Title of Thesis:
A Metacognitive-Affective Approach to Values Education

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Abstract

This thesis explores the way a skilled teacher developed and implemented my idea that metacognition could be applied to affect as well as cognition in values education. This idea suggests that teachers can help primary school students to understand the role that affect has played in the development of their values through socialization, and that through this understanding the students may develop a greater capacity to question and develop their values in the future. I call this teaching idea the metacognitive-affective approach to values education.

The review of the literature explores a range of theory, research findings and practical teaching ideas. It looks at the psychological, social psychological, sociological, philosophical, and educational, literature to establish links between affect and cognition in the development and education of values. It also looks at literature on metacognition to establish ways in which metacognition could be focussed on affect and values.

The teacher developed her own understanding of my original idea, and developed, implemented, and evaluated, a teaching intervention based on her interpretation of the idea in a history unit of study over a ten week period with her grade six class. Data were derived from: (i) interviews with the teacher about her understanding of the idea, the concepts, and the issues, before, during and after the implementation; (ii) observations of the teacher's implementation of the approach in the unit of study, and (iii) the teacher's written reflections.

The research was an action research-oriented, evaluative case-study using an interpretive, naturalistic approach based on the constructivist paradigm. It employed a hermeneutic philosophical stance that emphasises the way prior understandings and prejudices shape the interpretive process.

The results of the research showed the metacognitive-affective approach to have potential, but, as there was insufficient time to fully implement it, there are still major questions about ways of implementing it, about its practicality, and about how to involve other teachers in trialing it. A conceptual framework for the approach was developed and the thesis concludes with the suggestion that other teachers be recruited to an action-research program to further trial and develop the approach using my framework as a starting point to confirm the value of the approach for practical classroom teaching.
Declaration:

This is to certify that
(i) the thesis comprises only my original work,
(ii) due acknowledgment has been made in the text to all other material used,
(iii) the thesis is less than 100,000 words in length, exclusive of the bibliography and appendices.

Signature: ____________________________

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A Metacognitive-Affective Approach to Values Education

Chapter One: Overview

Students come to history, literature, art, or social studies classes with deeply held prejudices, stereotypes, and simplifications.... one cannot expect that these biases will simply dissipate after a single counterexample. It is important that these prejudicial views be regularly and repeatedly recognized as such and that the students have ample opportunities to develop richer and more rounded views. (Gardner, 1991, p 236)

Gardner's assertions about the power and persistence of children's early, often erroneous, 'theories' about the world, and about the need for planning and patience to bring about real change in those theories, beg the question of how to teach to bring about that change. My research contributes to an answer in two ways. First, it sees affect (emotions, feelings and moods), as a fundamental part of children's values and naturalistic theories about the social world. More metaphorically, it sees affect as part of the glue holding together those theories and values. Second, it explores the use of metacognition as a way of loosening that glue, of allowing other ideas to challenge those theories and values. In her novel The Orchard, Modjeska says something similar: "Doubt entered emotion that had been fixed for years. It sat alongside it, rocking it, unsettling it, freeing it" (1994: 233).

My research looks at ways teachers could have their students use a metacognitive approach to focus on the affect as well as the cognition built into their existing social knowledge, their learning processes, their values and their valuing processes. I call this the 'metacognitive-affective' approach. Children have quasi-theories about their world, and learning and teaching involves building and modifying those theories. 'Starting from where they're at' is a cliche amongst teachers about the imperative to take into account learners' existing understandings. However, the need to teach large groups and prescribed curricula means that many teachers can only pay lip service to this dictum. My research looked at how one teacher used a metacognitive-affective approach to help her students identify and understand what they presently knew, believed and felt, and, to a lesser extent, to help them develop their values.

In values education the term values is a short-hand term for a more or less coherent hierarchy of many preferential beliefs and attitudes, and a small number of abstract values, all of which have cognitive, affective, conative and behavioural elements. I see values
education fostering the development of students' existing values and values identified as important by the school.

I see the individual as actively involved in the construction of all knowledge, including values. While my thesis focuses on social education and specifically on values education within the upper primary school, in the final chapter I suggest that the ideas I am exploring apply more widely in education, and possibly beyond formal education if metacognition is used to understand and influence the way affect operates in people's lives.

**Background to the Research**

This thesis developed out of my work over nearly three decades in anti-bias education, where I found many students at both primary school and in teacher education classes were unaffected by good teaching, apparently because they had an emotional commitment to contrary ideas and values. They exhibited a classic 'closed mind'. For example, some students reacted automatically in a negative emotional way to any mention of gender, ethnicity or racial issues. Regardless of how many facts we teachers presented, how eloquently we argued, how thoroughly we planned, how subtly we explored controversies, how neutrally we presented dilemmas, how fully we clarified issues, or whether we taught in didactic or inquiry modes, evaluations showed that we had limited success with a significant number of students, especially those with the most narrow-minded views. (In later chapters I discuss issues such as relativity of values and inculcating or clarifying values.) Our teaching had not brought about learning in many cases.

I came to think that if teaching for values development is to be effective, the teacher needs not only to have students describe their values, but also needs to help them understand how their values have arisen both affectively and cognitively through socialization, and understand how their existing values contain affect that influences their present thinking and action. Armed with such insights, the students might then be in a position to influence the further development of their values. In all of that work, metacognition about affect is crucial. However, in teaching programs, textbooks and in educational theory, I found little acknowledgement of the role of affect in prior learning.

**The Importance of Affect**

I use the term *affect* to include feelings, emotions, and moods, each of which may have different levels of intensity and forms of expression. In chapter two I distinguish affect, cognition, and conation (motivation and volition), and point out that these processes overlap functionally. Fundamental to my thesis is the idea that there are important affective components to the values children construct during socialization. Many emotions and
feelings may be involved: for example, loyalty, disgust, love, fear. This affect is likely to lead to a degree of conservatism in the face of conflicting information. People are often resistant to change their thinking about personal and social matters, and even about the physical world. It is a premise of my research that this resistance may have to do with the role of affect in people's original learning, and, with the continued role of affect in valuing existing ideas above new ones, in 'blinding' us to cognitive realities. Folk wisdom knows about this emotional prejudging and biasing: it says people are blinded by their emotions. Perhaps these everyday explanations built up over generations of experience contain insights missing in psychological theories developed in experimental situations.

Motivation theories recognize the role of affect in learning and education, however, I argue that values teachers need to understand better the role of affect in socialization. Students may come to a learning situation with a desire to learn, but when they hear propositions that are contrary to beliefs, attitudes, opinions and / or values they feel strongly about, (and that they have learned in affective as well as cognitive ways, often through socialization), they may find it very difficult to assimilate the new propositions. They may even give the correct, (perhaps 'politically correct'), answers to the teacher or on a test, but not believe what they are saying. I have often noted children's body language - nudges and meaningful looks - indicating that they know they need to take care about what they say, that they need to be politically correct. In many such cases the children are consciously or unconsciously protecting basic affective elements of their selves. Their fundamental belief structures are unchanged by our teaching. Learning has not occurred.

Mezirow (1991: 36) talked about how the "emotional strength of the initial experience" affects memory. Teachers need to understand the existence, the links and the power of this affect if they are to help students let go of their old ideas and risk exploring the new. Teachers and students need to confront existing affect as much as existing knowledge, to find ways of replacing negative emotions with more positive ones, to nurture curiosity, courage, and creativity. They need to acknowledge the positive role of affect. All learning has this affective component. In some learning it is obvious, for example, religious conversions are often strongly emotionally charged. But we all have had less dramatic learning experiences where we have become aware of the wrongness of our previous thinking. And we all can recount examples of other people - almost never ourselves - refusing to change their mind in the face of overwhelming evidence. Teachers daily experience frustration at their students' failure to see the obvious. White & Tisher (1986) list numerous examples of university students clinging to childhood theories despite years of 'successful' study of more appropriate theories. Terms such as 'cognitive dissonance' and 'cognitive balance' are used to explain why we change our minds or not. Psychological
explanations of learning emphasise a build-up over time of cognitive discrepancies, and rational decisions to change positions. But such emphasis on cognition and rationality undervalues the important role of affect in the original socialization learning process and its continuing role in knowledge.

This idea about the importance of affect in socialization and in education reflects a fascination for emotion amongst ordinary people in their everyday lives. In the western world, in film, television, literature and drama, the emotions are paramount and consume much of ordinary people's attention, especially amongst young people. Social relationships are analysed according to their emotional content. Zajonc highlighted this emphasis twenty years ago:

There are practically no social phenomena that do not implicate affect in some important way. Affect dominates social interaction, and it is the major currency in which social intercourse is transacted. The vast majority of our daily conversations entail the exchange of information about our opinions, preferences, and evaluations. (Zajonc, 1980: 153)

He also suggested that in the field of psychology "affective phenomena deserve far more attention than they have received from cognitive psychologists and a closer cognitive scrutiny from social psychologists" (172). Since 1980, psychology has increasingly focused on affect, and recent research in neuroscience has helped rehabilitate affect as not just an unwelcome participant in cognition, but as central to decision-making.

Affect plays a powerful role in the construction of all thought. Common usage in the English language reflects this: people often say 'I feel that...' even when they have been doing a lot of thinking about the particular matter. Intuition, thinking and feeling are often interchangeable in everyday life. Perhaps this is not a matter of sloppy use, but rather a case of everyday language accurately reflecting how integrated these processes are. In the past, psychology often exaggerated the distinction between cognition and affect, however, now an integrated view of cognition and affect is common, as my literature review shows.

Despite the upsurge of psychological interest in affect, there has not been sufficient attention to affect by educators and teachers. Paraphrasing Zajonc, I suggest that: affective phenomena deserve far more attention than they have received from educators and teachers. With the exception of those concerned with conation, and many in the humanities and the arts, most involved in education, and especially in values education, have misunderstood, ignored, or maligned affect: rationality is seen as paramount. Perhaps this restricted view of affect may be an important factor in the failure of education to emotionally engage many young people. I acknowledge that teachers are aware that many students have negative attitudes, resulting from both socialization and poor teaching, about
certain subjects. Often teachers use strategies to circumvent that affect. However, especially in values education there is not sufficient attention to the affect socialized into the 'bits' of knowledge, to the affective components of the children's existing knowledge. I also acknowledge that there are teachers who incorporate affect, perhaps intuitively, into their teaching. Call it the 'Dead Poets' Society' approach: teachers conveying their passion for their subject to their students, and focusing their students' attention on the affective as well as the cognitive aspects of the content. However, I believe they are in a minority as most teachers struggle, under the pressures of accountability and large classes, to cover the required curricula. I suggest that even those 'affective' teachers may benefit from a more systematic approach focusing on the affect built into students' existing knowledge.

The Importance of The Self

In psychology the self is regarded as an elusive and difficult to measure concept (Greenwald & Pratkanis, 1984). I find the social psychological notion of the self as a social construction more useful in education than the psychoanalytic entities of the ego and id. Phenomenologically, the self is central to consciousness, our sense of being, mind, physical integrity, memory, and social interaction, as Denzin (1984) showed well. Izard (1977) saw affect as central to self-awareness and the self-concept. Recently Damasio (1999) has explored the development and interaction of the self, emotion and consciousness. However, a definition of the self is still difficult. I see it as an individual's conception of being that integrates her or his physical, affective, cognitive, conative, behavioural, and social experience.

I focus extensively on the concept of the self because I see it as central to socialization, affect, values, and education. The self links these concepts theoretically, and integrates them phenomenologically for the individual. The self constructs itself in the dialectic process of socialization: individuals are influenced by significant others, (mainly family and peers), by culture and the media, but, in turn, individuals influence their social and cultural surroundings, and participate in the ongoing construction of their own selves. The self experiences and expresses affect, and constructs its values. It is a central concept in education: it is the self that is being educated and that is doing the learning. I bring the self - along with affect - to centre-stage in education. Acknowledging that teaching is about working with individual selves means taking account not only of the diversity of intellectual abilities and of academic starting points, but also of the diversity of personal histories and affect.

By late primary school, children have learned to present and defend their selves. The teacher needs to encourage children to feel confident enough to open up their selves, so that
they can openly discuss their deeply held views. This does not mean that she *intrudes* into their selves or their privacy, but that she creates situations in which students feel secure enough to express and explore their own feelings and values, and the range of views that exist in the community. Metacognition may be useful in providing students with the knowledge and skills to critically analyse their own affect and values.

**The Use of Metacognition**

In chapter three, I expand upon the following definition: *metacognition involves reflecting upon and analysing what and how one thinks and learns, affectively, cognitively and conatively, in order to learn more effectively.* This involves three recursive stages: development of metacognitive knowledge about learning, evaluation of current learning, and regulation of learning. Theorists on self-regulated learning and other conative perspectives provide valuable insights into the role of affect in the motivational and volitional regulation of learning, whereas my thesis focuses more on the first two stages, development of metacognitive knowledge about the role of affect in previous learning, especially in socialization, and development of metacognitive evaluation of current learning. I look at how teachers can provide students with insights into how they have developed their present values, so they can evaluate their current thinking and systematically make changes in those values. I look at how children can be metacognitive about their affect, that is, more knowledgeable about, and more evaluative of, how their emotions, feelings and moods have influenced their learning, and thus develop more control of that affect in their subsequent values development.

Because I see cognition, affect and conation so intricately interacting, I use the term *metacognition about affect* rather than *meta-affect*. The process I envisage is fundamentally a cognitive one even when it is focusing more on the affective elements and influences of values. Thus I also use the term *metacognitive-affective approach* to values education rather than *metacognitive / meta-affective approach*.

I am not wanting the intellect to overcome the emotions, but rather I see metacognition allowing us more influence over our learning due to better knowledge of the role of affect in learning. That knowledge involves understanding the role that affect plays in human existence. I do not see metacognition making the person coldly rational in a valuing situation. Rather I want students to be more aware of how their affect and their intellect interact. I do not believe that full control of affect or of thinking is possible - or desirable. I am looking for metacognition to provide the capacity for the individual to influence, to direct, to regulate affect within the thinking / learning and valuing processes.
The Structure of the Thesis

In chapter two I develop the literature context for my thesis by searching for links between the three areas - affect, values, and metacognition - in the education, psychology, sociology and philosophy literature. That search found growing acknowledgement of the role of affect in cognition, and in some areas of metacognition, especially related to regulation of learning. It found awareness of affect's influence in the development of the self, identity, character and values, and it found recent interest in affective education, but limited interest in affect in values education. It highlights examples of research and theory that could be translated for use by teachers with students in the upper primary school.

The Literature Review uses the moral philosopher Flanagan (1984; 1996) to help provide a philosophical underpinning to my research. Utilizing findings from neuroscience, he addresses basic issues such as the role of reflection, and the meaning of the self, consciousness, value, morality, integrity, and the 'good life'. Many of these matters are covered in Izard's theory of emotion which provides a psychological grounding for my thesis, and Damasio's neuroscience findings provide a biological grounding for that psychology. Boud, Keogh and Walker (1985) and Mezirow (1991) help me make crucial links between affect and metacognition. Mezirow's emphases on meaning-making, reflection, and discourse have relevance to both the theoretic and the applied aspects of my thesis. In the three areas - affect, values, and metacognition - there is frequent comment in the literature about the confusion of terminology and the inadequacy of the theory. Consequently, much of the literature review is working towards clarifying the concepts and providing a conceptual foundation to link the three areas at a theoretical level.

I attempt that theoretical linking in chapter three where I provide details of a conceptual framework for metacognitive-affective values education. Chapter three also makes limited suggestions about how the framework might be implemented in practice in schools.

Chapter four discusses the methodology used in the research. That research looked at the way one grade six teacher developed and applied her understandings about how metacognition may be focused on the affect associated with values. The teacher decided what educational concepts and methods to use in her teaching. Because she had so much autonomy, some of the issues raised in chapters two and three were not treated in her intervention. The research began with discussions about her understanding of the key concepts. She then planned, implemented and evaluated a teaching unit to trial some of the ideas that she (in conjunction with me) had developed through those discussions. We monitored and recorded those discussions and the implementation of the unit, providing data for ongoing feedback and analysis by both of us.
The research traced the development of our understandings about how the key constructs may operate in teaching. Those understandings developed through discussions with each other and with others, through reading, and the work the teacher did with her class. Separately and together we reflected on and discussed the implications of our changing understandings both for her development, for other teachers' development, and for that of her students. We collected data about the connections between affect, metacognition and values at three levels: that of the teacher; to a lesser extent, that of the students; and, of myself. I report on my own values, affect and metacognition in conducting this research, (it could be said that a PhD is one long metacognitive exercise).

The research was a case-study using an interpretive, naturalistic approach based on the constructivist paradigm. My research approach is based on a hermeneutic philosophical stance (Denzin & Lincoln, 1994: 15). Its emphasis on the way prior understandings and prejudices shape the interpretive process also fits the pedagogical theory I am developing. That theory suggests that students can take a hermeneutic metacognitive stance towards their own knowledge and affect. This stance may be a key to unlock closed minds.

As a case study, this research invites 'naturalistic generalizations' (Stake, 1995), and raises questions about the application of the ideas in other situations with other teachers, and thus provides avenues for further research. Its main value is that it provides in-depth insights of one experienced teacher into the emerging pedagogy. It enables that person's voice, her version of reality, to be described in detail, analysed, partly explained and challenged. The research also used action research methodology. I wanted to explore with the teacher ways of implementing the metacognitive-affective approach, and incidentally of improving: i) her practice in the values education area, ii) her understanding of that practice, and iii) the curriculum and classroom context of that practice. I involved the teacher as a co-researcher in that endeavour: we were joint action researchers.

The research was more modest in its intentions than action research that emphasises the transformation of social situations, (if not the whole society). I started out believing that my research could help teachers change their practice significantly, however, the research has given me a more realistic view of the difficulty and complexity of change. On the other hand, I believe that my research has provided insights about the potential of the pedagogy and about the problems that need to be addressed to bring about significant change.

Qualitative research philosophies see research as inherently subjective, and value the subjective insights of the researcher. I attempt to demonstrate the trustworthiness of the
data in a variety of ways. Also I provide a background to my commitment to this research, and I describe my own values so the reader is able to evaluate their influence on my interpretations.

The research can be seen as a journey of exploration undertaken by two travellers in a new part of the education landscape they know well, and metacognition can be seen as a tool for looking at the familiar terrains of values, affect, teaching and learning. We both kept journals reflecting on our journey and shared those regularly. The teacher's journey was much more difficult than mine, and I am very much indebted to her for embarking on and persisting with it. While there was the potential satisfaction of achievement for her, she experienced periods of frustration, uncertainty and other emotions associated with exposing herself to so much intellectual and pedagogical scrutiny. She sometimes felt that she was not only being observed but also evaluated. It was as though the research spotlight was shining on her rather than on the pedagogical road. Early in the unit, that spotlight had to be moved from her as it was putting too much pressure on her while she was also carrying out her full-time, demanding teaching position. Not only was her professionalism on display, but also, as she sets extremely high standards for herself, she was judging herself. The place of self-evaluation in the metacognitive process is explored in this report, as are the teacher's difficulties and her resolution of them. On the other hand, for most of the journey much progress was made, and those successes are reported and analysed.

It should be noted that this thesis is one report of that shared journey. The journey had multiple levels and perspectives, only some of which are detailed here. The report is necessarily incomplete: it records some of what happened from as many perspectives as possible, but there are still other perspectives that could have been taken.

In chapter five I describe and analyse in detail the data derived from the interviews and the teacher's implementation of the approach. There the conceptual framework is fleshed out in pedagogical practice. The final chapter evaluates the model of metacognitive-affective values education presented in chapter three using the findings from the research. It also suggests tentative conclusions, questions and recommendations for further research.

Issues, Conclusions and Recommendations

The following are some of the key issues and recommendations discussed in the final chapters. There were interesting data about the role of language in the teaching/learning processes being explored, and the extent to which language needs to be refined and concepts defined by both the teacher and the students. My views on the latter were challenged by the practice of the teacher who, in working with primary school children, was
prepared to accept more vague definitions than I would have. That prompted me to consider
the way adults operate with reasonably vague definitions of concepts, and vague theories of
mind that function for them in their everyday lives. I came to understand that the teacher's
approach, built as it was on experience, was very effective.

The research raised questions and avenues for further research, for example, the extent to
which metacognitive training needs to be explicit. In the research unit, for a range of
reasons, the teacher tended to leave the children to make connections about the way their
emotions, beliefs, experiences, and knowledge were interconnected. Alternative approaches
could have the teacher focusing the children's attention more explicitly on the metacognitive
processes as well as the content.

The teacher and I discussed the implications for teacher development and for the
curriculum of incorporating a metacognitive approach to affect. We explored how, given the
excessive time demands on them, teachers could incorporate this approach into their
teaching repertoire, and how it could affect their curriculum planning, delivery and
assessment. We envisaged teachers in action research groups using this report to explore
their own ways of developing and implementing the approach.

While the research focus was primarily on the role of affect in values development, the
teacher and I found that an increased focus on affect related to any current learning (for
example, the feelings of others being studied), had a positive impact on the students'
learning. We found that the teaching / learning experience was more interesting, enriched,
and effective when affect was considered.

I believe that the research extends the concept of metacognition by focusing on affect
especially in the development of metacognitive knowledge. The research provides what may
prove to be a more useful, user-friendly, and effective way of thinking about and using
metacognition than many primary teachers have previously had. Metacognition has not
made inroads into teaching practice in primary schools to the extent I believe is warranted.
This report may help rectify this deficiency.

As the approach requires teachers to have a deep knowledge of affect, values, and the mind,
teacher education (in Australia at least) needs to focus more on affective, social, and values
development, to balance its present cognitive emphasis. This may lead not only to better
balanced children emotionally, morally and socially, but it may also be a key to more
effective cognitive development. In the next chapter I review how the literature has treated
many of these matters.
Chapter Two: Literature Review

The ideas of the young child - the youthful theorist - are powerful and are likely to remain alive throughout life. Only if these ideas are taken seriously, engaged, and eventually trimmed or transformed so that more developed and comprehensive conceptions can come to the fore - only then does an education for understanding become possible. (Gardner, 1991: 248)

Introduction

This literature review attempts to provide a theoretical context for the education for understanding that Gardner talked about and that my research is working towards in the values education area. I explore the literature about metacognition seeking ways of taking seriously, engaging, and transforming children's beliefs, attitudes and values. I look at affect because I see affect as the main reason that the youthful theorist's values remain powerful despite years of schooling. I analyse a broad range of literature seeking insights that could be incorporated into my model of metacognitive-affective values education, and I also highlight examples of theoretical knowledge that could be translated for teachers to use with students in the upper primary school. My model would have teachers and students developing a broad understanding of affect and its role in the development of values through socialization and education, and an understanding of the role of the self in relation to affect, to values learning and to metacognition.

Chapter 2.1 explores the relevance and meaning of affect; the relationship between cognition, affect and conation; theories about affect; the functions of affect; the relationship between affect and communication, social life and culture; and affect's relationship to consciousness, the self, and conscience. It also looks at the development, socialization and regulation of affect, at the concepts of emotional intelligence and competence, and finally at affect and education. Throughout, I am trying to assess the influence of affect on learning, especially values learning. Because there is not a lot of direct empirical evidence about the latter I look broadly at the literature seeking new connections. Chapter 2.2 explores the nature of values, and the development and education of values. Chapter 2.3 looks at metacognition in theory and practice in order to explore how it might be applied to affect in values education.
2.1: AFFECT

I use affect generically to include the following concepts: emotions, feelings, mood, sentiment, and temperament, although my thesis concentrates on the first two. I note below that others see the concept differently. However, all attest to the importance of affect. Ablon (1993: xv) talks about "feeling as the archetypal core of human 'being.'" Oatley and Johnson-Laird (1998: 85) suggest: "Emotions are at the center of human mental and social life. They integrate subjective experience, bodily changes, planned action, and social relating." Tomkins (1998: 212) says that without affect we "would know that things happened, but we would not care whether they did or not." However, Jenkins, Oatley and Stein (1998: 3) point to ambivalence and distrust about emotions. This is not surprising: emotions precipitate individual, social and cultural highs and lows. They bemuse us; they sometimes are out of control, and sometimes seem out of place, possibly because, as Jenkins, Oatley and Stein (1998: 81) point out, emotions evolved to meet the needs of hunter-gatherers, and our current agricultural, industrial life-style has only existed for 0.25% of human history. That life-style is cognitively-based, but the old emotions persist and newer affects have arisen. The relationship between affect and cognition, and specifically the influence of affect on values is a fundamental issue for my thesis that I return to later.

