educative process, and particularly as a context for educating children to think critically, creatively, and caringly (Lipman, 2003). The pedagogy of Socrates is the cornerstone of a community of inquiry and is distinguished by such features as: the unexamined life is not worth living, accepting a state of ignorance supports learning, questioning is essential in the learning process and learning occurs within a community.

The concept of community is based on democratic principles of fairness and justice, where the participants are respected as ends in themselves. It embodies social and emotional dimensions. Inquiry is conceptualised as the process of intellectual endeavour, having its roots in Greek philosophy. As a single concept, a community of inquiry is both a forum and a process for expressing and exploring ideas through a structured discussion. It is applicable to any field of interest such as science, art and philosophy.

Social and Emotional Characteristics of a Community of Inquiry

Social and emotional characteristics of P4C focus on the demonstration of care and value of, and respect for, others and their contributions. The physical layout of the classroom is cognisant of this, creating an inclusive environment for ease of participation. The layout differs from that of the traditional classroom, where the teacher tends to be isolated in front of the group, all interactions are directed through the teacher, and children look at the backs of their peer's heads. In contrast, a community of inquiry nurtures child-to-child interactions, allowing children to participate at their own level. Common practice in a community of inquiry is to have children seated in a circle shape to enable all participants, including the teacher, to face each other and be part of the same physical space. However, a horseshoe shape facilitates the inclusion of writing apparatus, such as a whiteboard or computer and screen. Such apparatus is needed for recording questions,

illustrating connections or summarising in graphic form. Both formations, however, encourage shared ownership of the process (Haynes, 2001). The use of communication technology, such as 'Skype', adds another possibility for a community of inquiry at a distance.

Particularly in the early stage of the programme, when the foundation for trust is being laid, and turn-taking is being established, the need for rules will arise. As a stimulus for inquiry, rules can be developed collaboratively. The rules provide guidance for structured interactions, though they must encourage rather than limit participation. Cognisant of the changing dynamics within a community of inquiry, rules are provisional and subject to change. Regular reflection on the value of rules and any resulting adjustments reduces the need for rigid adherence. Developing them through evaluation of community of inquiry is likely to address factors such as active listening, turn taking to contribute and democratic behaviour. Sharing ideas about the effectiveness of the rules is important in evaluating the effectiveness of the inquiry process and highlights its democratic nature (Haynes, 2001). The collective and collaborative inquiry characteristic of community of inquiry signals a cooperative approach to challenge and social solidarity (Lipman, 2003).

As a social process, all participants, both teachers and children, are modelling for each other the process of a community of inquiry and its social, emotional, and intellectual features. While modelling the desired interpersonal skills with children, the teacher needs to foster a classroom climate that is secure, reasonable, and respectful. In this environment, children are encouraged to discuss, evaluate and reflect on philosophical ideas, both their own and those of others. The environment must be conducive to risk-taking (Haynes, 2001).

When teachers ask open-ended questions that demand reflection, good judgement and reasoning, the type of language, questioning and thinking required of children is also modelled (Lipman, Sharp & Oscanyon, 1980).

Until children have understood and engaged in a community of inquiry teachers provide a model. Teachers as discussion participants provide the children with a model on which to base their own inquiry behaviour. They emulate those who engage in fair-mindedness, accepting community critique of their ideas, and who are open-minded. Children are exposed to other perspectives, which they evaluate and reject, accept, or modify (Murris, 2000).

Outlining the purpose of a community of inquiry and the associated roles with children is important, as is explaining the reasons for the physical layout of the classroom. As model, guide, facilitator and participant, the teacher's role is central to the success of a community of inquiry. In order to utilise prompts from children and so provide opportunities for further philosophical discussion, the teacher must be focused on and sensitive to the needs of the group (Murris, 2000). To develop and extend the inquiry and to engage in philosophical thinking, the teacher needs to prompt with open-ended questions. Children must be encouraged to modify their thinking in response to new and convincing reasons, and self-correct when personally appropriate (Lipman et al., 1980).

As facilitator, the role demands that the teacher be at ease with the educational practice of sharing control of the learning process with children. Having considered the age and number of children, as well as the learning, social, and emotional needs of the children, the teacher guides and supports them through the community of inquiry process. Some children may be troubled by particular questions or by the lack of conclusive answers (Haynes, 2001). Teachers as facilitators need to encourage, not dominate, the discussion and move it towards new understanding.

Although the teacher may direct the discussion in the early phase of this programme, the aim is for children to have increasing responsibility for a community of inquiry and its direction (*Ibid.*, 2001). As the children become

increasingly proficient and independent in the inquiry process, the teacher's role changes. Children assume more leadership in facilitating the inquiry while the teacher becomes increasingly active as a participant in the discussion. The teacher, however, does not entirely abdicate the position of being in authority within the classroom. They are ready to redirect the discussion should it deviate from philosophical inquiry. The teacher impresses upon the children that it is their learning forum (Murris, 2000). Children gain an understanding of how issues are addressed in a community of inquiry by learning from those aspects that are modelled in the novel.

Although P4C novels and manuals do not give step-by-step instructions for implementing the programme, they do give suggestions for the types of philosophical issues that may be discussed, and how they may be discussed, in a community of inquiry, and provide exercises to support deeper understanding of the issues discussed. Being well prepared and familiar with the content of the resource material is important in facilitating a successful inquiry (Haynes, 2001). As the teacher becomes more familiar with the content and more experienced at facilitating a community of inquiry, the manuals allow for flexible and creative use of the resources that best suit the learning context. This aspect of resourcing may favour some teachers while for others it may lead to a lack of confidence in their ability to implement P4C (Lipman, Sharp & Oscanyon, 1984).

When the teacher records questions for group consideration, all children need to be encouraged to participate without fearing a negative response from the group. In the initial stage of the programme, the teacher needs to prompt questioning by using the lead questions from the manual to ascertain the level of interest in and likelihood of pursuing a philosophical discussion. The teacher encourages the children to find connections between these questions and finally supports them in deciding on the discussion topic (Lipman et al., 1980).

As proficiency in the community of inquiry process improves, other resources can be used as a stimulus, such as students' suggestions, poems, stories, videos, art or music. The teacher needs to appraise these for puzzling content likely to stimulate philosophical discussion (Cam, 1995). Responses to an inquiry can be broadened through other forms of expression, such as poetry, visual art, or drama. Reflecting on the community of inquiry process provides space for further analysis and improvement of subsequent inquiry sessions (Lipman, 2003). A community of inquiry is not a static entity; each community is as unique as the individuals who form it continuing to evolve and adjust. Thinking is always subject to change, necessitating a flexible and open-minded attitude from the participants.

Intellectual Characteristics of a Community of Inquiry

Intellectual characteristics focus on the development of autonomous and collaborative thinking that is critical, creative, and reflective. These features underpin a democratic education and way of life. A community of inquiry, being the context, educates for thinking critically through each philosophical inquiry, being the content; the relationship between these two aspects is very much interconnected.

Exercises and activities from the manuals model effective questioning, providing support for teachers as they guide this learning. By teachers modelling Socratic questioning, and through practice, children learn how to deal with their own philosophical questions in a manageable way, that only philosophical questions are pursued within a community of inquiry (Curtis, 1985).

Evaluating and Assessing a Community of Inquiry

The assessment and evaluation of programmes in schools is required for internal and external reasons. Respectively, it is for identifying how well the programme is achieving the aims expected of it and needs to happen so that necessary changes for improvement can be incorporated. Assessment must be based on sound foundations and appropriate (Splitter & Sharp, 1995). Assessment is also a requirement of external agencies such as the Ministry of Education. Teachers and children currently contend with an increasing level of assessment requirements. The National Standards are a new addition to the testing framework. However, the assessment of P4C ought to be consistent with its approach and its underpinning principles for individual development within the collective development of the community of inquiry.

Continual evaluation of P4C is important for the first reason given above, and needs to focus on the teacher first, as the teacher's role is key to the success of a community of inquiry and hence P4C. Splitter and Sharp (1995, pp. 148-149) provide key aspects of early and mature stages of a community of inquiry which are helpful in self-evaluation. Teachers are aiming for the procedures of the inquiry to be internalised, to become more intellectually involved as a participant because the children are participating with more autonomy and flexible groupings work are an option when appropriate. The main ideas and content of the teachers' manuals act as both teaching guide and a reference for self-evaluation. The children's responsiveness and changing participation are also important factors in this process (Lipman, 2003).