In this review of affect I look mainly at cognitivist, phenomenological, and constructivist perspectives, and briefly at philosophical and psychoanalytic perspectives. Jones (1995: xxiii) suggested that psychoanalytic theory did not have a "satisfactory theory of affect," although it had recently developed more interest in affect and the self. Magai and McFadden (1995) claimed that psychological interest in emotion almost disappeared from the 1950s to the mid 1970s. In 1984 Buck suggested that a comprehensive theory of human nature would "not be realized until investigators using different approaches... learn about and appreciate other points of view and other approaches" (ix). His criticism applies to psychology's early study of affect, but recently there has been more integration. Wherever possible I look at integrating perspectives. Now I explore what the literature says constitutes affect.

What is Affect?

Damasio (1994; 1999), in perhaps the most clear account of the terms, uses affect as the generic term embracing emotions, feelings and moods. While Snow, Corno and Jackson (1996: 247) see values and attitudes as affective, I see attitudes as both affective and cognitive, and values as primarily cognitive, but with high affective components. I return to this in the section on values. Vannan and Miller (1993: 214) referred vaguely to affect as "an overall positive/negative subjective feeling." Berscheid (1990) documented the
academic confusion over what affect is, while Thomas (1985: 197) pointed out that "in
general, the terms affect and emotion are used interchangeably." Indeed, I have found that
in the literature the terms affect, feelings, emotion(s), sentiments, moods, temperament,
desires, interests, arousal, drives and even motivation are often used in overlapping ways,
and the phenomena they represent are variously categorized. Some writers I cite below use
emotion as a generic term to embrace feelings and moods, and in some cases, to embrace
some of the other terms. *

Here I need to make a brief comment about temperament and personality. The
metacognitive approach I am proposing would work best with a 'scientific personality'
rather than an 'authoritarian dogmatist', (Simon, 1986: 103) and, while personality clearly
has affective elements, I have focused less on personality types and more on the variations
within individuals. Hence, I focus on emotion and feelings and to a lesser extent on moods,
but not on sentiment, traits of temperament or personality types.

Why is there so much terminological confusion in the literature? Perhaps it is because the
activities of the mind are so integrally related to each other. The experience of thousands of
generations has been distilled into ordinary words to describe parts of these non-material
activities, but the concepts overlap extensively, reflecting the connections between the
phenomena they describe. Jones (1995: 244) suggested that: "ordinary language often
reflects subtle distinctions in the functioning of the mind of which we are intuitively aware
but that we find difficult to translate into the more exact language of science, philosophy, or
psychology." Harré and Parrott (1996: 4) pointed out that striving for more precision may
be at the cost of neglecting the richness of the natural category. In attempting to categorize
more precisely, science may lose the connections: it needs to balance description and
analysis of the separate elements, with showing how the elements interact. Contributors to
Lewis and Granic (2000) present a dynamic systems picture of affect and affective
development, that, with careful translation, could provide the dynamic, interactionist and
integrated perspective that I want to share with teachers and students.

If teachers are to teach about affect, an issue is the extent to which their everyday
knowledge and language about affect needs to be modified by scientific knowledge and
language. Again the scientific confusion arises: Damasio asks if "any sensible definition of
emotion can be formulated, and if a single term remains useful" (1999: 340). However, he
continues to use the term. Isen (1984) was not sure whether the everyday language of
emotions sufficed for scientific study, and Griffiths (1997: 247), exploring this issue in

* To save space in what follows, I use the term affect after I have quoted a writer using one of the other
terms in a generic sense. For example, I may quote a writer speaking generically of emotion, but in my
analysis of that quotation I use affect.
depth from a philosophical and scientific perspective, concluded that the vernacular concept of emotion was no longer useful. However, as teachers and children are working with the vernacular, those of us wanting to assist teachers in this area are compelled at least to start with the vernacular, while also translating the philosophical and scientific issues into curricular and pedagogical practice. Several writers have explored the everyday meaning of affect: Davitz (1969) explored the phenomenological meaning of emotion to ordinary people; Kovecses (1990) studied the nature of emotion concepts; and a chapter of Jones (1995) discussed the everyday language of affect. Their work could be used to help teachers clarify the terminology. Mayer and Salovey (1997: 23) have attempted this clarification, providing simple definitions of affect, emotion, cognition and motivation in a glossary designed for teachers. However, their definitions do not distinguish feelings and moods from emotions - distinctions that would be important for teachers and students.

**Emotions, Feelings and Moods**

Many theorists either do not use the term *feelings* or use the term almost as interchangeable with *emotions*, (e.g., Snow, Corno and Jackson, 1996; Ablon et al., 1993; and even the philosopher, Wilson, 2001). Griffiths (1997: 2) suggests that this down-playing of feelings derives from the dominant, cognitivist paradigm within the philosophy of emotion that has generally eschewed focus on the introspection of sensations. Cognitivist psychology and educational psychology have also played down the importance of feelings. Many theorists see feelings as part of emotions, but others such as Frijda (1986: 251), clearly differentiate emotions, moods and feelings. Isen (1984: 185) suggested that emotions are intense, episodic and goal-related, whereas feelings are more pervasive, although she admitted this is an arbitrary distinction. She referred to moods as even more diffuse, generally longer-term states such as depression. I characterize Isen's view using a continuum of intensity and immediacy with feelings situated between emotions and moods.

Damasio explored emotions and feelings in detail. Among other things, "affect is the thing you display (emote) or experience (feel) toward an object or situation" (1999: 342). He saw emotions as internal and external bodily changes. He pointed out that some feelings are associated with pain or pleasure, others with emotions, others with the organism knowing its environment, but he proposed that "the term feeling should be reserved for the private, mental experience of an emotion" (42). He called moods "dragged-out emotions" (341). He saw emotions as likely to be triggered non-consciously, as shorter term, intense (although background emotions are less intense), outwardly directed and public, whereas feelings always follow emotions, are likely to be longer in duration, not so intense, inwardly directed, and require conscious focus to enter awareness. Through that conscious focus, feelings provide information about the body to the mind. Emotions and feelings can also
provide information and evaluations about the social world - mediated through bodily experiences and images - to the mind. He linked values and morality to emotions and feelings, suggesting that the "body images" of emotions and feelings "give to other images a quality of goodness or badness, of pleasure and pain" (1994: 159). I develop this link to values in later sections.

Reflecting this idea of affect as information, Laird and Apostoleris argued that: "all feelings, including affective feelings, seem to be information, or knowledge. They are distinguished from what we ordinarily think of as knowledge only by our inability to experience directly the sources of that knowledge" (1996: 290). It is interesting that in everyday life feeling is used often as a synonym for thinking, knowing or believing, as Smith (1990) discussed well. The title of Clore and Gaser's (2000) article is: Feeling is believing. Izard (1977) pointed out that the biologist might never understand life "as well as the poet who can feel what it is like," and he emphasized "the importance of affective experience even in the business of achieving understanding and knowledge" (141). All this suggests close connections between feeling and cognition, and also that beliefs may have strong affective elements. Perhaps knowing is as much affective as it is cognitive. As these matters are so central to my thesis, I now look more deeply at the links between cognition and affect, and I context that analysis within the tri-partite division of mind: affect, conation and cognition.

Affect, Conation and Cognition

According to Isen (1984: 182), the original intention of this tri-partite conceptualization was that experiences contain all three spheres, but unfortunately some psychologists tried to categorize experiences as primarily affective, conative or cognitive, leading to confusion in the application of the terms. Isen pointed out that behaviourism ignored affect, that affect emerged as the most ambiguous of the three, and that the distinction between affect and motivation (part of conation) was "fuzzy" (1984: 204). Isen and Hastorf (1982: 21) emphasized the mutuality and simultaneity of the three processes: the three may be "understood in each other's terms." Thus, while it is useful to analyse the characteristics of the processes and sub-processes separately, their essential integration must be remembered.

The Dictionary of Psychology, (1999: 179) sees cognition as a "general term for all forms of knowing and awareness, such as perceiving, conceiving, reasoning, judging, planning, remembering, and imagining." Other areas included in cognition are recognition, attention, learning, problem-solving, and decision-making. Conation is defined by The Dictionary of Psychology as "mental processes concerned with striving and purposive action" (199). Although many psychologists (for example, Mayer, 2001; and Weiner, 2000) prefer the term motivation to conation, I follow Cormo and Canfer's (1993) use of conation as the
generic term involving both motivation and volition. Motivation relates to how an individual responds to influences (such as drives, instincts, desires, motives, and affects) to act or not. Volition refers to the will of the individual in deciding to act and in completing the action. Volition clearly involves cognition, and many aspects of motivation also involve cognition, although motivation is generally seen as more affective than volition. As Izard (1977: 3) said: "the emotions constitute the primary motivational system for human beings." The terms motivation and emotion derive from the same Latin root: movere, to move, and Frijda's (1986) notion of emotions as 'action tendencies' is clearly in the tradition of seeing emotion as leading to or precipitating action. However, I see motivation and volition as more action-oriented than affect.

Clearly drives, instincts, desires, and motives have major affective components, and Simon (1986: 109) followed Piaget's convention of categorizing these "energizing aspects of personality" as affect. However, I categorize drives and instincts as conative as I see them as distinct from affect and more involved with action than affect. And I see motives and desires as conative as they are cognitive-affective processes also involved with action. I admit these are arbitrary categorizations but they allow me to focus the term affect on emotion, feelings, and moods, and to focus on its evaluative-informational role (in conjunction with cognition), more than its action-related role.

In the following comment of Izard we see both these evaluative and action-related elements of affect. He saw the emotions "as the chief determinants of the quality of life and as the main provider of blueprints for cognition and action" (1977: 139). When linked to 'quality of life', the emotions are related to values via cognition; when providing 'blueprints' for action, they are related to conation via cognition. Mowrer argued that the emotions also play an "indispensable role" (1960: 307) in learning. I believe Mowrer was talking not only about affect's role in motivation to learn, but also about its broader role in the construction of, and as a continuing part of an individual's knowledge. It is this broader role with which my thesis is most concerned.

Ultimately I want students to be able to guide their own values development. This would require them to have a full understanding of: i) how their values developed affectively and cognitively through socialization, and ii) of how they can continue to develop their values. My thesis concentrates on the former: on students developing a metacognitive-affective understanding of the interaction of affect and cognition in the socialization of values. The latter involves developing metacognitive-affective understanding of their conative abilities to influence the future development of values. However, a full elaboration of that conative approach would take another thesis.
For present purposes, I see conation relating to actions individuals intend or take based on their cognitive-affective evaluations of particular situations. I follow Simon (1986: 109; 147) in viewing affect and cognition as two different but generally interacting and generally complementary ways that the self understand its self and its situation.

The Interaction of Affect and Cognition

According to Frijda, Manstead and Bem (2000), while the effect of emotions on cognition has been discussed for centuries, in the last three decades more emphasis has been on the role of cognition in emotion (for example, appraisal theory), and only recently has serious scientific attention returned to the influence of emotions on beliefs. Their book explores the general proposition "that emotions can awaken, intrude into, and shape beliefs, by creating them, by amplifying or altering them, and by making them resistant to change" (2000: 5). However, they suggest that empirical research on this has only just begun and that:

*We know little about the scope of such effects: how far they reach, how deep they go. We know almost nothing about the conditions under which these effects occur, or ... whether such effects even exist. To the extent that they do exist, there is little insight into how they come about.*

*(Frijda, Manstead and Bem, 2000: 5)*

Given those limitations, I needed to look at a range of literature on affect and cognition seeking how they have been connected and how they might be connected: how affect becomes a component of some beliefs, especially values; how it assists those beliefs to develop and to be incorporated into memory; and, how affect is associated with beliefs being modified or not modified.

Whether moods, feelings or emotions influence cognition more or differently is a relevant question. Isen suggested that unlike strong emotion that interrupts thought and behaviour, feelings "gently color and redirect ongoing thoughts" (1984: 186). It appears that some emotions overwhelm cognition, but that other emotions, feelings and moods may influence or become part of cognition. Contributors to Forgas's (1991; 2000; 2001) books provide evidence of the interaction of moods and beliefs. However, as I have found no research directly comparing how the different types of affect interact with cognition, here I operate on the assumption that beliefs are affected to some degree by each of the various types of affect: emotions, feelings and moods.

There is extensive debate over which of affect and cognition comes first and which is the more significant, (for example: Clark & Fiske, 1982; Lazarus, 1984; Cole, 1991; Ratner, 1991; Barrett, 1994; van Dam & Steutel, 1996; Dalgleish & Power, 1999; Forgas, 2000; 2001). Zajonc (1980) is the most often quoted proponent of the idea that emotion can be independent of cognition. Izard (1977: 63) agreed, but pointed out that after the emotion
process starts, the cognitive system quickly comes into play, and "cognition interacts with the emotion process almost continually," and the balance between them or the dominance of one helps determine personality functioning. LeDoux's (1998) work suggests that although emotion evaluations may be instantaneous, thinking is likely to modify them thereafter.

Vanman and Miller (1993) distinguished between two broad categories of theories: appraisal or constructivist theories that see cognition causing emotion, and biosocial theories that see emotion causing cognition. They suggested both processes operate in intergroup relations and stereotyping. Like them I use both sets of theories. Frijda (1986: 194) argued that cognition is both a determinant and a constituent of emotional experience. It is a constituent because the meanings of the situation are emotional for the appraiser: he called these cognitions 'emotional'. Mathews said that emotional reactions are rapid because they result from automatic appraisals that are equally rapid: "the cognitive processes involved are involuntary and non-conscious" (1993: 493). This seems to confuse cognition and affect, but perhaps it may not be possible to distinguish the two at the unconscious level. I discuss the issue of the non-conscious later.

For my purposes, the exact sequence is not crucial as, generally, cognition and physiological changes are experienced as happening together. However, it is a debate we can share with children. I take the position that primary school children are interested in and capable of understanding many of the issues discussed here. For example, they could discuss whether their body (face, stomach, heart, etc.) or their mind reacts first to a mad dog, an ice-cream, the sight of a hurt animal, etc. Such discussion would assist the development of their understanding of their affective life and its interaction with their cognitive life. Similarly, ideas such as Averill's 'intellectual emotions' could be translated for discussion with children.

Averill (1996) suggested that emotional theory has concentrated too much on a few emotions such as fear, leading to overemphasis on physiological change and expressive reactions, and to unnecessary debate over whether emotions are cognitive or not. Averill claims that "intellectual" emotions, such as long term fear and its opposite, hope, may not involve physiological responses. He challenged the "primitivism" that permeated philosophy and psychology, pointing out that emotion had been contrasted with volition. and thus was viewed as impulsive and passively experienced. Emotion had also been contrasted with reason, thus playing down its cognitive aspects and making it animal-like, whereas humans exhibit a far greater range of emotions than other animals. Averill asserted that this "cognitive core" of emotion, not physiological or behavioural responses, "forms the primary basis for distinction between commonly recognized emotional states...
cognitive appraisal is not simply an ancillary precursor of emotion, it is an integral part of what we mean by 'emotion'" (1996: 222).

The final words in the debate over the relationship between affect and cognition go to its main protagonists. Zajonc (2000) uses neuroscience research evidence to provide a convincing case for the separability of affect and cognition, whereas Lazarus (1999) - also convincingly - claims that cognitive appraisal and motivation are necessary for emotion. For my thesis, the most important point is that of Lazarus: emotion and cognition are interdependent most of the time. We analyse their characteristics separately to understand their particular contribution to the whole process of how the human being relates to itself and its environment, but full understanding of that process requires synthesis: we have to see how affect and cognition interact in real situations. As Magai and McFadden (1995:14) said: "information processing is saturated... with affect and... cognition and emotion are indissociable processes of the same dynamic system." I suggest that some appraisals may be categorised as affective and some as cognitive, but most should be seen as more or less affective and cognitive. This is especially the case for valuing. Teachers need to acknowledge how important affect is in valuing and they need some understanding of how affect and cognition interact in the development of children's values in real situations.

Damasio's work (1994; 1999) in this area is important. His 'somatic-marker hypothesis' suggests that emotion is integral to the processes of reasoning and decision making. He highlights a collection of systems in the brain dedicated to reasoning and decision making with a special emphasis on the personal and social domain, and also involved in emotion and feeling, and in processing body signals. He does not see emotion as a substitute for reason, nor as deciding matters except in extreme cases, but he sees well-deployed emotions providing support for the smooth operation of reason. His evidence suggests "that selective reduction of emotion is at least as prejudicial for rationality as excessive emotion" (1999: 41).

I paraphrase this to suggest an hypothesis linking affect to memory and learning: 'reduction in affect is at least as prejudicial for learning and memory as excessive affect.' The amount and kind of affect needed for particular types of learning needs research. I am not just talking here of the motivation studies that show a relationship between optimum arousal and learning, but rather about how affect becomes structured into an individual's knowledge. Drawing upon McGaugh's studies showing that emotion assists learning, Damasio (1999: 295) said that we store in memory our emotional reactions to an object, and when we recall the object we also recall and can re-experience those emotional reactions. Damasio's work complements that of Wyer and Srull (1989: ch. 12) on cognition-affect interaction and the role of affect in memory, and has important implications
for my thesis related to the role of affect in the formation and memorization of values during socialization, and the importance of affect in further development of values.

Before concluding this discussion of the interaction between affect and cognition, I mention Mackie and Hamilton's (1993) valuable edited volume exploring the ways that affect and social cognition interact in stereotyping. Each chapter is relevant to my thesis, but here I highlight two. Dovidio and Gaertner (1993) show how strongly affect influences perception, expectations, and interactions, and creates self-fulfilling prophecies. They also describe cognition-affect independence in intergroup perception: I truly believe another group is equal to my group, but I do not feel it. They argue that changing beliefs is not enough, affects must also be changed. Devine and Monteith (1993) explore methods for affecting that change, using cognition to regulate the affects involved. While they do not mention metacognition as a method, I see it as a logical extension of their ideas.

At this stage it is appropriate to discuss whether to call metacognition about affect meta-effect. While Damasio (1999: 282) made an interesting case about the importance of "feelings of feelings" to the sense of consciousness and the self, I do not see this as similar to the cognitive process I refer to as 'metacognitive-affective'. Mayer and Salovey (1997: 23) suggested that Meta-Mood Experience is a "reflective thought or feeling about an emotion or mood, such as 'I don't like this feeling'." While it could be said that the not-liking is a feeling, I suggest that when we regard it as reflective thought about the original feeling, it is better to label this process: metacognition about affect as this reflects the cognition involved in thinking about and regulating affect.

Now I look at the functions of affect, as teachers and students will benefit from having some understanding of those functions.

The Functions of Affect

Oatley and Johnson-Laird (1998) suggested that, in the evolutionary view of the functions of affect, each emotion served different functions related to survival and reproduction. However, in the modern world those functions have become myriad and complicated. For example, Isen (1984) reported that happy people are more likely to solve certain problems: happiness focuses attention, helps overcome setbacks, and creates optimism, openness and trust, (although I question whether happiness might be a correlate not a cause). Jenkins, Oatley and Stein (1998: 243 and 288) discussed evidence that some negative mood-states assist cognitive tasks calling for persistence and careful analysis.
According to Lazarus (1998), appraisal is a key part of the functionality of emotions. The primary evaluation based on minimal cues and drawing on memory about the environment, people and relations, is almost instantaneous and gives rise to a particular emotion and associated action. Secondary appraisal and subsequent reappraisals involve cognition, and concern coping options, blame or credit, and what action might prevent harm or produce benefit. It can also involve cognition "to regulate emotional distress or protect one's ego-identity," which includes "self- and social esteem, moral values, ego-ideals, meanings and ideas, other persons and their well-being, and life goals" (1998: 41). Thus, secondary appraisal is a complex affective-cognitive process involving the self, others and morality.

Morillo (1995: 20) suggested that as affects evolved in a simpler world, some may now be counterproductive. Frijda (1986: 475) admitted that there are "many obvious non-functionalities of emotion": behaviour disturbances, irrational, useless or damaging emotions such as jealousies. Many dysfunctionalities come from conflict between concerns, especially between long- and short-term concerns. Because it originated for quick response to minimum information, emotion is more focused on short-term gain. Inevitably it will be wrong sometimes, but then other parts of the system can fine tune. Also, in some social situations such as dysfunctional families where the person is in a lose-lose situation, the emotion system is past its functional limits.

Emotions also play a role in social life. Jenkins, Oatley and Stein (1998: 239) hypothesized that positive emotions provide structures for cooperation and negative emotions structure groups in other ways. Anger is acceptable and potentially useful in individualistic Western societies, but not in more interdependent societies. In hunter-gatherer situations contempt was a way of binding small groups together against outsiders. An example of this can be seen in Sherif's (1998) life-like experiments at summer camps: eleven year old boys arbitrarily placed in two groups would spontaneously develop strong hostility, even prejudice, towards the other group. Accurate information did not overcome the prejudice, and opportunities for contact were opportunities for further conflict. Sherif found that what worked was collaboration on joint tasks in which they come to rely on each other and trust each other: a lesson for peace-makers as well as teachers. It is difficult to see what positive role contempt plays in modern society, and easy to see its negative effects, from teasing to ethnic cleansing. Perhaps more understanding of its primitive origins may enable us to avoid its corrosive effect.

Jenkins, Oatley and Stein (1998) also suggest emotions help us know what we value, make our goals clear, and help us manage our relationship with our environment. Thus the functionalist approach focuses on intentions and meanings, on a whole social system of emotion. As Jenkins, Oatley and Stein point out: "Emotions are intrinsically relational"
In the complex modern world, the functions of emotions have proliferated to help us meet needs, goals, wants, desires, aspirations, hopes. Children will benefit from learning about how their emotions function and disfunction socially.

In the next but one section I look in more depth at theories focusing on social aspects of affect, but first I look at other theories of affect, some of which I have already mentioned.

Theories of Affect

Strongman (1987) surveyed competing theories of emotion back to Darwin, James and Lange in the 19th century. It is neither possible nor necessary here to compare and criticize most aspects of the theories. Nor do I attempt a synthesis. My purpose has been to understand what those theories have to offer theory, research, pedagogy and curriculum design in the values education area. The underlying issue is understanding how affect operates in learning and how teachers can take that into account in their values education. Given the (always) incomplete nature of theory, I suggest some aspects of the theoretical debates themselves are worth reporting to teachers and even to children, and in this review I point out a number of examples.

Simon (1986) criticized most psychological theories for concentrating on the abnormal and for their failure to adequately explain affect, and especially, values. He drew upon elements from psychoanalytic, behaviourist, humanist-existential, and other theories to develop his own integrated Cognitive-Affective-Developmental-Interpersonal (CADI) Theory of Personality that has much to offer as a foundation for my thesis. He argued that mature, healthy individuals are also moral because they understand the need for balance between personal and social needs. Their health also derives from the desire to continue learning, and even to be metacognitive (1986: 257). Mature individuals use Piagetian formal operational thinking in relation to people as well as to objects. They think scientifically about themselves and others, but do so with compassion. Their formal operational thought is informed by mature understanding of the role of affect. He does not use the term, but I suggest that Simon's mature individual has cognitive-affective intelligence or even CADI intelligence. Later I look at recent work on emotional intelligence and multiple intelligences.

Simon did not see most adults as having achieved cognitive-affective maturity. In endeavouring to meet their personal needs and solve their external problems, most have used defences that have caused them to become fixated and even to regress. He argued (1986: 126) that fixation and regression can be related to individuals' cognitive-affective interpretations of their everyday situations. Learning is involved in and results from needs and problems being at least understood, if not met and solved. Imagination and fantasy can
play both a positive and a negative role in these processes. Defences "are acts of the imagination in which the individual confuses imagination and reality" (179) when attempting to solve problems or meet needs. He sees these defences as habitual: having been employed they cause distortions of subsequent appraisals of situations and hence require further defences to be employed. Thus they can be built into the personality and leave the personality itself distorted, even abnormal. As a psychoanalyst, Simon is concerned with personality repair.

However, as an educator, I am concerned with defences in a more limited way: with how they are built into beliefs and with how defences can be overcome in order to change beliefs. Why does an individual stick dogmatically to beliefs, and then sometimes change those beliefs dramatically? I believe that some of the factors that Simon used to explain personality can be used to explain these variations. A major concern for the individual is to protect the self, and thus when its beliefs are threatened, defences such as denial or selective inattention are utilized. Simon suggested that defences may even lead to feelings of goodness, moral pride, and an increase in self-esteem. Even mature, balanced adults sometimes do not face reality. We all use defences: "All individuals enter situations that will arouse intense emotions and lead to immature thought" (1986: 191). He makes the point that it is significant others who arouse such emotions, not impersonal objects. In children still developing balanced and flexible affect and cognition, defences are frequent and normal.

The question for me is how teachers can assist the development of such balance. Simon's theory has added affective and situational elements to Piaget's cognitive and moral development theories. He also sees the development of a future perspective as important and within that hope and faith are crucial. I believe that education theory has been too narrowly based on behaviourist, cognitivist and developmental psychology. It needs a broad cognitive-affective-values base that Simon has assisted with, plus a social situational, and cultural, grounding. I argue that teachers would benefit from integrated understandings of all of these perspectives, (when we develop them), and that they can share much of those understandings with students in a metacognitive approach to values education.

Kelly's (1951) ideas could be built into that approach. He suggested that people construct theories to explain their world, and their theories change as they are exposed to more information and experiences. On the other hand all people are dogmatic sometimes. His concept of 'permeability' - how open a person's constructs are to his or her experiences - helps explain why some ideas change and not others. But I believe that the amount of affect built into the constructs and how close they are to the self are also important. Simon (1986: 94) suggested that: "Doubting one's personal construction of the world leads to profound
mental changes, great growth, or psychological breakdown and pathology." Thus a certain degree of risk-taking is required: it is not easy to doubt one's beliefs when they are part of a belief system that is affectively built into one's sense of self. To sell the student on the risk, we need to sell them on the potential for growth. I return to this later.

Within the philosophy of affect, Griffiths (1997) was critical both of 'feeling theory' based on introspections, and of the dominant cognitivist paradigm, based on conceptual analysis of folk emotions. However, I argue that teachers can help students introspect feelings and analyse concepts, and can make students aware of findings from empirical research that conflict with common-sense. Griffiths saw as important both 'affect program theory' based on empirical research on evolution, the mind and the brain, and 'social construction of emotion theory' based on social and cultural research. I look at the former now and at social theories later. Amongst affect program theorists, Griffiths focuses on Ekman who identified six fundamental human 'affect programs': surprise, anger, fear, disgust, sadness, and joy. Griffiths described affect programs as complex, coordinated, and automated, biologically based, response patterns, "usually taken to include (a) expressive facial changes, (b) musculoskeletal responses... (c) expressive vocal changes, (d) endocrine system [and hormone] changes, and (e) autonomic nervous system changes" (1997: 77). He also suggested that "emotion feelings and cognitive phenomena such as the directing of attention" be added to this list.

Amongst affect program theorists I focus on Izard (1977) because he attempted to integrate psychoanalytic, learning theory, cognitive, and phenomenological perspectives, (although his idea of a phenomenological approach is limited to self-ratings on dimensional scales.) In addition, Izard provided a useful structure within which to place much subsequent research, and his theory also allows me to make links to cognition and to valuing and values development. His original 'differential emotions theory' suggested ten fundamental emotions each of which varies along a continuum of intensity, for example, interest-excitement; enjoyment-joy; anger-rage; shame-humiliation; guilt-remorse. Frijda (1986) argued that the evidence for some of these is weak. I do not try to resolve the continuing debate about the number of such affect programs or emotions; rather I focus on the aspects of each theory most relevant to my thesis.

Izard postulated "the continual presence of emotion in consciousness" (1977: 59), suggesting that often what is noticed is a new emotion, activated by external events, or by internal processes such as chemical changes, imagination, anticipation, and memory. He saw facial responses as primary, followed by awareness of the experiencing of emotion, visceral and other bodily responses, and cognition about the whole experience. The extensive debate (Magai & McFadden, 1995; Fridlund & Duchaine, 1996; Ekman &
Friesen, 1998; and Russell & Fernandez-Dols, 1998) about the role of facial expressions continues and, given that children learn much about their own and others' emotions through facial expressions, that debate could be translated for teachers and students.

Izard saw interest as an emotion that has an important role in learning and in the development of beliefs and of the self. He claimed that interest helps explain curiosity, fascination, animation, enlivenment, exploration, adventure, problem solving, creativity, and the acquisition of skills and competencies: its significance "in individual development, personality, and human relations can hardly be overestimated" (1977: 223). Frequently recurring interest-cognition interactions "form the affective-cognitive orientations or structures that characterize the constructive and creative activities of the healthy individual" (212), including epistemic behavior and learning. Izard's idea of the habitualizing through repetition of affective-cognitive links might help explain why some beliefs are so persistent. Izard saw Maslow's primary creativeness phase as the exciting, initial part, whereas the secondary phase is the long-term, hard work phase, in which interest must "counteract fatigue and negative emotions" (231). I suggest an understanding of the role of interest and its relationship to other affect and to cognition may be built into the metacognitive approach I am proposing. I now look at Izard's ideas connecting affect and morality as they also could be built into that approach.

Izard (1977: 421) quoted Sinnott who wrote that true morality must have "a fervor of emotion" or it is "nothing but formal rectitude." While Izard suggested that all the emotions may play a role, he saw guilt as "the emotion most essential to the development of the affective-cognitive structures of conscience and the affective-cognitive-action patterns of moral behavior" (421). He saw guilt as innate, but each culture socializing its members to its specific rules, ethics, morals, and standards. The development of guilt requires "a sufficiently self-critical ability to perceive discrepancies between actual behavior and internalized values" (422). Guilt stimulates "cognitive preoccupation with the wrongdoing and... schemes for setting things right" (435). Guilt does not imply blind compliance: reflection is involved in guilt, although left unguided, that reflection can become preoccupation and can lead to other negative affect. I suggest that in the upper primary school there is potential for that reflection to be tutored and built into a metacognitive process that can help students to develop their understanding of guilt and of conscience. Wilson (2001) also discusses the role of shame and guilt in moral development, but he suggests that moral educators might better use fear, desire and love in their work. All these ideas are worth considering for my approach to values education, as are many of Frijda's ideas.
Frijda's (1986) information-processing model of emotion suggested that emotions are seen as responses to either internal or external stimuli whose meaning the individual appraises. Frijda also pointed out that emotions are seen as physiological upheavals, as superfluous, disruptive or ineffectual behaviour, and as subjective evaluative experiences. Thus emotions are related to norms and values, to modes of interaction, to cognition, and can involve reflective awareness and intention. There can be *irreflexive experience* of emotions that involves perceiving a situation's emotional meaning directly without reflection, or there can be *reflexive experience* that involves reflection on the emotional experience and can focus on the self as 'experiencer,' or on the self in relation to the object causing the emotion. While the metacognitive reflection I propose involves mainly this latter, reflexive experience, I suggest that students can also be made aware of their capacity to perceive emotional meaning without reflection. I return to this later.

According to Frijda, feelings imply acceptance or not of an object, whereas emotions suggest action. When we say: 'I feel angry' as distinct from 'I am angry,' there is less pressure for action. More control is experienced in feelings than in emotions. Emotions can become feelings through reflecting on the action tendency rather than carrying it out. He suggested that under particular conditions such as interruption, urgency, or difficulty, marked arousal and overt emotional action emerge from continuous "action readiness changes that are largely tentative, subdued, internal - true changes in readiness only" (1986: 478). He provided the metaphor of a stream whose flow is normal emotional readiness to respond and responding to life's concerns. Rocks sticking out in the stream are the 'excited,' sometimes upsetting, emotions. He saw emotions continuously monitoring how well one's concerns are being met and setting up 'tendencies' for action. I see this metaphor being shared with children to help them understand their emotions, and ultimately regulate them more effectively.

Frijda's discussion of concerns makes links between affect and values. He saw concerns as motivational constructs similar to needs, motives, and goals. Curiosity is a basic concern associated with emotions such as interest, fascination, excitement, and joy. Values such as justice, freedom, politeness, sincerity can become concerns. Emotions can arise when a prior concern is activated by a situation, and feelings "monitor the state of satisfaction of the organism, with respect to concerns... in a way that is accessible to reflection" (1986: 252). Frijda suggested that offences against values can enrage people even more than personal affronts, causing them to kill or risk their lives. He speculated that the violence associated with value-dependent emotions is caused by "awareness of social support or suprapersonal justification" (354). He suggested that the 'unselfish emotions' such as compassion, pity, and joy for others, derive from "specific sensitivity for distress
expressions in others" and "from the individual's own concerns, either directly through what the other means to him or by proxy, through empathy or identification" (355).

Frijda (1998) suggested twelve 'laws' or empirical regularities of emotions, for which he admitted there was more or less evidence. While all twelve have relevance to my thesis, especially to the question of regulation of affect (which I discuss later), I have space only to briefly discuss the most relevant. One law says the intensity of emotions corresponds to the degree to which eliciting events are appraised as real. Thus, words are less powerful than pictures or events seen or tone of voice; and, seeing and feeling mean more than knowledge. Until we feel that knowledge has value to us, it is mere information: we might 'know' that all people are equal, but until we feel it, that knowledge does not affect us. Vivid imagination can elicit strong emotion and thus make 'real' a situation only experienced vicariously.

Another of Frijda's laws refers to emotional events retaining "their power to elicit emotions indefinitely, unless counteracted by repetitive exposures that permit extinction or habituation." Emotions "surge up when stimuli resembling the original stimuli are encountered or when aroused by 'unbidden' images" (1998: 279). This reminds us that emotions are linked to memories and the unconscious. His last two laws refer to our tendency to minimize the negative load and maximize the emotional gain by viewing the situation differently. I suggest that if children are given some knowledge of Frijda's laws, they could apply this metacognitively to their own affect in values decision-making situations.

From his neuroscience perspective Damasio (1994; 1999) complements the theories looked at so far. He explored the role of emotions in the development of the mind, consciousness and the self. He distinguishes (a) six innate 'primary or universal emotions', (Ekman's six); (b) many 'secondary or social emotions', such as embarrassment, jealousy, guilt, pride, (some of Izard's ten); and (c) 'background emotions', such as well-being or malaise, calm or tension, discouragement, enthusiasm, cheerfulness, anticipation or dread. All these emotions provide "the highly constrained ebb and flow of internal organism states, which... continuously signalled in the brain, constitutes the backdrop for the mind, and, more specifically, the foundation for the elusive entity we designate as self" (1999: 30). Whereas other writers discuss the self without explaining it or even questioning its nature or source, Damasio has tackled these questions directly and remarkably successfully. Many of his ideas could be translated into terms understandable by children.

I now look at Morillo's theory because it links affect, value, biology and culture. The role of value is central to Morillo's theory, but because value is so linked to affect in her
discussion, I discuss it here rather than in the Values section. Morillo suggested that the individual experiences 'intrinsic good' or 'intrinsic bad' when 'brain reward mechanisms' or 'aversions' - electrical and dopamine brain stimulation - provoke feelings of pleasure or pain. These Reward Events or Aversions operate as intrinsic good or intrinsic bad independent of particular motivations, desires, thoughts, actions, or objects. However, through conditioning, all of the latter can become connected with Reward Events or Aversions. Affects involve these Reward Events or Aversions and become connected to qualities of goodness and badness. Thus Reward Events and Aversions acquire value relative to the individual and to the culture. Affective states connect intrinsic value to cultural normative values. Value becomes attached to, and apparently inherent to, fairly stable external goals. Ethics, norms and morality are "highly contextual, social, and related to competing human practices" (1995: 104), and only contingently connected to 'the intrinsic good'.

According to Morillo, what constitutes a good life is a cultural construct built on the biological, physiological reality of the Reward Event. Thus, "there are many different kinds of good life" (1995: 140) associated with different cultures. She points out that we can recognize this relativity for others, but for oneself, there is only the good life based on one's own affective responses, one's experiencing of Reward Events. We feel we are right. This sounds like extreme relativism, but Morillo is also concerned with "how or whether people come to accept norms, as well as with which norms they accept" and how to bring young people "into a moral community" (155). She asks important questions about the kind of affective bonding needed between adult norm-givers and the young, and which experiences and activities become associated with positive or negative affect. She questions if cognitive instruction is sufficient. She does not answer her questions, but implies that her theory could help find the answers.

Morillo saw herself in dispute with cognitive science and philosophy of mind "with their emphases on informational states or states with intentional content" (1995: 159), whereas she emphasised "the key causal role of affect" (143). She saw people as much less rational than most theories. However, I suggest that Morillo's provocative ideas complement cognitive science and philosophy of mind, and, with them, contribute to a theoretical foundation for the metacognitive-affective values education I propose.

Morillo also talked about affect as a social and cultural construction, a notion important for my thesis because I want teachers and students to understand affect as a social and cultural reality that exists separate from the individual's psychological and physical experience of affect. They need an understanding of how affect is constructed and changed in the social and cultural world. I look at that next, and then I look at how individuals learn through
socialization to mesh the social and cultural aspects of affect with their own experiencing of affect. Such understandings provide foundations for students' metacognitive understanding of the interaction of affect and values.

**The Social and Cultural Construction of Affect**

Ginsberg and Harrington (1996: 253) see emotions as biosocial phenomena in which "displays, behaviors and physiological reactions" co-occur in social situations. They suggested that once a person 'embarks on an emotional act' two factors operate: one is the person's own "skills at being angry or sad or happy or proud;" the other is the social environment: their partner acting "to facilitate or to damp the further development of that episode" (253). Thus affect is co-constructed.

Affect is constructed in social situations that are themselves part of larger cultures. Averill emphasised that "emotions can only be understood as part of a broader cultural matrix" (1996: 36). As Tomkins (1998) showed, there are cultural scripts for familiar situations involving rules for interpreting, responding to, and controlling emotions, for example, how, or even whether, we express being 'overcome' by an emotion varies in different cultures. Thus emotions do not just happen to an individual, "rather, they are acts which a person performs" (Averill, 1996: 224). Averill also pointed out that sometimes the person does not accept responsibility for the act: the initiation of the response is pushed from consciousness, and the individual may use an emotion as a rationalisation of his or her response: 'anger made me do it!' If others accept the explanation, it is culturally sanctioned.

Generally cultural scripts are agreed upon and taken-for-granted, but in our culture many such scripts are under challenge. As Magai and McFadden (1995: 235) pointed out, scripts tend to be selective, incomplete, and subject to change. Thus there may be tension between society's definition of the situation and individuals' scripts, for example, the question of diminished responsibility due to provocation has become a highly contentious issue in law. Lutz (1996) found contradictory ideas built into folk theories of emotions (elaborated scripts): a positive view contrasts emotion with cold alienation, relationship with estrangement, and free nature with restricting civilization. A negative view associates emotion with 'the female': like the female, emotion is seen as irrational, chaotic, subjective, physical, "unintended and uncontrollable, and hence often dangerous" (151). Lutz even found that this negative view underpins much academic discourse on emotion.

We can partly escape the confines of our own cultural perspectives on affect by looking at other cultures' very different emotional scripts. Emotions are sometimes conceptualized differently at different times in history. According to Demos (1996), in the New England
region of the United States, shame was used more in social control in the colonial era, and
guilt more in the 19th century. Harré and Parrott (1996) pointed out that in the present-day
United States regret is played down as unhealthy and unproductive in a future-oriented
society. Embarrassment peaked in 19th century England, but is still more important in
England than in France. Grief peaked in Victorian England, but in the 20th century United
States, it declined and was even seen as pathological. Thus culture influences both the role-
playing of and even the experiencing of emotions, and the scripts themselves change as
they are repeatedly interpreted in myriad social situations. Communication and
interpretation are central to all these construction and change processes, and an
understanding of the personal, social and cultural aspects of how affect is communicated
and interpreted is important for teachers and students in my model.

Oatley and Johnson-Laird's 'communicative theory' explores the expressive behaviour that
communicates emotions to other people in social situations. They see emotions as relating
to goals and "typically caused by cognitive evaluations that may be conscious or
unconscious" (1998: 85). More than one evaluation of a goal situation can cause mixed
emotions. Individuals may not be aware of their emotional state, or, if aware, may not realize
its cause, but their emotions may communicate their emotional state to those around them.
Oatley and Johnson-Laird suggested that emotional responses are mediated by mental
models; for example, models of care givers and of relationships play an important role in
the healthy development of emotions and self esteem. They also suggested that self-
awareness depends on models of the self that "are essential to meta-cognition, and indeed
for the maintenance of the sense that one has a coherence and integrity over time. Yet, these
models of the self are also always incomplete and sometimes erroneous" (1998: 91). I
discuss the role of models further in the metacognition section later, but here I point out
that teaching children about these models, about emotional scripts and about the
communicative aspects of affects, may improve their metacognitive knowledge about affect
and their potential to regulate the influence of their affect on their values and valuing
behaviour.

Many other researchers look at the involvement of affect in communication, (for example,contributors to Donohew, Sypher and Higgins' edited 1988 book), but here I focus on
Buck's (1984) work. Buck explored the interaction between spontaneous communication
involving biologically based emotional expression, and symbolic communication involving
socially based, specific propositions. Symbolic communication is always accompanied by
spontaneous communication: the two modify each other in both the person sending and the
person receiving messages, making for a very complex system. Both are equally important,
although previously the spontaneous stream was seen as a primitive hangover from pre-
symbolic times. Today its influence is acknowledged, for example, in the significance placed on non-verbal communication in social situations.

Buck looked at issues such as 'sending accuracy', inhibition, deception, individual differences in non-verbal receiving ability, mixed messages, gender factors, facial expressions, and the role of emotion communication in regulating social interactions. He provided a fascinating example of how subtle yet powerful is spontaneous emotional communication (1984: 303): a 3 second film clip shows a father waving good-bye to his daughter at the kindergarten door. Only when the film is slowed down can his momentary 'pushing away' hand signal be seen, and yet the child reacts to it. Possibly neither were consciously aware of the action. I suggest that teachers could discuss examples such as this with their students as well as many of Buck's other insights. Increased knowledge about affective communication is likely to lead to improved capacity to interpret and regulate affective behaviour.

Buck makes the surprising claim that the Holocaust was mainly the result of cognition and conformity to social rules. I argue that evolutionally old emotions like disgust, fear, or contempt were also involved. If we are to minimize conflict - both large-scale and also amongst children at school - we need a fuller understanding of the interacting influence of culture, thinking and affect on individuals and on groups, and an understanding of the affective-cognitive-social-cultural operation of values. I now look in more depth at talk about emotion in everyday social situations.

Lutz (1996) explored the way gender influences talk about emotion: she found that women spend twice the time talking about emotional control than men, but this 'rhetoric of control' is common in both groups. Surprisingly she did not find other differences in men's and women's emotion talk, but she found the everyday stereotypes - that women express all the emotions except anger more often than men, and all emotions except anger are disapproved of in men - are "thoroughly learned by American children as early as the preschool period" (1996: 161). It is important that values education teachers are aware of how emotions are 'gendered' in folk ideology and in values systems through socialization. I look at the socialization of affect in the next section.

Lewis and Saarni (1985) and Malatesta and Haviland (1985) suggested that emotional experience requires a vocabulary of emotion. Heelas (1996) reported that some cultures have no terms to describe inner states, and others have very limited emotional lexicons, whereas English has about 400 and Taiwanese about 750 terms! He pointed out that some cultures "so manage things as to diminish, even do away with, distressful emotions such as 'jealousy' or even 'anger'" (1996: 174).
Heelas made important links between emotions and morality: he claimed that how people talk about their emotions in connection with moral events in particular social settings actually influences how they experience the emotion. So the emotional script unfolds according to the particular participants and particular moral situation. Heelas also pointed out that the moral significance of emotion talk varies in different cultures. Some adopt a 'Dionysian' approach to emotions, enhancing many emotions, seeing them as normal and desirable, while others adopt an 'Apollonian' approach believing emotions need to be diminished or controlled. However, Heelas suggested this distinction is too crude to distinguish "the intricate ways in which moral assessments of the emotions vary from culture to culture" (1996: 179). In some societies there is little talk about the psychological aspects of emotions: they are seen as highly social, and seen to bind the emotional life of the individual to the moral order.

Heelas admitted that the significance of emotion talk is far from understood. He speculated that emotion talk acts as a spotlight highlighting culturally significant aspects of the experience. Emotions not thus highlighted atrophy. Emotion talk is more common in certain situations and in certain groups. It can be ritualized. Over time, emotion talk reflects changes in the culture and thus, changes the emotions themselves. Emphasising the links between emotion talk, morality and notions of the self, he concluded that emotion talk can function to keep emotional and social life in alignment. Perhaps this is what is happening in western societies at present amongst young people where emotion talk appears to be very prevalent.

Heelas' survey of the enormous variety of emotion across cultures suggests it is crucial for teachers to have a cross-cultural and constructivist perspective on affect, first so they can 'escape' intellectually their own narrow experience of affect, and second so they can assist children to do so. A social and cultural understanding of affect complements the cognitivist, biological and philosophical perspectives. These links between affect, the social and the self are well made in the social phenomenological perspective. I now look at it briefly.

In his extensive analysis of affect, Denzin (1984) focused on both the inner phenomenological dimension and the outer interactional dimension of emotions. He explored in depth the personal and social meaning of emotions and feelings, and the interpretive and relational processes involved. He suggested that emotions can be seen as "linguistic phenomena": there are "grammars of emotional expression and... vocabularies of emotional understanding that accompany everyday emotional experience" (1984: 54). He highlighted connections between the body, cognition and affect, and between imagination, empathy, emotionality, and morality. For Denzin, "emotion is self-feeling"
(49), and the person comes to understand its self "as a moral, caring being" (92) through experiencing and interpreting its emotionality. Denzin saw the moral and emotional self as inextricably linked: "Moral self-consciousness is at the core of the person" (83). I also mention Denzin's idea of self-justification because it partly explains why people do not always behave consistently with their values: "self-justifications may follow an emotional episode, may be expressed during emotionality, or may be offered beforehand, as preinterpretations" (53).

Drawing often on poets, novelists and philosophers, Denzin's writing is rich and dense, and at times borders on the poetic, for example: "Cognitions, thoughts, and meanings are lodged in the horizons of emotionality" (1984: 241). However, unlike poets, Denzin explains his meanings and provides numerous contexts and analyses of everyday emotional experiences and consciousness. A good example is his discussion of the vocabularies needed to describe and understand the different types of feelings he identifies (126). In my metacognitive approach, some of these could be shared with children as could many of Denzin's other insights, suitably translated.

Denzin also drew upon scientific analyses of affect from James and Freud to Ekman and Izard. His overall analysis of the phenomenology of and the relationships between emotions, emotionality, feelings, consciousness, the self, and the other, provides a phenomenological basis for - and in many respects pre-empts - Damasio's recent neuroscientific analysis of the same issues. It also provides a social phenomenological basis for a constructivist approach to education in which individuals are negotiating and constructing their own selves and their understanding. It is fundamentally a humanistic and optimistic perspective that respects everyday life and language, and yet is open to empirical evidence that challenges the everyday perspective. However, I agree with Fell (1977: 282) that neither phenomenology nor any other theory can provide a complete explanation of affect: I see them complementing, not excluding, each other.

My thesis sees students developing heightened metacognitive knowledge of their selves, their affect and their values, and of how all of those have developed through socialization. I noted an example of this above: gender relations are built into value systems to which children are repeatedly socialized in emotional ways. As part of their values development, we can help children understand how the practices got into their heads, and how they operate now in their lives: we develop their metacognitive knowledge about their socialization. I now look at the literature relating to the age-related development of affect through socialization, as an understanding of that process is central to my metacognitive-affective approach and crucial for teachers and students using this approach.
The Development and Socialization of Affect

Denzin (1977) explored socialization in depth, but in his 1984 book he showed how the moral and emotional self develop through socialization in everyday social interactions. He emphasized the emotions as relational phenomena learned in social situations with "emotional associates" (1984: 92). Emotions have a history of development that is "part family, part sexual, part educational, part occupational, and part friendship" (52).

There has been much recent work on the development and socialization of affect in infants and very young children, for example, Schore (1994), Jones (1995), Eisenberg, Fabes and Losoya (1997), Lewis et al. (1998), Jenkins, Oatley and Stein (1998), however, as Magai and McFadden (1995) pointed out, most theories address only the earliest stages of emotional development. Here I focus more on the affective development of children of primary school age. I start with discussion of the importance of emotion talk to the socialization of emotion. This was well documented by Gottman, Fainsilber-Katz and Hooven (1996). Dunn, Brown and Beardsall (1998) reported that three year olds exposed to more emotion talk were better attuned to others' emotions at age six. Also children were more likely to discuss the cause of feelings when they were in dispute with others, for example, over behaviour, beliefs, ideas and memories. (Perhaps teachers should promote such disputes in their classrooms?) I see adolescents' discussions about emotions and relationships as the continuation of their emotional development, and, as that talk often does not occur in families, there is a place for it in the upper primary school as part of my approach.

In the following, Jenkins, Oatley and Stein (1998: 168) mention metacognition of emotion:

Through talk about emotion parents may promote children's abilities to think about, reflect on, and talk about emotions as entities. This has been called the metacognition of emotion, and may relate to how well emotional events are handled in people's lives.