The community of inquiry is the focus of evaluating and assessing the P4C, though pencil and pen tests at an individual level are not appropriate; the method and content is not based on recall of isolated information. Children ought to be involved in evaluation by asking them to consider their

development in terms of their use of such elements as giving sound reasons as they make judgements and comparisons and their willingness to explore concepts and puzzling issues through questions. The teacher acts as model for children in evaluating P4C as a participant and co-inquirer. Assessment through reflective evaluation of the community of inquiry is carried out at the group level.

The development experienced by the individual and that of the community are interconnected and interdependent. In a sense the development of the community becomes the means by which an individuals progress is noticed. Hence, a reflective dimension investigates the inquiry for the purpose of ascertaining the aspects that are working well and those in need of development for improvement for both the individual, including the teacher, and the group.

Keeping a record of the questions over time will become an evaluative tool in tracking the progress towards deep questioning. Recording some of the children's related comments from time to time provides material for further discussion on evaluating the development of their thinking (Hayes, 2001). Videoing or electronically recording occasional philosophical discussions highlights the needs to be addressed and the successes to be discussed with the group. Although this is time consuming it is informative to both teachers and children and the results can become a topic for inquiry if appropriate as a way of moving forward. An initial transcription at the beginning of the programme and again later in the programme after regular sessions will provide information regarding its development (Splitter & Sharp, 1995).

Ideally, the teacher guides children through the evaluation process, achieving shared ownership of problems and improvements. Integrating evaluation at the conclusion of an inquiry session by allowing time to discuss its effectiveness supports its improvement and progress. Over time children learn to reflect on their participation, making adjustments to it through

personal or group goal setting. Self-assessment and teacher feedback support children in reaching these goals. Reminding them of the goal at the outset of an inquiry is also supportive (Haynes, 2001).

Older children sometimes lack the personal freedom to fully participate in the programme preferring to say what the teacher wants to hear rather than to share personal ideas. A preference for formal methods of assessment by children is also a consideration (Splitter & Sharp, 1995). With the current regime in schools of assessment through various mechanisms such as class tests for pre- and post-units of study performance, Progress and achievement Tests and the new National Standards which require measuring children's performance in literacy and numeracy against nationally set standards. Such a response can also be subjected to inquiry with the children.

Ascertaining the level of enthusiasm comes directly from the children and the impact of the level of enthusiasm on teaching and learning is ascertained through the teacher's professional judgement. Considering improvement is a prerequisite for indicating progress in all participants, including the teacher's, achievement across the curriculum and school experience, indicates progress within the programme. The community of inquiry needs to be considered at both the collective and individual level, and requires evaluating the degree to which the procedures have been internalised. Internalised procedures on the part of the participants, as well as the proficiency of the process are indicative of a well-established community of inquiry. Observing increasing interactions between students indicates increasing proficiency and progress (*Ibid.*, 1995).

Barriers

Transforming the classroom into a community of inquiry is the distinguishing factor that differentiates a classroom involved in philosophy from the traditional classroom. The teacher has a vital and active role in its success.

Inhibiting the education of children to think critically because of the ethos of P4C is possible if teachers and children do not succeed in transforming the classroom into a community of inquiry. The traditional approach where the teacher has total control can be so entrenched, and a democratic way of organising the classroom can be too challenging for some. A community of inquiry as the means for thinking critically within a true to life context to be practiced and enhanced seriously challenges the traditional roles of teachers and children.

The traditional conceptualisation of teachers and children, and of the aims and functions of education are contrary to the ethos of P4C. For teachers who are used to the traditional role, which entails the teacher transmitting information, accepting this provisional nature of the inquiry could be a challenge. Discussion of a philosophical nature can cause teachers to feel vulnerable because supplying definitive answers that children may crave is not the aim. Planning the precise direction of the discussion is problematic because this is also an unknown factor.