They suggest "other developments in the metacognition of emotion emerge between 6 and 10 years of age" (1998: 141). Masking feelings, and the understanding of ambivalence occurs later in the primary school years, and as development in cognitive ability affects emotional development, children start using emotions instrumentally to achieve goals, and the emotional components of situations are evaluated more. Jenkins, Oatley and Stein saw children as naturally metacognitive about emotion, and they point out that "with the development of the metacognition of emotion, very different relationships of emotions to the self and to the other also then become possible" (141). The challenge for my research is to find ways teachers can help students more systematically develop and use metacognition about affect.
The influence of family and cultural ideologies about affect was explored by Magai and McFadden (1995). They pointed out that social, personality, and emotional development are now seen as so related that the term 'socioemotional' development is used. They viewed affects as essential partners with cognition in normal maturation, and they emphasized the importance of language development in socioemotional development. They reported that behavioural expression of emotion (face, voice, whole body) is integral to the development of social competence, by providing "social cues that allow social partners to interpret one another's behavior" (1995: 161). The well-adapted child de-emphasizes disappointment and upset, and amplifies those affects sustaining positive social interaction. They also noted the importance of the child's active role in socialization of affect, and they pointed out that Izard placed "equal emphasis on self-tuition or learning through observation" (148), as on direct tuition by parents and other social agents.

Much research has been conducted on the development of empathy and sympathy, for example, Hoffman (1982: 93) who suggested empathy involves "affective arousal and a cognitive component." However, Magai and McFadden (1995: 193) criticized Hoffman's work for insufficient attention to contextual influences, such as size of group, number of strangers, group goals, social and cultural teachings. Also they critiqued literature blaming mothers for children's behavioural and emotional problems; they discussed emerging, but still limited, research on the father's role; and they called for more representative ethnographic and naturalistic research on empathy development and its relation to anger and aggression, as most research on empathy has been on intact middle-class families.

Thomas (1985) discussed the development of the 'affective response tendency', an individual's emotional 'style' similar to temperament or traits. Magai and McFadden (1995) suggested that these habits of affectively relating influence information processing and behavioural patterns. They pointed out that "affect becomes less labile with age": as individuals mature, their beliefs consolidate and "emotion becomes less episodic, and moods, as enduring emotional states, are more characteristic" (1995: 164).

Buck (1984), looking in depth at the development of emotion communication, suggested the integration of theories of cognitive and emotional development. He claimed that Piaget started the trend to ignore the interaction of affect and cognition. However, Youniss and Damon (1992: 267) argued that Piaget was interested in affect, and Dupont (1994) pointed out that Piaget wrote *Intelligence and Affectivity*, but that Piaget's early interest in affect waned. Dupont's theory of emotional development extends Piaget's work. Buck applied Piaget's concept of aliments - situations that are only partially assimilated and thus stimulate further thought and action - to emotions. He suggested that children may actually seek out "situations which intrinsically call forth attempts at emotional understanding and
mastery" (1984: 153), such as sexual stirrings and the first experience of fear. This supports the constructivist notion of individuals active in their own development.

A point relevant to metacognition about affect is made by Buck: "Different aspects of emotional states can be made relatively accessible or inaccessible via the education of attention" (1984: 158). By education I believe he means increasingly conscious cognitive focus on attention. He says that as individuals develop cognitively they learn to cope affectively: he defined coping as "the application of linguistically structured rules to emotional phenomena. Thus, coping involves reasoning about emotion" (158). Buck also discussed the influence of literature and the mass media in emotional development, although he provided little evidence. He did cite research showing that raising rats in an enriched environment "decreases emotionality" (161), and causes physical changes in the brain. From this we could hypothesize that greater intellectual stimulation of a child may assist the child to understand and regulate emotions, especially if metacognition about affect was involved.

Harris's (1985; 1989) work focused on the emotional development of older children. His 1985 report on his own and others' research is cautious but creative. He talked about a "process of imaginative construction that the child engages in both to experience and to understand emotion" (1985: 103). Nature, nurture and individual imaginative construction are all involved. He suggested that children of age six tend to see emotions as stemming from emotional situations, but by ten they talk about mental processes involved in interpreting the situation and creating their response. Citing numerous studies from a range of western, island and eastern cultures, Harris (1989) investigated the knowledge of internal control strategies of children aged six, eleven and fifteen. All had such strategies, but the two older groups tended to more often employ cognitive techniques such as re-directing their thoughts. His analysis of the coping mechanisms of boarding school boys throws further light on the insights and beliefs about emotion of children at different ages. Increasingly children learn to control their thinking - deliberately changing thought or 'forgetting' their current situation - so as to control their emotions.

Harris saw imagination as a tool for understanding others' plans, hopes and emotions. By six, children are capable of sorting out the other's appraisals, assumed desires, and emotions. Between six and nine children's sensitivity to the role of personal responsibility changes markedly: at six they might feel guilt or pride for things they know they could not control, but not at age nine. They move from seeing people simply as agents to seeing them as observers who assess their responsibility in meeting normative standards. Social approval and disapproval is important but gradually the child also anticipates possible
approval and disapproval; the audience is no longer needed as the child feels the emotions either on doing the act, or eventually even in anticipating the act. Conscience is developing.

Conscious acknowledgment of ambivalent feelings is rare in children until age seven or eight. Harris suggested that, when that happens, the child is not just adopting a more sophisticated folk theory, pushed by others, but the child is "turning round on his or her own schemata, and gaining new insight" (1989: 125) into his or her own emotional life. This implies that after age eight we may have children focusing reflectively on their affective experience.

Lewis and Saarni (1985: 15) suggested that biology predisposes humans to emotional behaviour, but socialization may influence all aspects of emotion - stimuli (internal and external), receptors, states, individuals' interpretation and evaluation of their state, expression, and experience. Social class and culture influences the socialization of affect. In an African community children are pressured not to cry: they internalize cultural scripts about the display of distress. The research on gender socialization is extensive and shows differential treatment commences at an early age. Lewis and Saarni reported little difference in emotional knowledge, but early differences in expressive behaviour, and girls more likely to show positive affect than boys.

According to Dorr (1985: 56), there was no evidence on how children learn affects from socialization, but she suggested all traditional socialization processes operate: explication by others, reinforcements, punishments, observation, and children using their "experiences with emotion to generate meaning, principles, conceptual systems, and/or rules." She proposed a typology of affective socialization contexts, one of which is children's involvement with television. Reviewing the limited evidence about the influence of television on children's learning about emotions, she suggested a number of conclusions, for example: television programming can evoke, condition, habituate, and desensitize emotional responses; and, where those influences of television diverge from those of other contexts, e.g. family, those of television are more easily amended or rejected than vice versa. Information such this would be useful for teachers to help their students understand the possible affective influence of television on their values.

There is still much we do not know about how older children are socialized emotionally. I have found few studies of peer-peer socialization in older children and none of teacher-student socialization of emotion. But, as Haviland-Jones, Gebelt and Stapley, (1997: 239) showed, while primary school children may not be so turbulent in their emotionality as infants and adolescents, they still have rich, complex and developing emotional lives that we need to understand better.
Brothers (1997) provides many useful suggestions about the socialization of affect. He suggests that the concept of person and the folk theory of mind develop through the mind reading other minds and "producing mutually regulated behavior" (1997: 28) in complex social environments. Through socialization children not only learn rules, but also "how to attach social qualities to persons, things like status and moral qualities" (29). He sees pretend play, narratives and performances as crucial in that. Through stories we are "constantly creating and reworking our social worlds" (81). Social performances "usually take the form of integrated packets of speech, facial gestures, and vocal intonation... everyday 'talk'" (85). Conversations are 'performative': "the breathtakingly rapid pas de deux... a highly structured, cooperative enterprise that requires the active participation of listeners as well as speakers" (85).

Brothers makes an important point about the development of our consciousness of self depending on our meshing of the social messages we receive about ourselves with our internal experience of our body and mind. Once we have constructed our sense of self we take it for granted: we don't notice we are applying a theory. Ethnomethodology suggests we "create elaborate, arbitrary worlds and treat them as if they were... inevitable. We cannot see that we do this or how we do this - but we can see that others have done it when their worlds are different from our own" (1997: 106). Commonsense 'facts' - 'what everyone knows' - "are created and perpetuated by people through their talk and actions" (106), and are experienced as objectively true. The child starts this in pretend play, but eventually stops needing to say 'let's pretend': "Once children have achieved the ability to co-construct reality, the scaffold of pretense falls away, and adult co-construction, which is tacit, supervenes" (108).

I do not agree with Brothers' extreme conclusions that emotion is a just an everyday construct "not to be found in our brains or bodies" (1997: 110). He does concede that emotion is phenomenally real to people: "emotion still holds sway over me and my readers... millions of everyday conversations... shape individual consciousness through the impress of social meaning onto experience" (125). I believe that Brothers has provided a number of useful hypotheses about the role of culture and conversation in the development of affect. However, I also believe the neuroscientists and psychologists are providing equally useful hypotheses - and convincing data. Given the uncertain state of theory, many of these competing ideas can be passed on to teachers, and metacognitive students can work with a range of hypotheses and data about affect.

My thesis sees students developing heightened metacognitive knowledge of their selves, their affect and their values, and of how all of those have developed through socialization.
Central to metacognition is reflection, and central to reflection are consciousness and the sense of self. I discuss reflection later in the metacognition section, but I discuss consciousness and the self now in order to highlight their links to affect. For the same reason I also look at the development of conscience.

**Affect, Consciousness, the Self, and Conscience**

According to Izard, "it is difficult to separate emotion... from consciousness itself" (1977: 141). However, he distinguished between consciousness as awareness or attention, and the contents of consciousness such as thoughts, perceptions, images, memory, sensations, emotions. He pointed out that meditation can expand conscious awareness while limiting the contents of consciousness. He also suggested that "the affects and affective-cognitive orientations" (139) are the most common and fundamental contents in consciousness, and "the affects, particularly the emotions, are the principal organizing and controlling forces in consciousness, self-awareness, and the ego or self-concept" (155). Izard (1977) and Lewis (1992) cited theoretical and research support for the idea that shame is involved in the development of self-awareness and self-identity, but paradoxically, awareness of our shame makes us likely to reflect less than awareness of our guilt: some emotions stimulate thought while others inhibit it. Izard pointed out that it is difficult to reflect upon emotion while it is being experienced, and also, "a successful effort to reflect on and analyze an emotion experience inevitably changes the experience" (1977: 152).

Questions about consciousness are difficult and unresolved as Thagard (1996) admitted: affect and consciousness pose major problems for his theory, but he believed his theory could be underpinned by some of the neurobiological research of the 1990s. Damasio's (1999) work throws new light on affect, consciousness and the self, and connects all three to the development of conscience. He provides a neuroscientific grounding for Izard's theory, Morillo's theory, for the self explored by Denzin's phenomenology, and for my thesis. Damasio suggests that the sense of self and consciousness are based on, and arose in evolution at the same time as, emotions and feelings, and also that emotion and consciousness are connected in the brain: our sense of images, our feelings of feeling and of knowing, and our sense of self, all arise when specific brain regions act in concert in response to an object that may be external, or internal: an emotion, another body state, or a memory. Thus: "consciousness is the part of mind concerned with the apparent sense of self and knowing" (1999: 27). Awareness and intuition are examples of wordless knowing.

Over 'civilized' time, Damasio suggests that the mind came to 'hide' parts of its knowledge about the organism so that it could focus on the external world more: thus we are only partially conscious of our feelings (1999: 29), although we can become aware that we are
anxious, uncomfortable, pleased, relaxed. Many of these insights about the self, emotion, consciousness, and different ways of knowing, can bevaluably used by the metacognitive learner in the approach I propose.

Damasio’s ideas about the development of conscience are also useful to values education theory and practice. Damasio suggests that through evolution, consciousness made possible changes in learning from simple to complex, from conditioned to mindful. Echoing Morillo, Damasio says that through conditioning, emotion connects virtually every object or situation in our experience “to the fundamental values of homeostatic regulation: reward and punishment; pleasure or pain; approach or withdrawal; personal advantage or disadvantage; and, inevitably, good (in the sense of survival) or evil (in the sense of death)” (1999: 58). Values, morality, ethics, and reason are elaborated by culture on this emotional base. Consciousness is “an indispensable ingredient of the creative human mind” (28), an intermediary to high reason, ethics, law, science and technology, poetry and human kindness: “extended consciousness permits conscience” (230). I suggest that the conscience provides for the self a sense of integrity in both senses of the word: goodness and wholeness. It is our attempt to keep our behaviour consistent and complete across place and time.

Damasio sees emotion negatively as well as positively: reason is “a means to control the pervasive tyranny of emotion… Ironically… the engines of reason still require emotion, which means that the controlling power of reason is often modest” (1999: 58). I think he is referring to the ‘tyranny’ of the primary emotions. He argues that through evolution consciousness has allowed culture and reason to modify the impact of the primary emotions, to create new emotions and ultimately, higher reasoning. Conditioning in socialization is a major way that emotion becomes attached to memory, but more sophisticated modes of thinking and learning are available to us to understand and modify those linkages. One of those is, as Damasio points out, reflection, but I suggest that we can see metacognition about affect and values learning as a further step in Damasio’s evolutionary developmental process.

As noted earlier, my thesis focuses mainly on the first stage of the metacognitive process: the development of knowledge about affect’s role in learning values. But it is important to look at the regulation of affect to ensure that the second stage of metacognition - regulation - is feasible in the approach I am proposing. Folk wisdom tells us to count to ten before reacting, but here I explore research and theory about influencing affect.
Regulation of Affect

From a philosophical perspective, Oakley (1992) argued not only that we can exercise some control over emotions deemed morally bad or wrong, and cultivate emotions such as compassion that are seen as morally good, but also that we can "attempt to develop our emotional capacities over time" (4). Here I look at some of the psychological and sociological insights into the regulation of affect and in the next section at educational ideas about the matter.

"We are about as effective at stopping an emotion as we are at preventing a sneeze," suggested Damasio (1999: 47), but we can remove an obvious stimulus to an emotion or remove ourself from it, and we can attempt to suppress feelings, or mask their expression. He says that we may partly prevent the expression of an emotion, but poker players who can disguise external manifestations of emotion cannot block the automatic internal physiological changes. I am not wanting to teach students to suppress or disguise their emotions, but to acknowledge them, and understand their role in their values, as a prelude to re-directing their influence.

According to Izard the strength of the bonds between affect, cognition, consciousness and the self in cognitive-affective interaction patterns "is a function of the quality and intensity of the affective component" (1977: 158). If those patterns are to be changed a special state of consciousness is needed in which the cognitive-affective-self bonds can be altered or released: "The individual has to be able to sense things without the affect usually activated by them" (158). Unfortunately Izard was vague about how this special state can be achieved, although he indicated that special states of consciousness "dominated by nonspecific interest or receptive joy... set the stage for intuition, tacit knowing, and the receptive mode," and "focused emotion states set the stage for analytical, critical, logical rational processes" (13). Eastern thought recommends the denial of the self, or sensing without desire. Perhaps some of its insights could be incorporated into metacognitive knowledge and strategy building, as could some of Izard's practical suggestions: he suggested that emotions can be linked via cognition to other objects, and emotions can be maximized or reduced through cognition and action. He listed difficulties in influencing emotions: (a) when they become linked to drives; (b) the rapidity and automaticity of biochemical and neurological responses; (c) vivid emotional elements in memory influence present thought; (d) communication of emotion via language is complex: "We have not been taught to verbalize accurately our emotion experiences" (51). My metacognitive-affective approach sees it important for children to talk about affective experiences as part of their development of their capacity to regulate their affect.
Emotions have both innate and learned components, and Izard claimed that we can even learn to "inhibit or modify the innate emotion expressions" (1977: 6). The idea that facial expressions can intensify or reduce the experience of an emotion goes back at least to Charles Darwin. While admitting there is little research evidence, Izard said some control can be achieved by controlling facial expression, in combination with posture control and cognitive processes such as imagery and fantasy, e.g., whistling in the dark to overcome fear. Frijda (1986: 233) disagreed, and, according to Magai and McFadden (1995: 163), Kagan "clearly rejects the idea that emotions are dependent on changes in facial expression." However, brain research is starting to provide support for Izard's position: Davidson (1998: 116), reported that when people produce sustained smiles with crows' feet at the eyes, they also produce the same brain activation as when they smile spontaneously, but not when they produce 'fake' smiles. Much of this debate and research could be shared with children: they could even experiment with their facial expressions to see whether that influenced their emotions and feelings.

Frijda (1986) provided insights about the control of emotion. For Frijda, emotion is a feeling of readiness for action, leading to potential change in our relationship with the emotional object. It involves temporal awareness, monitoring, and, to greater or lesser degrees, urges, intentions, outcomes, awareness of inhibition and the possibility of self-control. There "often is a strong sense that cognitive self-control is exerted" (1986: 240), and that, if it is released, the emotion would take over. Expressing emotion is letting go the cognitive control. He says emotion control is ubiquitous, if not always effective. This "involuntary control itself is an emotional response," and "the stimuli for control are the signals for possible adverse consequences of uninhibited responses such as retaliation, reprobation, or miscarriage of plans" (240).

While the initial emotion is "an essentially unconscious process" (1986: 464) - appraisal of the situation and a change in action readiness happens before we are consciously aware of it - according to Frijda reflection then follows: "reflexive awareness plays an important role in the development of emotional response" (465). Feeling acts as a monitor analysing concerns and features of the event, and helps planning and regulation. Awareness of "what one feels, does, or is inclined to do, and why, adds to the situational meaning structure" that was initially generated unconsciously. And although what we know about our emotion "is a construction, a hypothesis, like those one makes about the emotions of someone else" (Frijda, 1986: 464), I suggest the more knowledge we have, about the constructive processes, the more accurate will be our hypotheses.

Frijda also suggests that imagination and other cognitive processing can ensure that our long-term concerns overcome short term affective concerns. They do that by conferring
"emotive power on stimuli that do not by their nature have it. They can extend the driving forces of emotion to the spheres of moral responsibility" (1998: 284). These ideas about the power of imagination and cognition in relation to emotion and morality fit well into my metacognitive approach.

According to Frijda, emotions are subject to regulatory action throughout all phases of the emotion process: emotional events are sought and avoided; appraisals are regulated by attention and cognition; impulses are controlled; urges suppressed so as to disappear from consciousness as well as from behaviour, and they can be amplified; and responses can be checked, attenuated, shaped, or replaced. Thus, while mostly emotions are not under voluntary control, and while we cannot elicit or abolish emotions at will, we can work on and with them to some extent: "Thus emotions are handled" (1986: 401). Frijda also pointed out that emotions can have social consequences: isolating or uniting the person, and so there is the possibility of social influence on emotion as we anticipate social responses to our emotional expressions.

Laird and Apostoleris (1996) take some of these ideas further. They agree with Frijda that self-control implies a divided self: part of us wants to do one thing, another part another. Folk psychology sees self-control as control of feelings, and feelings are seen as hard to resist, but following James from the 1890s, Laird and Apostoleris argue the counter-intuitive idea that: "feelings are the consequences of behavior, not the causes" (1996: 286). My angry feeling does not make me strike, it results from my striking, although feelings guide further action. Providing further support for Izard, they cite studies where the emotion-inducing purpose is hidden from subjects asked to manipulate the muscles of their faces, body posture, vocal patterns, gazing or touching. The manipulations result in subjects reporting changed emotions. Feeling the muscles contracted in certain ways, tells us we are 'doing the emotion.' The information is put together unconsciously and registered in awareness. This perception is similar to other perceptions such as the intuition of an expert integrating knowledge unconsciously, and the 'feeling of knowing'.

Laird and Apostoleris see emotions as cultural-cognitive patterns of action that are somewhat inflexible and sometimes inappropriate to new situations. They suggest a variety of automatic patterns of action contest with "more or less conscious control processes" (1996: 292). The conflict "is between the automatic and the reflective, not between feeling and thought. And in this conflict, the feelings are tools of the rational, reflective processes, not representatives of the automatic processes" (292). Thus, feelings can help modify automatic action, through providing information about aspects of the emotion episode: for example, the instigating event, and the expressive and autonomic responses.
According to Laird and Apostoleris, feelings can be modified: acting angrily increases anger feelings and future angry actions; behaviour therapy uses muscle control and imagination to influence feelings. They report studies showing that: "becoming more alert and sensitive to one's emotional states" leads to "greater, not lesser self-control" (1996: 295), and that people chronically unable to control their emotional behaviour experience less rather than more powerful emotional feelings. Thus treatment of hyperactive children focuses their attention on their behaviour and their associated feelings. The common-sense view of feelings and action says to let the feelings out in action, but this misses the opportunity afforded by the information that feelings provide to influence behaviour.

For Laird and Apostoleris the contents of mind - desires, habits, motives, even passions - are simply interpretations of our behaviour. Rather than introspecting to understand ourselves we should try to understand "the repeating patterns of our actions" (1996: 298). This is not easy because we are too busy acting to see our actions as others do, and we are not thinking about our actions, but about the things we are acting for and in response to. We need to take the stance of the observer to our actions, reflect on them and what they imply about us: "With greater understanding of the patterns of our lives, and the nature of our automatic, affective processes, self-control will follow naturally" (298).

While I find Laird and Apostoleris' evidence and argument convincing, I believe their claim that internal processes are irrelevant is unnecessarily extreme. I believe reflection on behaviour and introspection about internal processes provide complementary information. I am not claiming here to know what theories and strategies are the most likely to be effective in this. Rather I am outlining possibilities for my theory and for further research. In the meantime, metacognitive knowledge about many of these hypotheses can be used by teachers and students in values education.

McCoy and Masters (1990), reviewing the literature on children's strategies for influencing emotion, were surprised by the extent of such control at relatively early ages. They called for more research, but it was clear that children 'naturally' learn to regulate affect to some extent. Teachers could build on that learning using many of the insights discussed above. Other recent fields exploring issues related to regulation of affect look at emotional intelligence, competence, and literacy. Unlike ordinary intelligence, it appears that these may be susceptible to training and education.

**Emotional Intelligence, Competence, and Literacy**

In 1960 Mowrer observed that the emotions "do not at all deserve being put into opposition with 'intelligence.' The emotions are, it seems, themselves a high order of intelligence"
The term 'emotional intelligence' popularized by Goleman (1995), was coined in 1990 by Salovey and Mayer. They suggested that emotion may "promote intelligence by... directing attention toward what may be important" (1997: 9). Like Damasio, they viewed emotions as "potentially contributing to thought rather than disorganizing it," through "generalities and laws of emotions that can be employed in recognizing and reasoning with feelings" (9). This is a further illustration of the affect / cognition link going in both directions: cognition contributing to effective affective operation, and affect contributing to effective thinking. Mayer and Salovey (1997: 10) suggested that emotional intelligence involves the following abilities:

1. Reflective regulation of emotions to promote emotional and intellectual growth
2. Understanding and analyzing emotions; employing emotional knowledge
3. Emotional facilitation of thinking
4. Perception, appraisal, and expression of emotion

I see students developing metacognitive knowledge and skills about each of these as part of values education.

While Gardner (1993a; 1993b) did not use the term emotional intelligence, his intrapersonal and interpersonal intelligences involve the affective knowledge of self and others, and the social skills involved in emotional intelligence. Hatch (1997) provided examples of interpersonal intelligence in kindergarten boys who controlled their own desires and responded to others' thoughts and feelings.

A concept related to emotional and personal intelligences is 'emotional competence'. Saarni sees this as

how people can respond emotionally, yet simultaneously and strategically apply their knowledge about emotions and their emotional expressiveness to relationships with others... they can both negotiate their way through interpersonal exchanges and regulate their emotional experiences.

(Saarni, 1997: 38)

Skills involved in emotional competence include: awareness of one's emotional state; ability to discern others' emotions; empathic and sympathetic involvement in others' emotional experiences; understanding deception and self-presentation; coping with aversive or distressing emotions; awareness of the importance of emotional communication to relationships; and capacity for emotional self-efficacy. Related to emotional competence is Bocchino's (1999: xii) emotional literacy: "the constellation of skills, strategies, maps, and tools that we learn to become emotionally fluent", that is, emotionally intelligent.

Saarni (1997: 39) also links emotional competence and values: emotional competence involves "self-control, fairness, and a sense of reciprocity," and is closely related to Aristotle's virtues and the notion of 'moral character'. Saarni also discusses Neisser's
typology of the self that allows the individual to locate his or her self physically, socially, temporally, and in relation to values and standards. The typology helps explain why individuals can experience the same situation so differently, and why people appear to be so competent emotionally much of the time, but in some situations do not cope. Neisser's 'evaluative self' highlights the feelings people attach to their interactions.

Having completed this review of the nature and development of affect, I conclude by looking at how affective development may be promoted through teaching, and at what is happening in the affective education field.

**Teaching about Affect**

Neuroscience shows the brain to be developing into adolescence, suggested Goleman (1997: xv), and "the circuits that regulate emotional competence appear to be among the last parts of the brain to reach full maturity." Thus childhood offers an "opportunity to give children the repeated experiences that will help them develop healthy emotional habits - for self-awareness and self-regulation, for empathy and social skill" (1997: xv). Here I explore how schools have taken up that opportunity and how they may do so.

When I started this thesis six years ago I could find only Yarlow (1972), Dunlop (1984), Beane (1990) and Greenhalgh (1994) who had written much about affective education. Since then there has been a burgeoning of literature in this field. The increased interest in affect within psychology, and problems in society and in schools, especially in the United States, have meant that in recent years, affect has received much more attention in education. Dieringer, Lantieri and Rehwaldt-Alexander (1998) indicate a commitment by a Brazilian Education Department to affective education. In Australia, there are teacher educators such as Malin (1999), who see affect as important in their anti-bias teaching. Books are appearing about teaching for emotional development, although Lang, Katz and Menezes' (1998) overview of programs in a dozen countries reinforces the perception that affective education research and practice are limited and haphazard. Lewkowicz (1999) is a practical, classroom-oriented publication; Elias et al (1997), Elias (1998), Cohen (1999 and 2000), and others associated with CASEL (Collaborative for Academic, Social and Emotional Learning) offer a theoretical and research basis for affective education, and an affective basis for values education. By 2002, affective education is almost fashionable, and, although the literature is mainly about social and emotional development, my idea of applying metacognition to affect in values education seems less novel than in 1995.

Salovey and Sluyter's (1997) volume included articles from neuroscience, child development theory and practical pedagogy, and teachers' comment on the relevance of the
articles. According to Goleman, the affective education movement, spurred by the "rising
tide of... substance abuse, violence, unwanted pregnancy, dropout, teen smoking,
depression, and the like" (1997: xiii), has spawned programs variously called: social
development, life skills, self-science, social competency, and, resolving conflict creatively.
Lantieri and Patti (1996), is an example of conflict resolution programs. Goleman said that
by early 1997, nearly 700 school districts in the United States had expressed interest in
implementing the 'emotional literacy' approach.

Emotional intelligence is primarily taught through literature, but also through art, music, and
drama, according to Mayer and Salovey (1997). They also suggest that, as values
"determine in part the person's more conscious knowledge of the emotions," students
should learn about different "value systems within which emotional responsivity occurs"
(1997: 20). However, as I point out later, most values programs have only limited emotional
focus. Mayer and Salovey warn that emotional competency courses "should be approached
cautiously, as there is little scientific guidance about how they should be designed" (20).
They also provide useful warnings about programs that adopt an untempered 'emotions are
good' philosophy; about emotionally damaged children discussing emotions in class; and
about possible difficulties for individuals from subcultures that approach emotions
differently.

To explore the links between learning and affect, Greenhalgh (1994) drew on Kelly,
Rogers, Maslow, and Erikson. Greenhalgh saw learning as the construction of meaning
from experience, and affect built into the core of experiences, meanings, memories and
knowledge, and especially related to the developing sense of the self and self-esteem.
Significant learning occurs mainly of those things the person sees as supporting the self,
but significant learning may be resisted, as the personality protects itself. Thus emotional
needs, including self security and trust in others, are fundamental to learning. I return to
many of these ideas in the next section on values. Greenhalgh also suggested that
traditionally schools have been concerned "to foster 'personal', or social and emotional,
development" (1994: 26), but he believed teachers do not have sufficient education and
skills to do that effectively. I suggest that consequently many teachers have emphasised the
3Rs at the expense of social-emotional development. Although good teachers intuitively
provide a secure social environment in which the child can develop its 'self' and can be open
to the world and prepared to take risks, I suggest that all teachers would benefit from
methods and curricula promoting social-emotional development.

According to Greenhalgh, to promote affective development, the teacher also needs to take
into account the child's stage of moral development, as he sees close links between moral
development and emotional development. He detailed the use of image, imagination and
metaphor in the Arts and Language Studies, where children can explore conflicts of feeling, learn to contain their feelings, and communicate about inner experience. He said teachers need to understand their own emotions, respond to their students' affective relationships, model reflection and how to contain emotions, and provide 'mirrors' and 'safety nets'. Teachers may not have all that knowledge and skills, but I suggest that, with some knowledge to start, they can develop the skills by being metacognitive as they teach their students to use metacognition.

Teachers' affective knowledge and skills were also of concern to Haviland-Jones, Gebelt and Stapley (1997). They pointed out that teachers often wrongly interpret as hostility children's crude and inaccurate emotional signals because the children are in the early stages of learning to signal more subtly. The teachers react accordingly, leading to a spiral of hostility, whereas emotionally knowledgeable and skillful teachers could prevent many such problems. Similarly teachers need knowledge about emotional styles, and understanding about how particular emotional states transform thinking, learning, preparing to act and information-processing. They pointed out that research on such transformations is just beginning.

Zins, Travis and Freppon (1997) attempted to bridge the researcher / practitioner gap by suggesting that both can gain from each other: research can gain relevance, and the practitioner achieve more coherence and purpose. Zins, Travis and Freppon focused on social and emotional learning, and on preventing violence in schools. I agree with them that much more research in schools is needed.

Based on their valuable insights into the development of children's strategies for coping with stress, Brenner and Salovey (1997) emphasized the development of regulation through cognitive-experiential and behavioural-expressive components within emotional literacy frameworks. Eisenberg, Fabes and Losoya (1997) pointed to connections between children's emotionality, emotion regulation, and social functioning: children who express a lot of negative emotion and do not control it are at risk socially and academically. They cautiously suggested that "parents and teachers probably play a role in teaching children how to manage their emotions and behavior based on intense emotion" (1997: 152). Despite the limited evidence, I believe their review has shown ways in which teachers and parents may positively influence children's emotional development.

Asserting that "emotion is very important to the educative process because it drives attention, which drives learning and memory" (1997: 103), Greenberg and Snell suggested that emotion has not been understood in education: it has not been regulated effectively, often being treated as misbehaviour, and not incorporated into the curriculum. They claimed
that "attending patiently to children's emotions and their effects as a central part of classroom processes will lead to improved personal and academic outcomes" (119). Although admitting there was no data "with humans illustrating how educational experience alters brain structure," they also claimed the quality of classroom "social and academic interactions impacts brain development, attention, and learning," and they recommended "helping children develop awareness of emotional processes (both in themselves and in others), applying verbal labels to emotions, and encouraging perspective taking and empathic identification with others" (119). Although they provided some evidence from their work over fifteen years focusing on emotional development and social problem solving, their conclusions are more hypotheses than established facts. However, most seem highly plausible and fit with the ideas of LeDoux (1998), Damasio (1994; 1999), and Schore (1994). They provide blueprints for initiatives in classrooms and for continued research.

Of particular relevance to my thesis is the Neuva School's three decade long, life skills program, Self-Science, that Vargo (1997) claims leads to 'brain development'. In grades 3 and 4, "the Self-Science curriculum includes a cognitive understanding of the brain's biology and functioning as well as practice in applying it in real, personally valuable, and meaningful ways" (1997: 121). She provided tantalising information about this program to develop children's emotional intelligence and competence. While she does not use the word 'metacognition', she appears to be using aspects of metacognition in her program. Her teaching uses mind-maps; develops emotion language and the skills of recognizing and regulating emotions; and it is integrated into all subject areas. Children are taught what parts of their brain are involved in different emotions. She has not provided 'hard evidence' for its success, but I suggest that she provides more than mere anecdotal evidence. It is the evidence of a practitioner who has developed her craft over a long time through meticulous observation, reflection, and action, continually subjected to critical review, and exposed to public scrutiny. I suggest her approach merits wider trialing in schools. It relates closely to my own approach.

Harbour and Stewart (1997: 193) pointed out that emotional education does not have a definable place in the curriculum: it is incidental, "receiving sustained attention only during crisis situations." However, they suggested that much of that incidental work is likely to be effective, some longer-term programs are in place, and many good teachers and schools have not waited for research evidence, but are already actively trialing their own ideas. They suggested novel ways of using the research findings in classroom settings, but also pointed to the need for "a clearly articulated scope and sequence curriculum" (195).
Lipman (1995) suggested using philosophy to educate the emotions, but I find little evidence of that in his very cognitive materials. While many, like Lipman, acknowledge the importance of affect, they generally do not systematically explain how it is implicated in thinking, and so their suggestions for taking it into account in teaching may or may not be appropriate. Part of the challenge for my research is to develop that explanation.

Finally in this review of the affective education literature I mention Roebben’s (1995) work because he connects the education of the emotions to moral education. However, I refer to affect not just the emotions, and I take a more constructivist approach than he does: he is more concerned about training good emotional habits in young children. My proposal is that older primary school children can be more intellectually - and affectively - engaged in understanding the way that affect is involved in their values and valuing.

So far I have explored literature about affect, cognition, and the self, and I have highlighted information about affect that teachers might use to develop their own and children’s theories about affect. While I have noted many aspects of theories that could contribute to an integrated metacognitive-affective approach, I have not shown how those aspects fit together in the approach. I attempt that in chapter three. I conclude this section with Harré and Parrott’s (1996: 2) reminder of Aristotle’s awareness that "all emotions arise from a judgement" and thus "have moral relevance." I now review the literature about values.
2.2: VALUES

The metacognitive-affective approach to values education requires teachers to have an understanding of: values, morals, attitudes, and beliefs; how these develop, especially through socialization; the involvement of affect in that development; how they operate in people’s lives; and, how they might be changed. Values teachers also need an understanding of related ethical and existential matters as most children want to talk with adults about the big questions of life. This section explores philosophical, psychological and social perspectives on the above, on the indoctrination of values issue, and on values education.

What are Values?

Here I attempt to clarify the terms beliefs, attitudes, values, and morals as the literature frequently notes that the terms are not sufficiently differentiated theoretically. Snow, Corno and Jackson (1996: 246) suggested that it is sometimes too early in the development of theory to define terms because that may exclude items that will later be included as knowledge grows. I agree: it is important to see definitions as tentative constructs. At the outset I distinguish the concept of value as a noun and as a verb: I use evaluating or valuing as the verb to make value judgements; when an individual or a group make repeated value judgements on a matter, they develop values about that matter.

Rokeach (1973: 6) distinguished three types of beliefs: descriptive or existential beliefs, (true or false); evaluative beliefs, (good or bad); and "prescriptive or proscriptive beliefs, wherein some means or end of action is judged to be desirable or undesirable." I see values education being concerned with the latter two types (both of which have to do with preferences), and with the development of a preferential belief system. According to Rokeach, a belief system is a more or less systematic organization of a person’s beliefs helping "maintain, insofar as possible, a sense of ego and group identity, stable and continuous over time" (1972: 12). Beliefs directly concerning one’s existence and identity are more important, more central to the self than other beliefs: "the more central a belief, the more it will resist change... [and] the more central the belief changed, the more widespread the repercussions in the rest of the belief system" (1972: 3).

Prentice in the Encyclopedia of Psychology defines values as "beliefs pertaining to desirable end states or modes of conduct that transcend specific situations, are organized into coherent systems, and guide selection and evaluation of people, behaviors, and events" (2000: 153). I would say more or less 'coherent systems'. Rokeach defined a value as: "an enduring prescriptive or proscriptive belief that a specific mode of behavior or end-state of
existence is preferred" (1972: 25) to its opposite; it is a standard influencing action, attitudes, "ideology, presentations of self to others, evaluations, judgments, justifications, comparisons of self with others, and attempts to influence others. Values serve adjutive, ego-defensive, knowledge, and self-actualizing functions" (1972: 25). He did not provide empirical evidence for these claims, so perhaps they should be treated as useful hypotheses. He also says a value

is a cognition about the desirable... [and] is affective in the sense that we can feel emotional about it, be affectively for or against it, approve of those who exhibit positive instances and disapprove of those who exhibit negative instances of it.

(Rokeach, 1973: 7)

Rokeach distinguished instrumental values such as ambitious, capable, cheerful: those used to achieve ends, from terminal values: ends or goals such as pleasure, salvation, mature love and national security. While his list is culture-bound and dated, and his methodology limited, his insights have been influential and are still useful. The Victorian Ministry of Education (1987: 13) distinguished procedural (Rokeach's instrumental) values (e.g., freedom; tolerance; fairness; respect for truth, reasoning, etc.), and substantive (Rokeach's terminal) values (e.g., family life, aesthetic, moral, religious, political values). Rules and values are also distinguished as moral (e.g., not hitting), or conventional (e.g., not talking in class). While these distinctions are not always clear-cut, they are useful for teachers.

Simon discussed morals as "rules that govern human interaction... as social conventions, they become the criteria of good, bad, right, and wrong" (1986: 252). Rokeach (1973: 8) distinguished two kinds of instrumental values: moral values and competence values. He suggested that moral values are more interpersonal and arouse pangs of guilt for wrongdoing, whereas competence values are more about self-actualization and lead to feelings of shame for wrong-doing. These distinctions are useful for values educators. However, moral development and moral education are often used synonymously in the literature for values development and values education, and here I will distinguish between moral(s) and values only when the literature does so; otherwise I use values as the generic term, and morals as the subset of values referring to good, bad, right and wrong.

Another source of confusion in the literature is at what level of abstraction the term values is being used. Rokeach's hierarchy of preferences, from myriad preferential beliefs, to attitudes, then a limited number of more abstract values at the highest level, is logical. However, in the phrase values education, the term values is often used in a generic sense to subsume all three levels, and I use it that way as values educators need to work at all three levels. Each of these evaluative levels interact with and influence the other and behaviour. And each level involves more or less affect, cognition and conation.
Prentice (2000: 153) suggests that values
differ from attitudes in that, for each individual, they are fewer in number and
more central and self-defining, they apply broadly across specific objects and
situations, they are more normative (involving an assessment of what should
be, rather than simply what one would like to be), and they have a stronger
motivational component.

Rokeach also emphasized that values are more central than attitudes to the personality and
cognitive systems. He defined an attitude as "a relatively enduring organization of beliefs
around an object or situation predisposing one to respond in some preferential manner"
(1972: 112). Eagly and Chaiken's (1993: 1) view is more complex: the favourable or
unfavourable evaluations at the heart of attitudes can be overt or covert; cognitive, affective,
or behavioural; can have developed and be exhibited in any of those ways; and can be more
or less consistent in those ways. They see evaluation as extraordinarily important in daily
life, citing research suggesting "a large portion of the meaning that people assign to entities
in their world is evaluative" (1993: 4). Eiser defined attitude as "the meaning of a person's
expressive behavior" (1987: 5), and stressed both its individual, subjective, evaluative
elements, and its social and communicative elements. According to Eiser, while individuals
derive their attitudes within social contexts, they and other members of the same culture can
have different attitudes to the same thing and express them differently. He suggested that
for an individual, consistency of attitudes and between attitudes and behaviour comes not so
much from within but from social pressures in interactions.

Many discussions of values note their cognitive, affective and conative aspects. Hill (1991:
4) suggested values have three components, each of which alone are sometimes referred to
as values: (a) a belief having to do "particularly with judgements of worth or obligation;"
(b) an affective element that is often regarded as 'attitude'; (c) a volitional element -
'dispositions' or 'commitments'. Crockett (1988: 39) talked about affective orientations as
"positive or negative inclination toward some object or situation," which sounds very
similar to what most writers call attitudes. Reflecting sociology's lack of interest in affect,
there is no mention of affect in the Encyclopedia of Sociology's (1992) definitions of
values or attitudes. But according to Izard (1977: 155), social psychologists see affect and
cognition as "separable but interacting variables in attitudes." I take that position with
values also.

Hall (1994: 24) defined values as "ideals that give significance to our lives, that are reflected
through the priorities that we choose, and that we act on consistently and repeatedly;" they
are "experienced through our feelings and imagination." I believe his link between values
and action is too strong: I see values as influencing action more or less consistently. Staub
(1989) suggested that values are motivational, but, along with Bandura (1991: 72), I see values also often used as justifications, even rationalizations of behaviour after the event. Epstein (1989: 4) suggested that values, motives and goals broadly account for similar phenomena and within limits, are interchangeable, but he also said that "self-reported values are often poor predictors of emotions and behavior" (1989: 13). Thus while values have affective elements and conative potential, I argue they are best seen as cognitions, with strong affective components and conative implications that are not always acted upon. A possible explanation for the discrepancy between values and behaviour is provided in Epstein's point that values exist at two levels that do not correspond fully: a conscious, verbal level, and a preconscious, experiential level.

Epstein identified four basic, universal values arising from biology and common life conditions: "(a) maximizing pleasure and minimizing pain; (b) assimilating the data of reality... (c) belonging or relatedness; and (d) positive self-evaluation" (1989: 16). Epstein sees behaviour as a compromise among the four. I suggest that what Rokeach regarded as formal values are verbalized judgements about reality: a small subset of Epstein's second category. Those formal values also have links, as Damasio and Morillo have shown, to the other three of Epstein's categories. Values educators needs to distinguish whether the values they refer to are the smaller subset or the larger category (b), or all four of Epstein's categories. My thesis argues that values education needs to take into account the connections between all these categories in the total valuing system of an individual.

In the review of literature about affect, I looked at Morillo's theory which provided a philosophical analysis of value based on psychological hedonism. I now look at various other moral philosophy perspectives. It will be noted that the role of affect, especially emotion, has been a major theme in moral philosophy. It should also be noted that this term moral philosophy is an example of the generic use of moral I discussed above. And in the next sentence ethics is used in the same way.

Moral Philosophy Perspectives on Values

Dobrin (1993:7) listed three 'schools' of ethics: (a) the values and consequences approach, (b) reason and principles, and (c) a middle ground acknowledging both emotion and cognition. The first school seems similar to 'emotivism', described by Sichel (1988), as a once ascendant moral philosophy that saw moral beliefs as simply expressions of emotions. It denied the possibility of finding any objective, rational means to adjudicate conflicting moral beliefs or decide the validity of different moral emotions or judgements. Dewey (1939) criticised emotivism, and challenged philosophers on several values issues, especially the relationship of science to value. I now look at three contributions to Lepley's
edited volume in which philosophers responded to Dewey's challenge. They seem to take Dobrin's middle ground that reflects my position.

Mitchell (1970), provided a surprisingly modern account of how values arose through evolution and culture, pre-empting Damasio by decades in statements such as: "consciousness and value emerge together" (195). Mitchell argued that value does not exist in an object but in "the wants, interests, or satisfactions of a conscious act" by a person towards the object. Hence there are "innumerable distinguishable goods and bads" (192): Mitchell's is a pluralistic theory. However, while he saw values developing through social interaction, he refuted relativism.

Mitchell saw values as "the objects, activities, qualities, and so on, between which there are relations of better, worse, or equality... Valuing, in the sense of assigning value, is the process of direct comparison in experience. Evaluation... is the more elaborate process of indirect comparison" (1970: 206). In evaluation there are too many factors for immediate comparison, so the evaluator uses norms or criteria to sort and analyze: "The final decision... is a summary judgment" (198). Mitchell pointed out that "children have values long before they can express value-judgments" (209), and much of our valuing or evaluating is revaluing old values against a background of existing personal and cultural values. This revaluing alters our habitual tastes and preferences. He suggested that knowing our previous preference was uninformed leads to a new attitude, "or a new disposition to overt action" and new action leads to new habits: "Changes in behavior produce corresponding changes in emotion, and finally in tastes and preferences" (210). These ideas from fifty years ago fit well into my metacognitive-affective approach to values change. However, Mitchell, and Ayres (1970), are dated in their emphasis on emotion as irrational and disruptive. Post-Damasio, we see emotion also as a positive contributor to values and valuing.

Mitchell used G.H. Mead's account of 'the act' to explain how values emerge: an act has three phases: the want, the means, and the end; each of which has value. Pre-empting Morillo, Mitchell said that generally the want is bad: felt as dissatisfaction or pain. The means are good, and experienced as pleasurable or exciting. The most commonly prized objects are the tools that have proved outstanding as means. Consummation is good, and experienced as enjoyment. Pleasure, enjoyment, satisfaction, excitement, and interest are ways of experiencing objects or activities: they are not the good, but our way of experiencing the good. However, we come to desire those feelings as ends in themselves. Gradually through habit, custom, and culture, value attaches to the object, while the feeling of want, interest or pleasure belongs to the subject. As wants, needs, and interests change for individuals, groups or societies, as cultures change, the value attached to various objects
also changes. I see values teachers exploring with their students most of these issues raised by Mitchell, including the cultural relativity question.

According to Mitchell there could be a "science of relativity in the field of value" (1970: 206). Because taste and preference are unreliable guides to value does not mean that direct valuing is illusory: "Value propositions, because they are relative (and not just impulsive or emotional or capricious or spontaneous) can be discussed, investigated, and tested" (208). So, direct valuing can be checked and tested by trials, by observations of experienced witnesses, and by indirect techniques of analysis, and, in this way, relativity can be avoided. He even suggested that when "groups cannot agree, the investigation should perhaps be directed to the cultural differences that underlie the opposing ideals" (208). A similar argument is put by Morris (1970) who suggested individuals can observe their own behaviour including their feelings and preferential behaviour, and, "it is possible to determine the reliability of the reports of self-observation on preferential behavior by checking them with the reports of others on such behavior" (1970: 213).

An existentialist and interactionist analysis was provided by Lopez-Quintas (1989), who suggested values are able to be known through experiences of "encounter and ecstasy" and "through a type of knowledge by participation which joins knowledge with love, creative action and an active-receptive immersion in realities which constitute fields of play" (4). This may sound somewhat esoteric, however I suggest that it fits with some of the ideas of Izard, Damasio, and Denzin, about the role of affect in ways of knowing. It also fits with discussion later in the metacognition section about ensuring that students explore all their ways of knowing.

Taking a more scientific and constructivist view than Lopez-Quintas, and focusing more on existential questions than Morillo, Flanagan (1996) explored questions such as what makes for a truly meaningful and human life. He proposed that we preserve our identity by "making changes in our selves" (1996: viii), and that "being in charge of your self matters as much, possibly more, than does being integrated or unified or consistent." (Perhaps this helps explain why humans - including philosophers - are as inconsistent as they are.) Flanagan says that while self-knowledge is a good, it is not necessary for a good or meaningful life that comes "from having chances to express and carry through on projects that matter, that have value and worth, first and third-personally" (1996: viii). Things of value can be ordinary short-term goods, such as play, but we also need longer-term projects and plans that matter more, such as love and friendship and creative work. We also need to believe that we can make a difference. Baumrind (1992: 256) said that Aristotle saw this 'contributing' as our 'second nature', our moral personality. I suspect it is an adult concern: children are more often concerned with meaning-making than with difference-making.
Maslow's (1970) hierarchy of needs is relevant here also. I suggest that values teachers might address with their students many of Flanagan's existential issues.

Flanagan saw the self as meaning-maker, but he said living meaningfully and living morally can conflict, and when they do, we often let considerations of meaning win over morality, but at some risk. He suggested that a meaningful life requires risk taking and sometimes requires proceeding unconfidently. While happiness confers worth, it is not enough for a worthwhile life, it may not even be necessary, whereas "having an identity and expressing it... self and self-expression" (1996: 4) may be necessary to make life worth living. He accepted that not any self or expression will do, but he also did not promote a particular conception of self. He admitted that what individuals can be and express is dependent on their culture and life situations, only part of which is under their influence, and thus luck plays a major part in whether individuals have the opportunities to construct themselves and express themselves creatively.

Fundamental to our sense of being Flanagan proposed that there must be narrative connectedness: "that I be able to tell some sort of coherent story about my life" (1996: 65). That connectedness "is caused in part by active authorial work on the agent's part: by working at integration and working at making one's plans and project materialize" (66). We continually update our 'self-model' in our thinking, talking, acting, and even in our dreaming. We self-represent narratively for self-understanding, for public dissemination, and for successful social interaction. Bruner (1992) took a similar position. Golden (1996) also explored these ideas both theoretically and in a values education context. Flanagan's propositions provide an excellent foundation for my metacognitive-affective approach to values education: teachers can involve children in exercises in self-narrative, and thus, in constructing their moral selves.