Time needs to be scheduled for establishing of a community of inquiry, and for using the exercises and activities that supplement it. Considering the open-ended nature of a philosophical discussion makes flexible scheduling preferable. However, within an already crowded curriculum at least once a week is sufficient. When the children and teacher are proficient in the community if inquiry process, they are better able to take advantage of spontaneous sessions as directed by the students.

P4C provides the means through which critical thinking can be developed in schools. It requires understanding of and ability in philosophising, and allocated time to capitalise on its benefits. However, a lack of time for scheduling within the school programme, and of philosophical understanding on the part of the teacher, are two potential difficulties. Adding to this is the controlling nature of the traditional approach to education where the teacher

transmits the information and the children learn it, often leaving little time for an inquiry into the content or into the foundations of particular learning areas. Furthermore, this transmission approach embodies a conceptualisation of teachers and children as unequal, which gives the teacher absolute authority and is in conflict with such ethical principles of fairness and respect.

The following points need to be considered as they can impact negatively on children's engagement with the novels. The use of American English can be off putting for children who are unfamiliar with the different meaning of some words. Associated with this is the discrepancy between the language of the novel and the language used by children, particularly older children. However, this also provides an opportunity for an inquiry to examine the language difference. This can make the task of reading aloud more difficult while some children implicitly lack the desire, confidence or ability to read aloud to the group. Teachers must give children the option to read to the group or not (Murris, 2000).

Lack of a clear understanding of the term philosophy, the key role that it can play in educating for critical thinking, and its suitability in educating children to be critical thinkers, present difficulties in implementing P4C. The support for teachers and children provided by the guiding nature and structure of the P4C programme also addresses these and other potential challenges.

CHAPTER SEVEN:

Conclusion: Where to from here?

The previous chapter examined the implementation of the Philosophy for Children programme (P4C) within the classroom setting. It discussed P4C methodology - a community of inquiry - explaining the concept and the practical matters relating to its establishment. The roles of the teacher and children as participants in a community of inquiry, and the democratic principles which underlie these, were discussed. Evaluation and assessment matters were considered, and potential barriers to its successful implementation were discussed.

This chapter provides a brief outline of what is happening in New Zealand schools, highlighting that groups of teachers are committed to P4C. Various aspects which are impeding widespread dissemination of P4C in primary schools are considered. It then argues for what ought to happen to enable all children to engage with P4C through its implementation in New Zealand schools. It explores how changes in policy would lead to the inclusion of P4C in the primary school curriculum. The implications for pre-service and in-service teacher education and to the services of advisory personnel are sketched out. The chapter provides a summation of the thesis before making a call for further research.

P4C in New Zealand Schools

Current Activity

Although P4C does not yet have official status with the Ministry of Education, a number of primary schools include P4C in their school curriculum and have done so since at least 2000 (Gerritsen, 2000). Wairau Valley School in

Blenheim, and Balmoral and Parnell Schools in Auckland for example are achieving engagement from their children and the support of their parent community. However, as part of the school curriculum P4C is not widespread and its inclusion is largely attributable to the enthusiasm and commitment of individual teachers. The situation is not always an easy one to sustain however because various barriers exist (Dr Vanya Kovach, contact for P4CNZ, pers. comm. 18.10.10).

Barriers to the Inclusion of P4C in National and School Curricula

Firstly, in the past New Zealand teachers generally have lacked information, about and familiarity with, P4C and its relevance to the national curriculum and to mainstream classrooms. Teachers have often used P4C with small groups of students, most often those considered to be gifted and talented, for example Nelson Central School, Nelson. This thesis has argued that its content and methodology engages *all* children to think critically.

Secondly, limited opportunities for teachers to study the programme and its methodology are available to New Zealand teachers. At present Massey University offers a level three course of study in Philosophy for Children through the School of Educational Studies, which focuses mainly on theoretical foundations. The Philosophy for Children Association of New Zealand (P4CNZ) offers short courses throughout the year at level one which focuses on the practical matters of its implementation. Unfortunately, the number of tutors is limited compared to what is required in order to cater for the number of teachers wanting to study. The Massey University course is by distance and therefore potentially accessible to many teachers, but it is just one course. The P4CNZ courses are mostly in Auckland, although at the time of writing this thesis courses have been held in Christchurch, Wellington, Whakatane, Gisborne and Hamilton. It is possible for schools to organise in-service courses through P4CNZ, but tutors for this are not always available due to their own school or university work commitments. On-line study is

available through the Institute for the Advancement of Philosophy for Children (IAPC), USA and also through Barunda State School, Queensland, Australia. These focus on practical and theoretical aspects (http://www.p4c.org.nz/). Other opportunities for study exist in Australia, through Federation of Australasian Philosophy in Schools Association (http://www.fapsa.org.au) and through IAPC (http://cehs.montclair.edu/iapc/) in the USA, but are hardly accessible to all teachers due to the distance from New Zealand.