I also believe that what Flanagan called his natural method for studying consciousness is similar to and useful for my approach linking affect, values and metacognition. His method integrated several areas: phenomenology - listening carefully to individuals; psychology; cognitive science; neuroscience; evolutionary biology; cultural and psychological anthropology; and listening to folk wisdom. He also argued that voluntary action processes can be studied scientifically. The ingredients necessary for free action are: "the ability to pay attention, the causal efficacy of conscious deliberation, reasons sensitivity, the capacity to act in accordance with desires, the capacity to consciously monitor and guide action" (1996: 58). Freedom also implies that the person is responsible, and therefore subject to attributions of agency and responsibility (praise, blame, etc.). These are further issues for discussion with children.
Flanagan and Rorty (1990) explored issues of agency and responsibility in the face of socialization - to what extent individuals construct themselves, their identity, temperament, character, emotions, their moral-values system, and thus, to what extent can they modify those things or be held responsible for them. They suggested that, while "normative ethics sets standards of feeling, thinking, and conduct," they believed that "articulating moral ideals and principles is appropriately constrained by knowledge of the basic architecture of the mind, core emotions, patterns of development, social psychology, and the limits on our capacities for rational deliberation" (1990: 1). I believe that values teachers need knowledge of these matters and of how to work through them with students.

Trianosky was another exploring how much voluntary action or 'will' plays a role in the development of character, as against temperament (largely biologically given), social experiences, "and pure happenstance" (1990: 104). He suggested that individuals can be partly but not totally responsible for their character and actions. Moody-Adams (1990: 113) accepted that luck is involved in the initial structure of character, but denied that it undermines responsibility. She saw character as problematic, but, while people can dissimulate or be dishonest, we can still make reasonably accurate judgements about their character based on their behaviour. She suggested that: "part of being human is having the capacity to act out of character" (1990: 111). This capacity justifies holding people responsible for their actions: we are self-reflective, self-evaluative and self-correcting. These issues relate to my constructivist notion of individuals being active and responsible agents in the building of their values and their self.

Two philosophers exploring the role emotions play in valuing activities are Sherman (1990) and Lind (1990). Sherman observed that "emotions often play a significant role in the expression and cultivation of moral character," that recognizing the morally relevant features of situations often involves "a sensitivity cultivated through emotional dispositions" (1990: 149), and that "specific emotions such as sympathetic sorrow or joy, indignation, fear, or anguish typically draw us in and help us to fasten onto matters where moral intervention may be required" (150). He also pointed out that the emotions play a role "in communicating to others an agent's interest and concern," and "the emotional tone of one's action may make a moral difference" (150). Lind argued that "philosophers who claim that emotions cannot form an adequate grounding for moral theory are often working with a crude, simple view of emotion" (1990: 133). This sounds very close to emotivism, but I agree with his exploration of "understanding through and with emotions," and I agree with his statement that it was time "to reexamine the prejudices that tell us of the evils of emotion... that the poets should still be banned from the Republic" (1990: 145).
Moral psychology also has had little truck with poets. Its focus has been very much cognitive and rational. I now look at what various perspectives within moral psychology have to say about values, and especially at if and how they have acknowledged the role of affect in values, valuing and in values development.

**Psychological Perspectives on Values and Values Development**

Dobrin suggested that the four main theories of moral development - social learning, psychoanalytic, sociocognitive, and biological - each relate to different ethical theories, and their proponents "present their theories as though other approaches were wholly wrong" (1993: 1). I have found that to be the case, and here I attempt to integrate as many aspects of these theories as possible.

Blaming social psychology's positivistic fundamental assumptions that saw human behaviour as biologically determined and motivated by selfish concerns, Forsyth (1992: 239) suggested that social psychology's explanation of moral processes remained relatively undeveloped, in contrast to the cognitivist, behaviourist, social learning and psychoanalytic explanations. The two dominant theorists in moral psychology, Piaget and Kohlberg, took cognitivist and developmental perspectives. So dominant was Kohlberg that Baumrind (1992: 276) talked about "the hegemony of Kohlberg's paradigm" during the 1970s and 1980s. Here I do not attempt to summarize either Piaget's or Kohlberg's theories or the voluminous literature, (for example, Kurtines, Azmitia and Gewirtz, 1992) debating them. I confine myself to looking briefly at aspects of the Kohlberg debate most relevant to my thesis and to alternative theories, especially those looking at the social context of values and values development.

While I look at Kohlberg's theory mainly through the eyes of its critics, I emphasize here that many aspects of his cognitive and developmental ideas are relevant to my thesis. Teachers could use metacognition in combination with a cognitive developmental stage theory. However, they could also take into account other theories of moral development and also the role of affect in valuing and values development, for, as Sichel (1988: 12) pointed out, Kohlberg's treatment of affect was inadequate.

Gilligan (1993) criticized the gender bias in Kohlberg's emphasis on justice, and argued for a focus on caring or compassion. Similar to Ruiz and Vallejos (1999), I see caring as more affectively based than justice. Haste and Baddeley (1991) found support for Gilligan's thesis in their British studies, whereas Garrod and Beale (1993) produced mixed results, and Walker (1991) argued unconvincingly against Gilligan. In exploring connections between the male-justice / female-caring moral orientations, children's gender identity
development, and their same gender friendships in childhood, Langdale (1993) raised important questions for researchers, theorists and teachers.

DeVries suggested that Kohlberg's central theme is that "children are philosophers who actively construct their own worlds, the meaning of their actions in it, and their very instruments of knowing" (1991: 9). While that fits well with my thesis, Packer and Richardson (1991) argued that Kohlberg's methods could not have generated the sort of data to show that. They argued for an analytic hermeneutic approach to studying everyday social interactions amongst children, the moral concerns at work in the interactions, and the moral issues arising from the interactions. Following Heidegger, they saw care as "an existential structure that organizes all of our ways of being in the world" (1991: 336). Their approach and focus fit well with my thesis.

The three volumes of Kuhring and Gewirtz (1991) on moral behaviour and development is an extensive and balanced look at Kohlberg's legacy and at alternative theories. Bandura's (1991) contribution suggested there has been little research on the relationship between moral reasoning and moral conduct from a social learning perspective. He cited some research on families and other social agencies including the mass media, in the transmission of values, and concluded that children's values "are likely to reflect amalgams of these diverse sources, rather than simply the unaltered familial heritage" (1991: 57). Davidson and Youniss (1991) looked at the development of moral judgement and identity, and at connections between the two. They pointed out that moral judgement is a frequent, spontaneous act in social life whereas reflecting or theorizing about moral judgements - as in the Kohlbergian approach - is much less frequent. The latter is more studied because it is amenable to verbal methods. The former is more affective and part of the identity and personality. This suggests to me that we should help students reflect upon their moral feelings and their moral selves in their daily lives, rather than discuss abstract philosophical issues or moral dilemmas. Similarly, teachers could help children develop the capacity to feel forgiveness as well as simply saying they are sorry. In this, Enright et al's (1991) discussion of the moral development of forgiveness is useful for teachers.

Damon saw moral development as a product of affective, cognitive and social factors:

\[
\text{morality grows readily out of the child's early social experiences with parents and peers. It is through common activities like sharing and helping, as well as through universal emotional reactions like outrage, fear, and shame, that children acquire many of their deep-seated values and standards of behavior.}
\]

\[\text{Damon (1988: xiv)}\]

He suggested that subduing the emotions completely leads to moral insensitivity that is as bad as moral emotions out of control. He thought moral learning is best done before
adolescence, and that children need 'authoritative parenting': clear expectations and restrictions consistently enforced. But he also suggested that parents discuss with their children typical childhood moral problems such as honesty, fairness, and concern for others, and their associated feelings.

The role of the social context in moral development is widely researched, as Turiel, Smetana and Killen (1991) showed. Keller and Edelstein (1991) explored how social and moral reasoning development are connected through socio-moral meaning-making and the coordination of perspectives in friendships. This happens through the development of a naive theory of social action in which "the development of a conception of the self as an intentional and responsible agent is central" (1991: 90). A similar approach is that of Kurtines et al. (1991) who, using psychosocial role theory, emphasised the development of linguistic, cognitive, and communicative psychosocial competencies. They saw freedom, creativity, critical-hypothetical thinking and critical-discursive discussion liberating the individual from the constraints of maturational stages: individuals freely and creatively contribute to "the subjective construction and intersubjective co-construction of their understanding of reality" (1991: 331). These are important foundations for a metacognitive-affective approach to values education.

Contrasting the Piagetian and Kohlbergian structuralist approach with the social psychological, cultural approach, Reykowski (1989: 23) emphasized the development of evaluative processes and standards based on innate affective reactions that through conditioning become attached to objects, concepts, words, and even larger cognitive organizations such as schemas. He also explored complex interactions of these affective sources with the impact of societal and cognitive sources on moral development.

I mention briefly Baumrind's (1992) sociocultural perspective and Hogan's (1992) socioanalytic perspective on moral processes, both of which emphasize the importance of socialization in the development of children's moral life. Hogan emphasized personality factors, whereas Baumrind saw children as "active in the co-construction of reality" (1992: 276), gave due weight to existential concerns about identity, self-integrity and "internal experiences," and emphasized rational and volitional factors. Baumrind saw Kohlberg's approach as culture-bound in western, socio-economic, and gender terms, and argued that his dilemma interviews "engage the cognitive, and not the affective and conative, faculties" (259). She pointed out that empathic responses can be powerfully moral, and, as principles have affective aspects, "everyday interaction to be moral does not require the application of formal logical principles in postconventional reasoning, and that is fortunate, because few people use it" (261). She argued that Kohlberg's assertion, that the moral dimension should exclude the practical consequences for the self, was immoral, inhumane and unrealizable.
Baumrind proposed 'true self interest', based on breaking down the self-other separation, as basic to traditional notions of altruism, and fundamental to moral judgement. This notion of *agape*, self-giving love, or altruistic egoism, requires justice and compassion. She suggested that socialization of children should "include training in constructing true self-interest" (270). I see this as yet another component for values education.

Subjective self-interest is central to Haan's theory: "selves are entitled to receive their deserts without guilt in order to function givingly" (1991: 261). She argued that pressing self-interest and recognizing the right of the other to do so leads to reciprocity. She saw morality as a "shared, interactive understanding that arises from social interdependence" (260), and interaction as "the distinctive feature of everyday moral consciousness" (255). Moral tensions, inequities and moral disequilibrium in the social situation must be worked upon, either through negotiation or conflict, or maybe in people's minds, to achieve some resolution. Nonverbal dialogues are particularly important for young children, and while most are minor, they all contribute to the socialization of the child. Developmental aspects of morality in everyday life were also the focus of Killen and Hart (1995).

Haan suggested that "the cognitions of morality are usually emotional - 'hot' rather than cool. From the interactional view, moral emotions communicate more immediate, compelling, and accurate information to disputants than is captured in words" (1991: 260). The speed of emotional communications and the variety of verbal and nonverbal communications means that moral dialogues can be complex and speedy. Moral dialogues, occurring throughout the day, explore the facts and emotions of the moral issue. Extreme positions are put, but often people back off in order to clarify the problem" (256), and compromises are struck. Shweder and Much (1987), Berndt (1987), and Berkowitz, Oser and Althof (1987) also made useful contributions about moral development through sociomoral discourse.

According to Haan, parents go to great lengths through repeated moral interchanges, to ensure their children's morality and that their children come to view themselves as moral, although severe, dramatic, or accusatory lessons can lead to distortions. Haan said that the development of children's moral intersubjectivity depends on their experiencing 'good faith' rather than betrayal: entering a moral dialogue "means self-exposure that may be risky" (1991: 261). She also saw social bonding as important for moral commitment. The child has not just to learn how to give, but "how to balance the other's needs with her own in a moral sense. A moral basis for deciding when one has done enough for the other person develops because doing too much upsets the moral balance as much as doing too little" (262).
Suggesting that Bandura's moral theory is based on transgression, Hoffman's on empathy, and others' on controlling self-concern, Haan argued for research and theory embracing all facets. She proposed that "the desires and rationality of people are served by dialogues that promote fairness" (1991: 272) in which all can speak, none dominate, and anyone can veto. Teachers can create the atmosphere of openness, trust and listening, required by Haan's dialogue, in their classrooms.

Walker et al. (1995: 396) suggested that moral psychology had failed to acknowledge that the "role of affect in moral functioning is multifarious." Exploring their respondents' affects, they found angst in struggling with difficult moral conflicts was very common, as were anger, pain, sadness, guilt, shame, satisfaction, and power or confidence. People were aware of this role of affect and some would utilize it or try to reduce it. Many relied on intuition in resolving moral issues or in evaluating their actions. Walker et al. also suggested that the "role of automaticity or habitual responding also needs to be examined better in moral psychology, in contrast to the contemporary emphasis on reflectivity" (1995: 397). The metacognitive approach I am suggesting would have children reflect upon their automatic responses and habits.

Memory, emotion and behaviour are the focus of Arsenio and Lover's (1995) paper exploring the emotions children expect various sociomoral acts to produce, and the way these emotional expectancies influence children's sociomoral behavior. They drew upon Piaget's ideas about affect and will to investigate developmental shifts in children from age five to twelve. They concluded that affective and cognitive aspects operate in combination to instigate such transitions.

Lapsley (1996) claimed that his was the first book comprehensively to integrate the psychological literatures with allied traditions in ethics. It explored moral rationality and decision-making; the development of prosocial dispositions and the sense of fairness; the notions of moral self and moral identity; and their relation to issues of character and virtue. Lapsley discussed parenting and educational strategies for influencing moral behaviour, reasoning, and character development. His discussion of Johnson's 'moral law folk theory,' is useful for values teachers as it provides an understanding of their students', and possibly their own, theories. Lapsley claimed that Kohlberg's methodology focused on issues "foreign to the daily experiences of children," and Kohlberg's theory assumed "that young children are egocentric, that their moral sensitivities are dominated by a punishment and obedience orientation, and that real progress to the next stage is not possible until early adolescence" (1996: 149). According to Lapsley, Piaget had seen children starting to insist on equal treatment around middle childhood. Lapsley highlighted Damon's work on children's understanding of fair sharing and Hoffman's work on empathy's role in moral
life. He suggested that Hogan's Socioanalytic Theory and Kohlberg's theory represent opposing options in the the moral law folk theory, and that Blasi's Self Model fits mid-way between the two.

According to Lapsley, Blasi saw the self developing moral understandings that are integrated into the core self to develop a moral identity and moral personality. The self constructs an ideal moral self that "becomes a constituent of the core, essential self" (1996: 228). Lapsley also discussed research showing that moral emotions are separate from moral understanding in young children "but they progressively converge with development" (1996: 235). Lapsley also pointed to the work of Tappan "highlighting the importance of language, dialogue, and narrative structure" (1996: 244), and to Gilligan's research on moral voices of justice and care in the stories of individuals facing real moral dilemmas. I believe Lapsley has provided the basis for a more integrated values education than has previously been available. Most values education approaches have been too cognitively based and do not reflect the role of affect, of the self, of social interaction, or of folk theories. Another example of an integrated approach is Gibbs' (1991) integration of Kohlberg's and Hoffman's theories.

Hoffman's (1982) historical overview showed that many theorists have regarded affect as important in moral action and even in moral judgement. Hoffman saw the typical moral encounter not as a Kohlbergian moral dilemma but as a 'bystander' situation. People's response in such situations are generally more emotive than not, and often do not involve reasoning or reference to principles. According to Hoffman, moral action is motivated by empathic affect, and empathy is implicated in most moral situations because so often there are potential victims. Intentional acts are so often of benefit or harmful to others, and we can share their emotional experience. Hoffman argued that: "Moral reasoning or judgment may be involved, but not necessarily" (1993: 157). He saw empathic affect developing through primary reactions, mimicry, and conditioning, and through language cues of the other's distress, and role-taking, but he acknowledged that this involvement of language and role-playing shows that cognition is involved in empathy development.

The concept of 'hot cognitions', in particular empathic affect, was used by Hoffman to show how affect and moral principles become linked. Empathic affect and moral principles may be evoked independently, but bonds develop between them so that if one is evoked it will prime the other. Consequently the principle, "even if learned initially in a 'cool,' didactic context... acquires an affective charge... [and] may be encoded and stored as an affectively charged representation - as a 'hot' cognition" (1987: 72). After that, when the principle is activated, the associated affect will also arise. Anything associated with the principle, even words, can activate the cognition and affect. Hoffman summed this up: "empathy may play
a significant role in determining whether one becomes committed to a moral principle by giving the principle an affective base" (73). He also explored the implications of hot cognition for memory: "there is reason to believe that both affect and cognition contribute to memory. Recent research suggests that affect in general is an extremely powerful retrieval cue" (83).

Because empathy is amenable to cognitive influence, Hoffman suggested that this "gives a significant role to socialization and moral education" (1993: 169): providing children with a variety of emotional experiences increases the likelihood of them being able to empathize with a range of emotions. Socialization in peer groups and through parental discipline is important for the development of empathy-based guilt feelings. He pointed out that empathy with kin is more likely than with strangers, and so moral education should stress "the common humanity all people share" (1993: 174). Role-taking is important, but so also is more cognitive information and teaching about rules. He called for more empirical research into his proposed empathy-, judgement-, and principle-based moral education.

There are a number of models with similarities to Hoffman's. A general process model of helping behaviour, based on Kruglanski's lay epistemology theory, was proposed by Bar-Tal and Bar-Tal (1991). Eisenberg, Shea, Carlo and Knight (1991) looked at the interaction of emotional and cognitive processes in pro- and anti-social behaviour. Eisenberg (1992) developed this further, comparing biological, cultural, socialization, and situational factors in the development of caring. She looked at socialization influences: the family, school, peers and the media, and she reported that the relatively few programs in schools aimed specifically at developing altruism are trying multiple approaches simultaneously thus making it difficult to evaluate their effectiveness. Spinrad et al. (1999) explored the contribution of parental emotional practices to moral emotional development, and pointed out that there had been little research on the socialization of moral emotions.

Harris (1985; 1989) usefully linked affective and values development. He pointed out that by age three or four, children are aware of the differences between moral and conventional rules. They can anticipate the possibility of influencing another's emotion: hurting and comforting behaviours are clearly intentional. This awareness comes more from the emotional reactions of the victim, than from their preschool teachers or parents who often are more concerned about conventional breaches than moral ones, whereas children generally ignore conventional breaches. Blair (1997) agreed that affect plays a primary role in children's development of the conventional / moral distinction through its positive or negative role in socialization experiences, and its processing into memory.
In the prejudice development area, Hirschfeld (1996) showed that preschool children can hold strident racial and ethnic biases, but may choose playmates from out-groups. He surmised that they may not yet have a clear picture of the characteristics of the out-group. He talked about children constructing 'folk theories' of race. Van Dijk (1987) analysed how racism is reproduced through everyday talk, and Essed (1991) emphasized the everyday repetition of myriad minor events in the reproduction of racism. None of these three explored the involvement of affect in the development of racism. From a Freudian perspective, Young-Bruehl (1996), claimed that cognitivist and other psychologists ignore affect. However, other than guilt and ego defence mechanisms, she herself does not talk much about affect. She says prejudices are latent during the primary school years but become full-blown in adolescence. This suggests to me that late primary school may be an opportune time to work on this area.

Young-Bruehl's emphasis on the unconscious challenges my thesis: "each of the prejudices involves modes in which it defies understanding or refuses to come out into the open, ways in which it blocks access to its dynamics, even when being studied" (1996: 138). However, I take this as a caution against unrealistic expectations rather than a proof that metacognitive exploration of the affect surrounding prejudices is not possible.

Finally in this review of theoretical perspectives, I discuss Haste's (1996) comparison of communitarianism with the liberal, rationalist, individualist tradition, most clearly seen in the Kohlberg approach. While Haste says she is agnostic - her article questions both approaches - she clearly sees appeal in a hermeneutic, social constructivist, communitarian approach, but also points out that Kohlberg's theory has given rise to practical values education programs that straddle both traditions. I find myself close to Haste's position. In this review I have stressed the importance of social constructivist and hermeneutic perspectives, and the importance of dialogue and communication in understanding both affect and values, but I have also argued for the relevance of cognitivist and other approaches. All perspectives can contribute to our understanding. People are both individuals and social beings; psychology and sociology must be involved in an integrated attempt to understand human issues such as affect, values, metacognition and education. Much of the literature still approaches human reality from narrow perspectives, and often theorists tell us that those perspectives are incompatible. I see the latter attitude as the problem, not the supposed incompatibility of theories. I find much more convincing Strike's (2000) argument for a linking of liberalism and communitarianism. He suggests a focus on empathy and notions of kindness leading to an 'ethic for strangers'. I see this as an excellent basis for values education.
Major issues for values education relate to the relativity of values and the inculcation of values in a multicultural society. I discuss them now before I look at values education approaches.

Indoctrination, Inculcation and Clarification

In values education, *indoctrination* can be seen at one end of a continuum, and *clarification* at the other, with *educate for, convey, instil, nurture and strengthen* closer to *clarification*, and *inculcate* closer to *indoctrination*. The criterion for placement on the continuum is the extent an approach encourages students' rational choice as to how far to accept their teachers' basic values. Different proponents suggest values education is about clarifying values or inculcating values or a mix of the two.

If certain values are universal, it may be logical to inculcate such values, however, the briefest exploration of the anthropological literature on values shows that values are culture bound. Of the many who have argued for universality, Kohlberg (1971) is the most extensive and in some ways, convincing, however, Forsyth (1992) critiqued Kohlberg's claims to have empirically demonstrated the universality of justice. Baumrind (1992) rejected the existence of universal moral standards, but made the important observation that universal social-material realities such as scarcity, hierarchy, reciprocity, and indeterminacy, "create the need for morality in all cultures (without thereby mandating a universal hierarchy of principles)" (1992: 262).

A middle position between ethical relativism and absolutism was provided by Kegan (1993). He sees Kohlberg's stages as the development of moral meaning making, leading at stage six to integration of individual and group perspectives, based on human, not national or cultural, rights. Kegan suggested that Kohlberg had escaped culture by focusing on processes of generating principles. However, Gilligan (1993) argued against Kohlberg's rights-based conception of morality, and for a relationships, interdependence, and context-sensitive morality. I see Gilligan's morality as broader than Kohlberg's, and thus more relevant to values education in a multicultural society.

Puka (1991) powerfully critiqued Kohlberg's universality claim, arguing that it and Kohlberg's sixth, mature stage principle of justice are unnecessary, but that Kohlberg's first five stages are still relevant to most people's development. Puka says that even though Kohlberg saw justice reasoning as the final goal, he did not advocate inculcation of justice: Kohlbergians stimulate students to construct morality for themselves, to develop themselves. Puka pointed out that development can be educated for within any of the many moralities that exist. This is a fundamental point for the sort of values education I propose.
Puka suggests a meta-ethical or metacognitive charting of how standards are set in a particular culture. Adapting this, I suggest values education could aim at deepening individuals' awareness about how their values are developing within their culture.

The Values Clarification approach of Raths, Harmin and Simon (1987) emphasised helping students to clarify their own values, rather than inculcating values. Children are encouraged to choose, prize, affirm, and act upon their own values. Because there is a strong 'relativity of values' position underlying the official version of values clarification, Stewart (1987) considered values clarification to be superficial and confused, and also mistaken in its assumption that the process is content-free because a number of values are obvious in its methodology. I agree that values inevitably underlie methods, so teachers must take a position at least on procedural values.

Shermis and Barth (1985) argued that choosing any values as universal or overriding is indoctrination, but Shaver (1985) argued that the term indoctrination is ambiguous and value-laden. For him the issue was whether an educational program increases or decreases rationality while developing commitment to certain values. Commitment means an affective acceptance of values, but does not preclude cognitive inquiry into the meaning and application of those values. I suggest we can inquire into the affective aspects of values, without diminishing commitment. If that commitment involves mixed emotions, or if there is some disagreement between our cognitive understanding of the value and our emotional commitment to it, then it is essential to inquire into the derivation of the affective aspect. I argue that providing students with metacognitive knowledge and skill to focus on the affect as well as the cognitions in their own and others' values, is the best way of giving them choices.

I believe that, in a pluralist society, compromises must be made, but for minimal societal cohesion, some values must be embraced as fundamental, though not necessarily universal. Crittenden (1999) put this case well, and Bauman (1995), Kekes (1999), Luntley (1999) and Talbot (1999) discussed the issue of morality, relativism and postmodernism. Hill promoted "the inculcation and examination of widely embraced values" (1991: 12). The difficulties are to achieve balance between inculcation and examination, and to know how widely which values are embraced. Governments, claiming electoral mandates for their policies, influence the values content of education. Similarly school systems, individual schools, and teachers have a right and a responsibility to promote values. Teachers need a middle path between indoctrination and laissez-faire. I see that path as one where they can publicly defend their choice of basic values and where they promote rational discussion of values through a metacognitive-affective approach.
Shaver (1985: 196) suggested that at an early age we use "literature, well-written history and other dramatic means... to invoke in students positive feelings about their heritage," and later we help students develop cognitive meaning for the basic values. However, I see this separation of affective and cognitive approaches as unnecessary and inappropriate. Shaver's early stage is close to indoctrination as it appears to limit young children's choices. He seems to see older children able to reflect, question, and develop rationally, but not younger children, whereas I see young children also as capable of working on both their affect and cognitions, although my focus is on the older age group. I accept that the development of commitment to values is more an affective than cognitive process. However, as Kalantzis and Cope (1984) pointed out, commitment through affect devoid of rationality is undesirable.