At present maintaining an adequate level of professional support for teachers in schools also is a challenge (Dr Vanya Kovach, pers. comm. 18.10.10). Limited support can be gained from the P4CNZ website, including information, a limited number of related lesson plans and the opportunity to read and share P4C classroom experiences (http://www.p4c.org.nz/). Professional support within the classroom, however, is invaluable and of more practical support to teachers.

Policy support at the school level is also vital if teachers are to be enabled to educate through P4C. As employees of the board of trustees teachers require the endorsement of the school's policy to allow for the inclusion of additional programmes in the school curriculum. As professional leaders, principals need to endorse the educative value of P4C through their own understanding, and to support teachers in its implementation through the board of trustees. Without this endorsement, teachers are at risk of not fulfilling their performance management agreement through the school appraisal system, as specified in the *National Education Guidelines* (Ministry of Education, 2010a), defined in Section 60A of the Education Act 1989 (http://www.minedu.govt.nz/NZEducation/EducationPolicies/Schools/). Potentially, questions of teacher compliance and ultimately competency could be raised, in line with the policy and procedural framework of the government.

Finally, current government policy is identified as a major impediment, but not insurmountable. Government policy directs learning in all schools. Currently, government education policy is driven by a focus on economic growth through education (Ministry of Education, 2010b). This utilitarian and narrow approach is at the expense of a balanced and sound education (Clark, 2004; Hope & Stevenson, 2005). The education system is held responsible for ensuring that "New Zealanders have the skills that employers demand" (Ministry of Education, 2010b, p.6), minimising the importance of what living in a democracy requires of its citizens. The Ministry of Education therefore holds the position that "we must view our education portfolio through an economic growth lens" (*Ibid.,* p.8). That genuine educational aims for New Zealand's children are not the central focus of the government is deeply concerning (Clark, 2004). Furthermore, that our children are reduced to human capital, dehumanised and instrumental in achieving the economic goals laid down by the government, demonstrates a severe lack of its adherence to the principles that are fundamental to democracy (Olssen, 2001; Neyland, 2004; Peters & Marshall, 2004). Resistance to "this demeaning form of education and its associated demeaning notion of the human being" (Peters & Marshall, 2004, p.123) is required and achievable.

As lead advisor to the government on the education system, the policy work of the Ministry of Education leads to legislation intended to improve education for all New Zealand children. It supports and resources the implementation of programmes that have been "shown to have a positive impact on education" (*Ibid.,* p.8) such as the New Zealand Numeracy Project. P4C is such a programme as this thesis has argued, and the literature base supports, suggesting that there is good reason for the Ministry of Education to consider it.

Supporting philosophy in primary schools through the Education Guidelines (Ministry of Education, 2010c) (NEGs) and National Administration Guidelines (Ministry of Education, 2010d) (NAGs), and committing to its

resourcing is a major but crucial next step in the government's educational endeavour. As a sector priority, every child ought to experience a teaching and learning programme focussed on sustained thinking about matters and issues that are pertinent to societal well-being. This thesis does not claim that the existing curriculum areas do not provide for this. It claims that the inclusion of the Key Competency: Thinking in NZC requires increased consideration of how educating for critical thinking can be best achieved. As a ministry priority, Vote Education funding would need to be reallocated in service to the specific aim of educating for critical thinking. Cognisant of the central location of thinking critically in NZC, it is timely to amend the NAGs, as it has been done previously in relation to physical activity, amended in 2004 and National Standards, which was amended in 2009 (*Ibid.*), and give official status to philosophy in primary schools.

P4C in *All* New Zealand Schools through Policy

On close examination, P4C aligns with the government education policy objectives, which are documented in the NEGs and the NAGs. Respectively they state the goals to be achieved by the school system, and principles of administration for boards of trustees, principals, teachers and school staff. It is argued here that except for NEG 9, which deals with Maori education initiatives and is outside the scope of this study, NEG 1 through to NEG 10 (Ministry of Education, 2010c) easily accommodate philosophy in schools and would be enhanced and enriched by its inclusion for the reasons discussed in chapter four of this thesis. No change to the document would be required.

Therefore, the position of this thesis is that educating children to think critically through P4C can occur at three levels:

(1) Individual teachers educating within a supportive and educationally sound school policy framework have the opportunity to use the programme. As discussed in this chapter, educating through P4C is already being used effectively in some schools. However its implementation relies on these dedicated teachers as the driving force, often with limited support and a limited number of children actually have the opportunity to engage with it.

(2) Individual schools, if they possess the political will, can include P4C in their school curriculum, formalised through school policy. Added support and collaboration between teachers certainly has the potential to enhance the P4C experience. Once again however, limited professional support from P4C tutors lessens the overall efficacy of the programme.

(3) Policy change at government level is most desirable, as it would enable P4C to be properly resourced with confident teachers, novels and manuals, and professional support personnel. Such policy change would support effecting *The New Zealand Curriculum* (NZC) and its aspiration to educate children to be critical thinkers as induction into our democratic and culturally diverse society. Such an education through the New Zealand system is too important to be left unsupported, unresourced and ultimately haphazard due to government policy remaining absent in this area.

Policy Change and Implications for Teacher Education

To achieve policy change two amendments would be required to the NAGs (Ministry of Education, 2010d) and are now explained:

NAG 1 "Each board, through the principal and staff, is required to: (a) develop and implement teaching and learning programmes:" (2010d, p.1) needs to include an additional fourth point, iv. providing all students with regular philosophical inquiry.

NAG 1, as above: (d) "develop and implement teaching and learning strategies to address the needs of students and aspects of the curriculum identified in (c)" (*Ibid.,* p.2), specifically point "iv. aspects of the curriculum which require particular attention" (*Ibid.,* p.2) needs to include an additional point, i. giving priority to the philosophical community of inquiry paradigm.

Attention is drawn to the accomplishment of a dedicated group of secondary school philosophy teachers in New Zealand. Since 2008 they have worked with the Ministry of Education to achieve official status for Philosophy in New Zealand Secondary Schools. Recently it achieved this status as a self-contained subject area of study (http://nzapt.net/). Together with the Ministry of Education they formed Teaching and Learning Guidelines for teachers to use. Although different in content to P4C their achievement of official status for the secondary sector is a heartening demonstration by the Ministry of Education that the worth and value of philosophy has been acknowledged. It provides impetus to strive for such status in the primary sector for P4C.

Effecting these policy changes in schools has implications for both in-service and pre-service teacher education. Educating all teachers about and for P4C, its resources and the community of inquiry is vital if they are to be confident in its use.

For in-service teacher education we are fortunate to have the recent Numeracy Project model as an exemplar for this task. This model entailed all teachers in the primary sector receiving mathematics education for use in their classrooms; in this instance P4C would make up the content instead of mathematics. Tutors from the Ministry of Education advisory service conducted these courses; teachers who have studied P4C and educate through it would be ideally suited for this role. Paid relievers supervised all classrooms; this would be appropriate and necessary while attending a P4C

teacher's course as well. A series of courses allowed all teachers to attend at different times over the course of two years, enabling the school day to continue uninterrupted.

Consultation with P4CNZ, FAPSA and IAPC regarding the course content would ensure that it remained informative and appropriate, while courses would include each teacher participating in a community if inquiry, supported and facilitated by the tutor. The P4C novel *Harry Stottlemeier's Discovery* (Lipman & Splitter, 1992), which models a community of inquiry, and the accompanying teacher's manual, *Philosophical Inquiry* (Lipman, Sharp & Oscanyon, 1984) have been used for teacher education and would be appropriate resources for our purpose.