A related issue is the influence of values in the hidden curriculum, whether in the school structure or classroom procedures, or in teachers' body language. I see this as values development through socialization in the school. Tom (1984), Jackson, Boostrom and Hansen (1993) and Hansen (1993) argued that the hidden curriculum is pervasive. Nyborg and Egan (1982) argued that the socialization role of schools overwhelms the education role, and teachers need to distinguish the two. DeVries and Zan suggested that, in contrast to children, teachers are largely unaware of the hidden curriculum. They correctly pointed out that the school "is not and cannot be value-free" (1994: 25), and the hidden curriculum influences the sociomoral atmosphere, and thus, sociomoral development. Discipline procedures are central to the hidden curriculum, and discipline is normally coercive and authoritarian, although, fortunately in the 1990s in Australia most schools embraced positive approaches to discipline.

Pollard et al. (1991) saw moral development as only one goal of moral education, that was itself part of a broader education for democracy. They saw socialization as another goal of education. I agree that certain values are worth educating for, but if we teach critical thinking about those values, we are educating, not socializing. Brezinka (1994) argued that because the term 'socialization' is used in such a confused way, it should be dropped, but he acknowledged it will continue even in scientific discussion. I find that in some values education literature, for example, Battistich et al. (1991), there is a blurring of the distinction, and some, for example, Blair (1997: 194), seem to see socialization as an aim of values education. However, I argue that any work teachers engage in consciously to develop children should be called education, and values teachers need to be very clear about the distinction between these two processes. Although we impose consequences if students transgress procedural rules of the school, students may choose not to accept the values underlying those rules. We should teach what we value and that we value. By teaching the
idea of values, of valuing, and of behaving according to values, we convey a fundamental message - and value - to children.

I now look at the literature on values education, particularly on whether and how it involves affect.

Values Education

Young-Bruehl warned against "earnest educator sponsored programs for eliminating racism" (1996: 106) that she saw as poorly thought through at best and racist at worst. Her warning is appropriate: education for prejudice reduction is difficult and complex. My thesis does not see quick ten week fixes. Attitude change and other values development and values education is complex.

Values education, (generally moral education in the United States), covers the education of children's preferential beliefs, attitudes and values, and, as Hill (1991) pointed out, values education should cover the full range of values: aesthetic, instrumental, technological, moral, religious and political. Teachers have as their long term goals the development of abstract values and values systems, but most of their work is towards the development of beliefs and attitudes as the building blocks of those abstract values and values systems. While values education also aims to have children act upon their values (Haydon, 1999; Straughan, 1999), my thesis focuses more on the development and change of values, beliefs and attitudes than on their enactment, although it briefly looks at conative aspects in order to demonstrate how it could be extended to enactment. Here I look broadly at values education, but I am most interested in the extent to which, and how, affect is treated in values education.

While Fraenkel's (1977) Values Analysis took a 'scientific' approach, having students hypothesize and gather data to enable them to develop new values, Fraenkel (1982) also proposed that children study feelings as a way to understand people's values and their own moral development. He advocated experiences that evoke feelings such as visiting old people, and then discussion about their own and the old people's feelings and actions. I believe Fraenkel's approach has indirectly influenced many teachers in Australia who still follow his procedures. His procedures fit well in the approach I am proposing. Another approach is multicultural education. Banks (1993) provided a good overview of this in the US. In Australia, Kalantzis and Cope (1984) criticized the 'food and dance' approach: the naive idea that multicultural experiences will emotionally move students to embrace other cultures. They advocated the need to deconstruct racism. I agree. The old affective
multicultural education is ineffectual, but a metacognitive-affective approach may be more effective.

I agree with Ling and Stephenson (1998: 5) that generally there is 'a theoretical void' in values education in Australia. Hill suggested that in Australia: "Values education remains a vague and woolly notion... [and] is the poor cousin of other core areas in the curriculum" (1991: 3). Ling, Berman and Cooper (1998) pointed out that a moral vacuum exists in many schools, that there is little room for values education in a crowded curriculum, and the teaching of values is "a contested and contentious field of activity or, in some cases, inactivity" (1998: 41). They critiqued the limited values positions and suggestions of Australian government curriculum documents.

In Australia at present I note a strong push for civics and citizenship education, but this has a history emphasis, a very limited values perspective and no affective aspect. There have been peace education programs, human relationships, social justice, and global education programs in some school systems and in many individual schools. At state and national levels, values education has been neglected, or seen as limited parts of other subjects such as Health and Social Education. In curriculum documents, different governments emphasise different values, such as citizenship, economic rationalism, human rights, or social justice (e.g., State Board of Education, 1990). In Victoria, the Studies of Society and Environment (2000) document refers to values as part of the citizenship knowledge base (tolerance and mutual respect are mentioned). While there is explicit emphasis on respect for indigenous history and cultures, values are generally implicit in many statements about content and goals. There is much less explicit focus on values than there was in documents from the 1980s and 1990s, where values and action were listed as important as knowledge and skills development. There is now no mention of how values should be treated. Affect is not mentioned in any of these documents.

Ling, Berman and Cooper (1998) surveyed Australian teachers and found the most common approach to values education was discussing a plurality of values and encouraging students to take responsibility for their own values learning. (Perhaps many of those teachers might embrace a metacognitive approach to assist learners to autonomy.) A second common approach amongst their respondents was to promote values such as social justice, human rights, independence, self-respect, sensitivity, honesty, even courtesy. Their respondents reported a wide range of teaching strategies, some of which, such as role play and simulation games, may allow exploration of affects. However, there is no mention of affect in the Ling, Berman and Cooper paper.
The treatment of affect in Australian values education texts, for example, Brady (1989), is generally superficial and lacking theoretic underpinning. Empathy is mentioned only briefly as one of the essential aspects of values education by Hill (1991). Catchpoole (1998), uses television to explore ethical issues in years 5-8 and provides background information about values education, but does not treat affect. There are also commercial programs such as Brunskill (1998) that provides teaching ideas for 36 instrumental values, but no rationale for those values, nor for its methods. Emotions and feelings are mentioned only incidentally. Several general texts about teaching provide introductions to values education, but do not mention affect, or only fleetingly like Cox (2001) or Marsh (1996: 182) who mentioned that "values and attitudes relate to the feeling component of human behaviour," but did not develop the point.

Stephenson, Ling, Berman and Cooper (1998) surveyed values education approaches in five countries, but other than one mention of empathy, and one about feelings about peace, affect is not mentioned, although it is implicit in some strategies. Personal and social education has been important in Britain, (Pring, 1984; Thacker, Pring and Evans, 1987; Lang, 1988), which also has a strong Christian moral education tradition (Wakeman, 1984). However, I find little discussion of affect in either field, other than mentions of empathy. In contrast, the Philippines education system not only widely acknowledges the importance of values education, but, according to Values Education for the Filipino (1997: 40), that values education is based on the integration of affective and cognitive elements. This 'Affective-Cognitive Experiences for Self-Integration' approach, further explained in Punsalan (1998), has similarities to my approach.

Taylor (1996) in her review of 25 years of publication of The Journal of Moral Education reported limited attention to affect. She called for more contributions on "the integration of habit, reasoning, feeling, judgement and action," and on "promoting the moral identity and integration of the individual" (1996: 18). A fascinating response was Zigler (1998), suggesting that Dewey, influenced by F.M.Alexander, anticipated much of the emotional intelligence / competence developments of the 1990s. Zigler argued that a comprehensive values education must include awareness of how habits can be changed through change in mind-body relationships, through control of emotions, and changes in the environment. Zigler (1999) connected recent neuroscience findings on emotion to the transformation of moral impulse, and also put that into the context of a pluralistic often amoral society and an often emotionally negative mass media.

In the USA, peace education programs appear to have been common in the 1980s, and, as noted earlier, recently anti-violence programs and Social and Emotional Learning programs are common. Purpel's (1998) overview of values education in the USA, found little formal
values education in schools, and suggested that even the Values Clarification and Kohlberg approaches have left only a negative legacy, but that Lickona's more conservative Character Education Movement (CEM) has some currency, [Education Leadership (51), 3, 1993, and Lickona (1996) discuss CEM]. Purpel did not explicitly discuss affect, but he did see as potentially influential Noddings' work focusing on caring, and he discussed service, conflict resolution, and holistic education philosophies, as other areas in which values might be reintroduced into school curricula. I add that each of these are areas in which the role of affect could be explored and developed. Noddings (1984; 1992) explicitly explored caring as the basis for moral education, but did not explicitly mention affect.

In 1988, Damon knew of no formal moral education program directed "towards children's moral emotions" (1988: 126). He suggested introspection and self-monitoring experiences "can help children identify guilt and other moral emotions" (1988: 127), but he provided no further details about helping children do so. He suggested training children's social perspective-taking skills, developing a mature sense of justice through moral dilemma discussions and through indirect counselling, and developing responsibility through service. He saw as anti-democratic, conservative approaches that indoctrinate traditional values and inculcate habits and character. Damon also provided a critique of, and some research evidence against, the formal Values Clarification approach. However I believe less formal values clarification techniques employed in many values education approaches are useful, as are many aspects of Lipman's Philosophy for Children (PfC) approach, although it is not about values development. My proposed approach can incorporate values clarification and PfC techniques.

Sichel (1982) talked about a societal 'value crisis': a perennial theme in the values education literature that Carr (1999) discussed well. Sichel also pointed out that most values education texts use the term 'value' ambiguously and their definitions are often strained. She suggested four types of values are needed for moral development: a) facilitating values, "the procedural tools which allow for rational value choice and foresight" (1982: 54); b) contextual values, built into the social structure and practices of the school, family or group; c) basic moral principles such as individual rights, justice, fairness, equal opportunity, equality, and freedom; and d) character or personal traits. She admitted that character was not 'fashionable', but saw virtues such as honesty, impartiality, consideration, and conscientiousness, as important, and she would reinstate courage, imagination, persistence, commitment, fidelity, authenticity, even creativity. She argued that: "values chosen emotionally often are illusions. After experiencing such emotionally chosen values, there is often regret and sorrow" (1982: 55), and she also said that if values are not "learned through rote, memorization or indoctrination, then the individual must use some degree of creativity in resolving unique and different moral dilemmas" (1982: 60). I suggest that her
writing shows elements of the confusion evident in much of the values education literature concerning the role of affect.

Contributors to Kurtines and Gewirtz (1991c) looked at moral education mainly based on cognitive developmentalism. One, Battistich et al. (1991), focused on cognitive and affective processes involved in the development of 'moral conduct'. Their intervention project changed classroom, school, and home environments to develop prosocial character through a mix of cooperative learning strategies, traditional inculcation of values, and a cognitive-developmental approach. They found such a comprehensive program was overly ambitious but still claimed significant change in many teachers' practices and some development of children's attitudes, skills and behaviour. Another contributor, Higgins (1991) provided details of a Kohlbergian moral dilemma discussion approach using Socratic questioning and emphasizing dialogue. Her evidence suggested long term development in some children's reasoning levels, and that dilemma discussions must be integrated into the broader curricula.

Higgins also discussed Kohlberg's 'Just Community' schools based on Durkeimian moral education ideas and participatory democracy principles, and aiming to produce moral behaviour, not just moral reasoning. She incidentally mentioned many examples of affect in the discussions in such schools, but she did not explicitly draw attention to that affective component. I argue that affect is the 'missing ingredient': teachers need not only to structure schools along the Just Community lines, but also to teach for affective development as well as reasoning development. Higgins suggested developing a just and caring classroom climate and school culture, but justice appears to be the central organizing idea for those schools, and rationality the central focus. Affect is comparatively ignored despite some emphasis on role-taking, perspective-taking, and the development of the self. Perhaps is would help if those schools were called: 'Just and Caring Community' schools.

In Australia, many primary schools already describe themselves as 'caring', and some carry it into their practice, but some appear to have a superficial, and others a sentimental, approach to it. I suggest all would benefit from a more formal and intellectual understanding of how caring relates to development in the full range of affective, self, social and values areas. They would also benefit from more rigorous reasoning development such as Lickona's (1991) 'process' approach integrating thinking, action, and moral affect. Although he focused mainly on affect as motivation, he did discuss the development of empathy. Nucci and Weber (1991) emphasized the need for teachers to clearly differentiate their teaching of social and moral concepts. I agree, and add: teachers need to differentiate the cognitive and affective aspects of moral and social issues.
Is values education a separate subject or integrated into others? Pring argued that personal development is too important to be "hived off to one small part of the timetable" (1988: 45), it should be the responsibility of the whole curriculum. As Tomlinson and Quinton (1986) showed, the issue of timetabling versus integrating values education is unresolved. I believe integration is the best option, but if that is not done well, values education must be timetabled. Certainly there are many advocates for the use of literature in values education, e.g. Perry (1996); Dibella and Hamston (1989); Goodeham (1997). Ellenwood and Ryan (1991) argued for the advantages of narrative learning over logico-deductive learning. They see narrative as a way of helping children not only develop cognitively but affectively, and learning to act morally. The narratives of others, and self-narrative has arisen in this review a number of times, and I see them fitting well into the hermeneutic, constructivist elements of the metacognitive-affective approach.

Campoy (1997) presented four metacognitive strategies for promoting moral thinking about children's literature in language arts. Students investigate school related and real-life problems: "Teachers and students simply need to begin using the vocabulary of the strategies" (1997: 64). I am less optimistic about the simplicity of the process, but certainly the potential is there. Campoy did not describe what he meant by metacognition other than: "metacognitive strategies are structures that promote thinking about thinking, in this case, reflection on moral issues" (1997: 55). In the next section, I show that metacognition is more complex.
This review of the metacognition literature draws upon developmental, cognitive, social, and educational psychology, from social learning and cognitive learning theory, and from phenomenological and pedagogical literature. Throughout it looks at how affect and the self may be involved in metacognition.

What is metacognition?

While Lories, Dardenne and Yzerbyt (1998: 1) pointed out that cognition about cognition "is a fundamental characteristic of human cognition," Borkowski (1996: 400) suggested that "metacognition is at best a set of weakly related mini-theories," Brown (1987: 106) said that "the term has been problematic from its inception," and Reder (1996) said it means different things to researchers from different backgrounds. There are many brief definitions of metacognition, e.g.: cognition about one's own cognitions, (Nelson, 1992); understanding of knowledge, or knowledge of knowledge, (Brown, 1987); learning how to learn, (Sharples, 1989); knowledge and cognition about cognitive phenomena, (Flavell 1979). It is described as a passing feeling, and as a complex cognitive process. Sometimes it refers to problem-solving and other times to other types of learning. Flavell (1987: 21) pointed out that metacognition could focus on emotions, motives, and motor activities. Rowe (1988) mentioned metacomprehension, meta-attention, metamemory and metalanguage. Samson (1997) used the terms 'meta-learning' and 'meta-teaching'. Mezirow (1991: 112) suggested reflection and metacognition are the same. This proliferation of terms and confusion about their use is not surprising as the construct is less than three decades old; it is still evolving. And that confusion may partly explain why metacognition, in contrast to reflection, has not gained more favour amongst primary teachers.

Longer definitions provide more clarity and some consistency. Schraw suggested that "metacognition consists of knowledge and regulatory skills that are used to control one's cognition" (1998: 116). For Schraw, regulatory skills included planning, monitoring and checking activities, but Nelson (1992:1) treated monitoring separately: "the main conceptual categories of metacognition are (1) the accumulated autobiographical information about... (2) the ongoing monitoring of... and (3) the ongoing control of one's own cognitions." I also separate monitoring from control because it highlights the process linking knowledge and control, and it allows more focus on the important processes of reflection and evaluation that occur before regulation as well as during it.
Baird et al (1991: 164), focusing on metacognition about learning, suggested that:

Metacognition refers to a person's knowledge of the nature of learning, effective learning strategies, and his/her own learning strengths and weaknesses, awareness of the nature and progress of the current learning task (i.e., what you are doing and why you are doing it); and control over learning through informed and purposeful decision making.

Baird's (1986: 264) definition - the knowledge, monitoring and control of one's own learning - puts the same ideas succinctly. Borkowski's (1996) framework added 'judgements': knowledge; judgements and monitoring; and self-regulation. Hacker (1998: 5) included affect in his definition: "knowledge of one's knowledge, processes, and cognitive and affective states; and the ability to consciously and deliberately monitor and regulate one's knowledge, processes, and cognitive and affective states." However, his references to affect relate to motivation, not to prior knowledge, as I have discussed it. This is generally the case with references to affect in the metacognition literature.

Because of the difficulty of distinguishing "between what is meta and what is cognitive," Brown (1987: 66) said that the term metacognition was over-used, often being applied to "any strategic action engaged in while reading." She said that asking questions about a chapter could be either cognitive: extending your knowledge, or metacognitive: monitoring it. I suggest the objects of these verbs need to be specified: extending your knowledge of the subject content is cognitive; extending your knowledge about learning is metacognitive. A learning strategy is a cognitive one if it focuses only on the subject content. If the strategy is part of a larger learning focus, an attempt to improve learning, then it is metacognitive. A metacognitive strategy may have both cognitive and metacognitive outcomes.

Looking at the functions of metacognition assists an understanding of the concept. Flavell suggested metacognition is usually "in the service of some concrete goal or objective" (1976: 232). The goal of improving thinking or learning is implicit in most discussions of metacognition, however, I argue that the concept of metacognition would be more coherent if that goal was always explicit. Anstey (1988: 272) says: "Children need to learn how to learn." I would state this more modestly: 'improving learning' is a reasonable goal. Babies are 'hard-wired' to learn, but children can use metacognition to develop as more effective learners.

Rowe (1988) suggested that metacognitive knowledge guides the use of higher order executive mechanisms necessary for advanced cognitive strategies, and metacognition enables the generalisability and transfer of "cognitive skills learnt in one context and/or task to other subjects, or to real life situations" (1988: 228). She also said that a metacognitively
aware and active person can operate as a self-correcting system; that metacognition assists recall, learning and problem solving, the maintenance and strengthening of concentration, motivation, interest and self-esteem; and that metacognitive individuals are able "to identify the principles governing their reactions and cognitive behaviours" (228). Their reactions may include affect although Rowe did not explicitly say so. She claimed that: "metacognition is a general, pervasive and quite essential aspect of cognitive development and intellectual functioning... metacognitive knowledge and skills are a prerequisite for academic and real life success" (229). Perhaps this final claim is overstated, although I notice many real life situations where people are metacognitive.

Having already introduced some of the following terms, I use these major headings to organise the remainder of this review:

i) Metacognitive Knowledge
ii) Monitoring and Evaluation
iii) Regulation or Control?
iv) Metacognitive Development
v) Teaching for metacognition.

**Metacognitive Knowledge**

Brown suggested that metacognitive knowledge and regulation feed on each other recursively, and she warned: "attempts to separate them lead to oversimplification" (1987: 67). Kluwe (1987) avoided this problem by distinguishing declarative knowledge: what children can state about their own cognitive activities and abilities; and procedural knowledge that is built into processes regulating their thinking. Thus Kluwe sees knowledge both as an entity and as part of processes and skills. Davidson and Sternberg (1998) reported that in problem solving, metacognitive knowledge and metacognitive skills help students strategically encode the problem, select plans and strategies, and identify and conquer obstacles. Hacker (1998) mentioned metacognitive knowledge of what we do not know. We could also talk about this as a skill or process: identifying what we don't know.

I think it is useful to see both knowledge and regulation as components of the whole process that is metacognition, and to use metacognitive to refer to components of the whole. Metacognitive thinking produces metacognitive knowledge about learning; metacognitive actions such as planning and monitoring lead to metacognitive regulation of learning. Metacognition involves the processes of generating knowledge about learning and using that to guide learning. Gunstone and Baird see metacognition as "not just a cause of learning but an outcome of learning" and "a crucial goal" (1988: 240). So metacognition is
seen as a *process* and an *outcome*. But it is an intermediate outcome: we want to be more effectively metacognitive in order to learn better.

It is useful to highlight features of knowledge, cognition and learning more generally. I see knowledge being constructed and reconstructed through thought and action in social situations. Knowledge has social and psychological elements, including affect, motivations, and purposes that can lead to inconsistency in beliefs and actions. An individual's knowledge is never completely accurate; it may be unconscious, automatized, only partially understood or storable. Kruglanski (1989) provides two metaphors for knowledge: (i) knowledge structures, like LEGO structures, can be modified or even dismantled under appropriate conditions; and (ii) like a searchlight, thoughts are focused awareness but "in a constant state of flux" (1989: 32). Thoughts are focused by affects, motivations, and purposes, and learning results when old thought patterns are 'unfrozen' in the searchlight of new evidence and new thoughts, and are replaced by new patterns.

Greeno, Collins and Resnick, (1996) provided an extensive analysis of the relationship between cognition and learning as seen in the three major educational psychology perspectives, but I find Mezirow's definition of learning more useful because it emphasises meaning-making and affect: "Learning is a process of construing and appropriating a new or revised interpretation of the meaning of an experience as a guide to awareness, feeling, and action" (1991: 35). He added: "we tend to accept and integrate experiences that comfortably fit our frame of reference and to discount those that do not."

According to Baird (1991: 99), metacognitive knowledge "includes knowledge about the nature and process of learning, effective learning strategies, and personal learning characteristics." Schraw's (1998) 'conditional knowledge' - knowing when and why to use declarative and procedural knowledge - is a useful concept for teachers to have in mind when working with students. Brown suggests that knowledge about cognition

> refers to the stable, storable, often fallible, and often late developing information that human thinkers have about their own cognitive processes... it requires that learners step back and consider their own cognitive processes as objects of thought and reflection. 

*(Brown, 1987: 67)*

A number of points follow from this: One, learners need knowledge about cognitive processes, including knowledge about the mind, about the 'self', and about the relationship between their cognition and their affect. Two, if, as Brown (1987: 68) says, the early concept of memory one forms is stable as "a permanent part of one's naive theory," teachers need ways to challenge that concept - and similar concepts of mind - if students are to become more accurately metacognitive. The very existence of a 'concept of memory' is metacognitive, (Kreutzer, Leonard and Flavell, 1992: 299). Three, by 'late developing'
Brown means in late childhood, thus making the upper primary school an appropriate time to teach for metacognitive knowledge development.

Four, we need to find ways to help learners accept the fallibility of their knowledge, to treat their 'theories' scientifically. Five, metacognitive knowledge is 'statable' in contrast to insights individuals are not yet able to explain in words. Brown reports Piaget's ideas about self-correction and regulation proceeding below the level of consciousness. Piaget saw success as "having enough understanding to make things work," and understanding as "successful mastery in thought of the same situation to the point of being able to solve the problem of the 'how' and the 'why' of the connections observed and applied in action" (cited in Brown, 1987: 95). Brown also says: "the most stringent criteria of understanding involve the availability of knowledge to consciousness and reflection; thus permitting verbal reports" (1987: 72). This is a useful distinction between understanding and knowledge: understanding as the capacity to manipulate, apply, and explain knowledge. Metacognition implies developing understanding.

Six, Brown talked about knowledge of own thinking, but implicit in that is information about the way other people think. Flavell (1979: 907) explicitly included knowledge of "people as cognitive creatures," and suggested three categories of factors influencing cognition - person, task, and strategy. I suggest teachers can make these distinctions when helping students to be more metacognitive. Nelson, Kruglanski and Jost (1998) show that metacognitive judgements about the thinking, feeling and beliefs of others are crucial in social interaction. They also argue that there are few differences between the processes of knowing the self and of knowing others, that the self has only limited 'privileged' access, and often is mistaken or does not know what is causing its thinking, beliefs, or actions. Information about self and others is subject to incorrect judgments, and is only raw data until individuals interpret and sort it in the social context, and in the context of their affects, motivations, and emerging theories about thinking. Individuals are continually constructing their lay or 'folk' metacognitive theories.