The programme of study within the Colleges of Education for pre-service teachers would include the course content and methodology used with in-service teachers. Differing levels of experience with classrooms between in-service and pre-service teachers need not affect the course content or structure as each community of inquiry is as unique as the participants and therefore caters to the needs of different groups. P4C as a separate programme of study would be ideal as beginning teachers would be well equipped to work collaboratively with teachers in schools and able to share their extensive understanding of it. Teachers in schools would have extensive practical experience to support beginning teachers. However, if not a stand-alone course then maybe P4C can be included within their professional courses as part their theoretical understanding of education. It is acknowledged that staffing for pre-service teacher education courses poses a difficulty as P4C qualified staff is few. However, as teachers in schools complete their P4C courses some tutors would be available to take up positions in Colleges of Education. Delaying full implementation of P4C courses may be pragmatic.

The initial stages of implementation, when new to the education system, are likely to require a higher level of resourcing, time and intellectual, social and emotional effort than when established. For some the process would be more difficult than for others, as traditional positions and entrenched ideas are challenged and changed. It would require that everyone be a critical thinker. Ongoing resourcing would be required through professional support to teachers and for pre-service teacher education programmes.

Conclusion

The purpose of this thesis is twofold; conceptualising what it is to think critically in order that children can be educated for it as per *The New Zealand Curriculum* (Ministry of Education, 2007), and how, through P4C, they can be best educated to be critical thinkers. The study supports those involved in the educative process by providing for a solid theoretical and practical understanding. In this way children will be better thinkers enabling them to experience better individual lives and the collective life of society will be better as argued in chapter four.

There is no expectation or compulsion that all children who have engaged in P4C in learning to think critically, will make the impact on wider human thought and others' world perceptions that key historical critical thinkers have. However, it is important to acknowledge that the thoughts and actions of every person do indeed impact on the thoughts of others and their understanding of their environment on a daily basis and thus affect the collective lives of the community. Focusing not on the extraordinary achievement, but rather the learning and process, such as that embodied in P4C and its community of inquiry, is the aim.

This thesis has traced the inclusion of critical thinking in New Zealand curricula since 1984 highlighting that its inclusion is not new in a general sense. It has presented four historical critical thinkers as exemplars to

demonstrate that thinking critically is not solely achieved through engagement with school curricula, but through the interaction with, and reaction to, our social and natural environment. Conceptualising what it is to think critically and to be a critical thinker has been crucial in understanding its importance in living autonomously within a democracy where pluralism challenges and enriches the judgements we make. The Philosophy for Children programme has been described, while defining terms, its implementation and potential barriers to the widespread dissemination of the Philosophy for Children programme in New Zealand schools, the most significant being current education policy underpinned by economic imperatives. A call for further research into the community of inquiry paradigm, and the roles of teachers and children, and the perceptions of this compared to that of the traditional paradigm is made. Such a study would seek to uncover and redress common assumptions as a way forward to using the community of inquiry paradigm across all learning areas.

The inclusion of P4C in curriculum policy and its resourcing nationally will entail a philosophical shift by the government to one that is underpinned by education imperatives rather than those of economics. There is no escaping the notion that New Zealand society and education sustain a reciprocal relationship, where meeting the demands and needs of each intersect in schools through the curriculum. Since the curriculum addresses a mix of extrinsic social functions and intrinsic educational aims, political positioning is inevitable (Barrington, 1992; McCulloch, 1992). Sadly, it continues to be the utilitarian functions of schooling that have secured dominant political support, ensuring its salience as the over riding purpose of the curriculum, for the present (O'Neill, Clark & Openshaw, 2004). However, the imbalance can and ought to be redressed, and as this thesis has outlined.

Within and across the learning areas children need to be encouraged to question and challenge assumptions, content, and to sharpen their conceptual understanding of them. To be served well in education children

must be encouraged also to observe and imagine, and consider how things ought to be and could be, seeking to more fully understand the world and their place in it. So is educating children to be critical thinkers right because NZC directs it - or does NZC direct it because it is right? No matter what the policy makers have based their judgements on, or how it is conceptualised for them, it is most definitely the latter that holds sway; for if we are to have a citizenry worthy of democracy and its pluralistic nature then our citizens must think critically about the issues that impact on living their lives in a manner that supports democracy.

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