**Metacognitive theories and Theory of Mind**

A metacognitive theory provides a unified conceptual framework of what it means to be an effective learner. Schraw and Moshman (1995: 356) suggested that metacognitive theories enable children to use their metacognitive knowledge to regulate their cognition and to transfer their metacognition across domains. They proposed three types: tacit; explicit but informal; and, explicit and formal. Tacit theories may be difficult to change even when "false and maladaptive," and informal theories involve increasing "recognition and control of constructive processes" (359). That awareness allows individuals to begin to formalize and evaluate aspects of their theory. Interestingly, they suggested that formal theories are
rare, and formal theories of pedagogy are rare even among skilled teachers. They also suggested - and I agree - that instructional programs can start from the time a child enters school, and should include a rationale for the importance of metacognitive theorizing and a focus on constructing metacognitive theories. They report that research shows "metacognitive theorizing can be facilitated by self-talk and peer interactions that focus on the process rather than the product of learning" (368).

Schraw and Moshman (1995) suggested that theories of mind address mental phenomena such as emotion and personality, whereas lay metacognitive theories focus on cognitive aspects of the mind. I see this distinction as theoretical, not a real world one, and not useful given my proposal that metacognition can focus on affect. Borkowski (1996: 393) sees Theory of Mind (ToM) as antecedent to metacognition, thus, teachers can be helping students to develop their naive theories of mind and of self, as the broader context for their metacognitive development. Bartsch and Estes (1996: 284) pointed out that ToM research looks more at children's conceptions of emotions and desires than does metacognitive research. They emphasised the importance of the social environment for the development of children's knowledge of feelings and desires. They suggested the possibility that

an understanding of cognitive states arises from an understanding of noncognitive states... If so, a comprehensive account of metacognition will have to be anchored in a broader understanding of development and will require a better understanding of the relationship between cognitive and noncognitive psychological phenomena. (Bartsch and Estes, 1996: 299)

Their explicit linking of metacognition and affect is broader than that of other ToM theorists who concentrate more on the conative-metacognitive link.

Lories, Dardenne and Yzerbyt (1998) discussed links between social cognition and metacognition. They suggested, as did Smith (1990), that there is nothing mysterious about metacognition: there is no special metacognitive ability or location in the brain. They pointed out that metacognition requires an inductive step, an attribution: it is a reconstruction. This is a useful perspective on the learning process at the heart of metacognition. They, and Wegener, Petty and Dunn (1998) pointed out that people have naive theories about how they are influenced by the social context, and they have corrective strategies to overcome such 'contamination', but, in turn these corrections may not be correct. Banaji and Dasgupta (1998) discussed the discrepancies between individuals' beliefs and actions, and the inaccuracy of their judgements of the causes of their actions. Thus, education for metacognition should involve students subjecting their naive theories to contradictory evidence and critical analysis. Research in this direction is only beginning, but promises much for the concerns of my thesis.
Wilson, Gilbert and Wheatley (1998) explored lay metacognitive theories about how our attitudes, emotions and beliefs change. They suggested that lay metacognitive theories help protect people’s affects more than their beliefs: people cannot "resist attempts to change their beliefs" (1998: 180). This claim, based on limited experimental evidence, contradicts my experience of the difficulties of many teachers attempting to challenge students' narrow-minded beliefs. I believe Wilson, Gilbert and Wheatley see beliefs and affect too separately: they need to address the role of affect attached to beliefs. They also discussed implicit and explicit common-sense psychology. The former refers to subjective impressions of the world that "operate largely outside of awareness, yet they mediate evaluations, judgments, and actions," whereas the latter are "people's meta-beliefs about their metacognitive processes... how people think they think about the social world" (1998: 173). I suggest that we can help children to be more aware of both types, and also the issue of self-deception addressed by Nelson, Kruglanski and Jost (1998). Martin and Stapel (1998) explored the extent people’s judgements are guided by their metacognitive theories, as opposed to their use of those theories as justifications of implicit processes. The issue has obvious relevance to values judgements and action. They do not mention affect as a factor in the implicit processes.

I now look at two other key metacognitive knowledge concepts: schemas (or schemata) and meaning perspectives.

Schemas

According to Jones (1995: 164), Piaget saw a 'schema' as an internalized model that synthesizes perceptual experience; a working map of the world-out-there. There are schemas for any object of cognition, including physical objects, interpersonal traits, sequences of actions, patterns of relationships, and abstract concepts. Schemas are both socially constructed and personally specific, and evolve with repetition over time. Mezirow said that schemas guide the ways "we experience, feel, understand, judge, and act upon particular situations" (1991: 48); they are dynamic ways of sorting experience, setting priorities, and determining the focus of attention.

Crockett (1988: 37) suggested that "much, perhaps most" of the cognitive activity associated with schemas "will occur outside of awareness," as when we drive a familiar route without consciously attending to it. However, given that we are able to recognize, describe, and analyse the origin and influence of schemas, I suggest we are also able to attend to them metacognitively. Stereotypes are an example of a schema that teachers could explore with students. An understanding of the concept of schema might be useful in understanding how stereotypes arise and how they affect us. Using metacognition, students
can focus on their schemas when they are thinking about the nature of their knowledge and their learning processes.

Crockett reported that there is "a growing body of literature that ties the use of social schemas to the experience of affect" (1988: 48). He cited the example of the schema associated with 'salesperson': it has an affective tag, but the category is also likely to list personality traits that themselves have affective tags. The total affective outcome is likely to be complex. Mezirow also talked about affect influencing schemas. He said that because of our need to avoid information threatening to our self, "we narrow our perception, and blind spots... arise. They operate on attention to filter the flow of information and come to define the shape of both perception and responses," and this "results in character formation" (1991: 49). (Note the connection to values development.) He continued: "attentional patterns learned in childhood become self-perpetuating," once expectations are learned, people are disposed to look for them, or to avoid them. This may explain the persistence of naïve theories in the face of more sophisticated information. These are important insights for teachers to explore in appropriate ways with children.

Meaning perspectives as a special kind of schema

Mezirow's concept, meaning perspectives, highlights the importance of meaning-making and interpretation. They are "made up of higher-order schemata, theories, propositions, beliefs, prototypes, goal orientations and evaluations," and they refer to "the structure of assumptions within which new experience is assimilated and transformed by one's past experience during the process of interpretation. They involve the application of habits of expectation to objects or events to form an interpretation" (1991: 2). Mezirow says that sometimes we may avoid anxiety by not accepting new ideas contradictory to our expectations, but to avoid a consequent loss of meaning, we resort to self-deception (1991: 63). I suggest children can be helped to understand these processes and the affects involved. Note the role of affect in the following: meaning perspectives are mostly acquired through socialization,

*often in the context of an emotionally charged relationship with parents, teachers, or other mentors. The more intense the emotional context of learning and the more it is reinforced, the more deeply embedded and intractable to change are the habits of expectation that constitute our meaning perspectives.*

(Mezirow, 1990: 4)

While he sees the individual more passive in socialization than I do, he acknowledges that learning situations can be organized to promote a constructivist process rather than a passive one. He says "it is the intentionality of consciousness that assures that socialization is not deterministic" (Mezirow, 1991: 2).
Mezirow developed his transformative theory of adult learning using reflection to bring to consciousness and challenge the assumptions and premises underlying meaning perspectives. I believe we can do the same, using the broader process of metacognition applied to affects, with children who are still in the process of forming their schemas, constructs and perspectives. Thus they can participate more consciously in the formation of those structures. It is better to equip children with metacognitive strategies that will create open minds in childhood than to allow closed minds to form that need 'transforming' in adulthood. Students are likely to construct more comprehensive and open meaning perspectives if they are also developing their metacognitive knowledge and skills.

Mezirow suggested Kelly's personal constructs fulfil some of the same functions as meaning perspectives. Each individual develops a hierarchical system of personal constructs modified by experience and social interaction. The more open, adaptable or 'permeable' the construct is, the more realistic it becomes. Thagard (1996) listed six broad theories of mental representation that cognitive scientists study: logic; rules; conceptual theories, (including schemas, meaning perspectives and personal constructs); analogies, (including metaphor); images; and connections. Much from Thagard's list could be used in metacognitive work with children. We already tell children to try drawing if they think better with pictures: an example of metacognitive use of image theory. I suggest appropriate ways can be found to improve children's metacognitive knowledge about how they have developed and are developing their structures of thought that include affect.

Now I look at how metacognitive knowledge is applied. Monitoring, reflection, evaluation, and other skills are involved. Because I see reflection as so important, I treat it under a separate sub-heading.

Monitoring or Evaluation?

监控 is the more common term in the literature, but I argue here for evaluation. Brown (1987: 68) suggested that monitoring activities are used to oversee and regulate learning. They include planning activities (predicting outcomes, scheduling strategies, and various forms of trial and error, etc.), and testing, revising, and re-scheduling one's strategies for learning, checking and evaluating outcomes. Hacker (1998: 13) reported examples of research about monitoring: feeling-of-knowing; allocation of study effort; judgements of learning; and, ease of learning. Baird (1991: 99) suggested that metacognitive awareness of current learning derives "from asking appropriate evaluative questions (such as 'What am I doing?', 'Why am I doing it?')." For Baird, awareness, reflection and control involve evaluation. Schraw (1998) also highlighted the importance of evaluation, and Wilson made metacognitive evaluation an integral part of her definition of
metacognition: "the awareness individuals have of their own thinking and their ability to evaluate and regulate their own thinking" (1998: 15). Because I agree that evaluation should have a prominent place in the overall metacognitive process, I use evaluation instead of monitoring. It is a more familiar term to teachers, and it is easier to identify as a separate stage prior to regulation than monitoring which is also integral to regulation, as I discuss later.

Some writers highlight awareness of what and why one is monitoring separate from the monitoring. Mezirow's first phase in his learning model is 'being aware': "a reflective pause during which a decision is made to proceed toward understanding an object or event" (1991: 84). He also talked about Dewey's 'pre-reflective' stage of critical inquiry as 'awareness of a problem situation'. Awareness can also be prompted by surprise at a positive outcome, as Schön (1991: 56) argued. Flavell (1979: 907) suggested that monitoring "occurs through the actions of and interactions among four classes of phenomena: (a) metacognitive knowledge, (b) metacognitive experiences, (c) goals (or tasks), and (d) actions (or strategies)." By metacognitive experiences Flavell seemed to mean 'awareness': thinking, feelings, puzzlement, wondering, or fear about one's thinking, understanding, remembering, communicating, learning. By 'metacognitively aware' Rowe (1988: 228) meant exploring thought, and identifying and explaining how ideas or strategies arose. This very active process looks more like reflection than awareness, which I see as more passive and limited. For a metacognitive experience to be more than just a passing feeling, we have to attend to it and reflect upon its significance. I see awareness as a first step, and attending as a next, more focused step leading to or part of reflection. Heightened awareness results. It is useful for me to highlight awareness of, attending to, and reflection upon affect as continuing throughout the metacognitive process. These matters raise questions of conscious attention and related issues.

Consciousness, automaticity, accessing cognitive data and self reporting

In contrast to metacognitive knowledge, according to Brown, monitoring and regulating activities are "not necessarily stabable" (1987: 68). Knowing how to do something does not necessarily mean conscious awareness of the process. She says even young children monitor and regulate their own activities without being aware of it, and adults ubiquitously do so on simple tasks. However, these non-conscious activities are not metacognitive. Brown and DeLoache (1983: 281) proposed three stages of learning for learners of any age: i) little self-regulation, ii) active self-regulation, iii) automaticity. Brown pointed out that practice causes many of the intermediate steps of both thought and action to become automatized, and "less available to conscious introspection" (1987: 77). Also introspecting and reporting may change or impair the processes being reported: she cited studies about the relationship between verbal reporting of thinking and performance and learning, but
concluded that the theory and evidence are limited. I have found no research evidence on the effect of verbal reporting on affect. Hacker accepted the convention to "reserve the term metacognitive for conscious and deliberate thoughts that have other thoughts as their object" (1998: 8). I agree: for monitoring and regulating activities to be seen as part of metacognition they need to involve conscious reflection, and thus are able to be stated, perhaps with help from another. Metacognition can occur after automatic processing has been blocked.

Anstey (1988: 269) says competent readers automatically use metacognition. However I suggest that, while learners may be trained to automatically use metacognition in certain situations, once called into action, the metacognitive process needs to be a conscious activity: the metacognitive repertoire needs to be searched and applied systematically. Perhaps as Rowe says: "Continued use of monitoring activities enables the process to eventually occur at an automatic level. The regulatory activities, however, remain a conscious experience" (1988: 230).

While I emphasise the importance of conscious focus in metacognition, I also suggest that metacognition can focus on below-conscious ways of knowing and learning. Kihlstrom (1992) used the term preconscious processing to refer to unconscious, but cognitive processing of affects. I argue that a full metacognitive analysis of one's learning must take into account as far as is possible these unconscious activities. As Kihlstrom says: "it should be possible for people to notice and describe the salient features of an object or event, even if they cannot articulate the way in which those features have been integrated to form certain judgments made about it" (1992: 88). I argue that students can be aware of and describe the affective features of objects, events, memories, knowledge.

While it as important that students know about unconscious influences on their thinking and feeling, several writers warn that such awareness does not come easily, if at all. Lories, Dardenne and Yzerbyt pointed out that: "warning people that some unwanted influence may bias their judgment" is not "enough to allow them to detect that influence and adjust for its effects" (1998: 1). Nelson and Narens (1994: 18) saw people as "imperfect measuring devices of their own internal processes," but they pointed to a new acceptance of introspection in psychology. Wilson, Gilbert and Wheatley (1998) were pessimistic about our ability to protect our mind against 'contamination' by unwanted influences on our beliefs. Studying the unconscious influence of the past on the present, Banaji and Dasgupta (1998) found that stereotypes are unconsciously used even by apparently non-racist people and even when they are instructed to be careful about stereotyping. Studies such as Narens, Jameson and Lee (1994) looking at priming of memory, also explored the relationship between nonconscious forms of memory and metacognitive judgements derived from
conscious memory search. Although Winser (1988) was positive about the value of self-reports, Rowe (1988: 233) expressed concern about "the extent to which metacognition is accessible to a person's awareness, and the extent to which the reports represent veridical and complete accounts of personal experience."

The same concerns arise when we ask children to be metacognitive about their affect. However, it is not the accuracy or completeness of their knowledge of these processes, or of their reporting that concerns me, as there is no way of being certain about the truth. What is important is that children are aware of the possible influences of their affect, and of the possibility that their memory about it may be defective. We want students to incorporate the existence of affect, and of its possible causes and effects, into their learning theories, into their metacognitive knowledge.

Brown pointed out that there are at least two ways in which information may not be readily accessible: one, that it is buried deep in long term memory, and two, that the child is not yet developmentally able to verbalize internal processes. She advocated more microgenetic case studies and "systematic evaluations of children's verbal reports on their own cognitive processes" (1987: 78) including the influence of reflection on the operations of thought. I add that such research and theory development needs also to take place in relation to children's capacities to recall and reflect upon their affect.

Kihlstrom suggested that: "Some mental representation of the self as agent or experiencer" (1992: 95) is fundamental to the individual's conscious experience of its thought. The conscious metacognitive awareness of, attention to and evaluation of cognition and affect in the broader context of the self is the process of reflection that I look at now.

Reflection

Metacognition has reflection as a central mechanism, a basic skill or subprocess. Boud, Keogh and Walker suggested that: "It is important for the learner to be aware of the role of reflection in learning, and how the processes involved can be facilitated" (1985: 19). They suggested a special time for reflection in learning activities and providing a model of reflection for learners. I see reflection covering a range of cognitive possibilities from daydreaming (mentioned by Baird, 1991: 97), through mulling over and seeking meaning in experience, to Dewey's and Mezirow's quite technical, systematic processes. All of these may provide insights into the self and learning. Which sort of reflection to be used is decided metacognitively by learners as they evaluate their self, task and context.

Conscious reflection depends on the development of self-consciousness as von Wright (1992: 61) pointed out. Flavell (1987: 26) also mentioned the importance of "the
developing sense of the self" for the development of metacognition. According to Mead (1934: 225) self-consciousness develops through the child taking the perspective of others towards herself or himself. But, as von Wright (1992) pointed out, the self also starts to see itself as director through reflecting on what it knows, how it knows, what it wants to know for. It creates metamodels about all these aspects of its knowing. Intentions and motives become objects of thought. This self-reflection "permits the viewing of one's representations as representations, one's beliefs as beliefs. This 'relativization' of knowledge paves way for decontextualization," and "enables the person to see himself or herself as an actor with different alternatives" (1992: 62). He suggested that one's self-model is elaborated to fit the social community, and becomes "more coherent in itself" (61). This suggests to me two criteria for evaluations during reflection: consistency with social expectations, and internal coherence. Von Wright's valuable insights are also applicable to affect: self-reflection makes metacognition about affect possible.

Dewey (1933) saw reflection as a systematic processing of experience seeking evidence to confirm or deny one's present line of thinking; an evaluation of the relevance of our thinking to our experience. Mezirow, also viewing reflection systematically but more broadly than Dewey, suggested roles for intuition and imagination. He said: "We imagine alternative ways of seeing and interpreting. The more reflective and open to the perspectives of others we are, the richer our imagination of alternative contexts for understanding will be" (1991: 83). Imagination and intuition can be amenable to conscious reflection and influence. Noddings and Shore (1984) provided detailed suggestions for enhancing intuitive modes in education. Egan (1992) also provided creative ideas about the use of imagination. Boud, Keogh and Walker pointed out that it "is only when we bring our ideas to our consciousness that we can evaluate them and begin to make choices" (1985: 19). They also mentioned insights that arise 'out of the blue,' apparently instantaneous intuitions that cannot be planned. I argue that, because we know learning does occur in below-conscious ways, metacognition can acknowledge that learning and the conditions likely to enhance it, and can tell us when to use informal reflection to create those conditions.

Mezirow (1991) located reflection in what he called the metaphorical-abductive learning process that brings about change of meaning structures. He saw this learning process as how people change their ideas through discussion, a common school learning activity. Thagard (1996: 34) explained abduction as forming explanatory hypotheses that are continually modified in situations. It is similar to induction, but does not lead to generalizations, at least in the short term. Mezirow also talked about the generative role of metaphor: "We reflect on the results of our efforts to project our symbolic models, as selected and organized by our meaning perspectives, metaphorically to interpret a situation" (1991: 117). He also borrowed Langer's notion of mindfulness which he says assists
accurate "perception of the unfamiliar and deviant, avoidance of premature cognitive commitments, better self concept... flexibility, innovation" (117).

According to Mezirow, the "validation of prior learning, or attending to the grounds or justification for our beliefs, is the central function of reflection" (1991: 116). When we have doubts "about our physical environment, our social interactions, and our personal world of feelings and intentions, we must resolve these issues before we can continue to learn" (116). He talked about the importance of dialogue and the social context for both creating doubt and supporting reflection. Boud, Keogh and Walker (1985) suggested reflection can be provoked by external or internal stimuli leading to loss of confidence, disillusionment, and inner discomfort. Dewey (1933: 12) suggested doubt, hesitation, perplexity, or mental difficulty, led to inquiry to find material to resolve the doubt. I suggest that part of teaching is providing situations in which intellectual discomfort is created and resolved. Perhaps metacognition should be creating doubt, (but not insecurity), as a permanent attitude. Such doubt helps prevent ideas being taken-for-granted. It is the scientist's skepticism applied to the inner as well as the outer world. Students would come to see their knowledge as tentative, open to challenge by external events and evidence. They would also be willing to question their own premises and assumptions.

Mezirow showed how this can be done. He distinguished: (1) content reflection: "reflection on what we perceive, think, feel, or act upon"; (2) process reflection "an examination of how we perform these functions... and an assessment of our efficacy in performing them;" and, (3) premise reflection that "involves our becoming aware of why we perceive, think, feel, or act as we do and of the reasons for and consequences of our possible habits of hasty judgment, conceptual inadequacy, or error in the process of judging" (1991: 107). Content reflection can be seen as simple cognitive activity whereas process and premise reflection can be seen as part of metacognition because they involve higher level focusing on the how and the why of the what. Premise reflection's questioning of assumptions that are implicit or taken-for-granted is especially powerful. Mezirow sees premise reflection leading to change in meaning perspectives whereas content and process reflection lead to change in meaning schemas. As meaning perspectives are more encompassing than schemas, change of perspectives is especially powerful.

In suggesting that: "Critique and reassessment of the adequacy of prior learning, leading potentially to its negation, are the hallmarks of reflection" (1991: 110), Mezirow was talking about both recent and older prior learning. Baird (1991) talked about 'phenomenological reflection' that has learners focusing on long term, existential, experiential, and meaning aspects of their situation, their learning and their selves. Most other theorists talk only about reflecting on recent experiences, but my thesis sees
metacognition having students reflect on their learning that has occurred through both
socialization and education from the distant to the most recent past.

Mezirow said that during the ongoing action a hiatus is necessary in which critical
reflection can focus on "the why, the reasons for and consequences of" action (1990: 13).
His distinction between reflection and critical reflection is similar to van Manen's (1991)
distinction between anticipatory, contemporaneous and retrospective reflection. Van Manen
is intrigued by active contemporaneous reflection - reflection in the very moment of action -
that teachers do in the dynamic complexity of their teaching situation. He, and Lucas
(1996), suggest Schöns reflection-in-action is much more than 'thinking on our feet': it is a
complex, almost unconscious process, although it can be brought to consciousness and
reflected upon after the event. Van Manen distinguished this "thoughtfulness" from "true
reflection" (1995: 35-41): it does not have the deliberative reflective element. It involves
what he calls the 'tact of teaching' (van Manen, 1991), a notion derived from his
phenomenological analysis of teaching.

I believe we can apply van Manen's concept of 'tact' within student metacognition. It is
another example of a way of knowing that students can become aware of and focus on
metacognitively. It involves an attitude, almost a mood; it requires confidence, (van Manen,
1995: 46). This confidence contrasts with the doubt engendered by the reflective stance
already discussed. I suggest that the two - confidence and doubt - can co-exist and
complement each other: there are many successful people who exhibit both. The sort of
metacognition I envisage enables the individual to embrace both positions: the confidence
of the van Manen tact can balance intellectual tentativeness and can help avoid insecurity.
Metacognitive individuals know about and at least partly understand all these complexities
in their knowing and feeling.

Van Manen suggested that tact is personal, but also "inherently an intersubjective, social,
and cultural ethical notion" (1995: 43), and "a kind of practical normative intelligence that is
governed by insight while relying on feeling." A person who is tactful "has the sensitive
ability to interpret inner thoughts, understandings, feelings and desires" of others "from
indirect clues such as gestures, demeanour, expression, and body language": this tact
"seems characterized by moral intuitiveness" (44). Van Manen pointed out that tact is
similar to other forms of tacit, implicit, practical knowledge that are hard, if not impossible
to verbalize. He said that such knowledge is not primarily located in the intellect or the
head, but rather it "belongs phenomenologically more closely to the whole embodied being
of the person as well as to the social and physical world in which this person lives" (46). I
see it as having much in common with emotional intelligence.
Van Manen's notion of tact as knowing-in-action is important for my thesis in two ways: it is another reminder of the subtlety of the links between affect and cognition; and, the teacher 'knows' this tact from the inside and can share the concept with students so that they can learn to incorporate a 'tactful' way of knowing, of reflecting-in-action into their metacognitive repertoire. As well as conscious, explicit, systematic ways of knowing, the metacognitive repertoire must include these non-intellectual ways of knowing, of knowing from experience, action and feeling, of knowing based on the phenomenology and narrative of everyday life. I now look more closely at the possibility of reflecting upon affect.

**Reflection and affect**

Mezirow (1991: 112) reported that psychologists "have shown little interest in the conative or affective dimensions of reflection." Boud, Keogh and Walker (1985: 21) claimed to have given much greater emphasis than Dewey "to the affective aspects of learning, the opportunities these provide for enhancing reflection and the barriers which these pose to it." They defined reflection in learning as "a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations" (19). They argued that reflection should focus on all aspects of experiences: behaviour, ideas, attitudes, and feelings, and that reflective "outcomes of an affective nature enable us to continue on to future learning as well as involve changes in our emotional state, our attitudes or sets of values" (34). While they talked about adult learners, I see these principles applying to children also.

There are three stages of Boud, Keogh and Walker's reflective process: "returning to the experience, attending to feelings, and re-evaluating the experience" (1985: 21). The first involves describing what happened and the feelings, assumptions, premises, interpretations and judgements associated with it. The second involves utilizing and enhancing positive feelings and removing obstructing feelings. Even in the third stage affect is also attended to. Those affects can be expressed in a sustaining environment, perhaps one-to-one with a teacher, perhaps in a supportive group or even in the whole classroom. They mention writing and drawing, and I add poetry and drama, as ways of expressing and exploring affects.

Boud, Keogh and Walker acknowledged that most people are unaware of these internal affective processes. Their stage of attending to feelings is not intended to raise individuals' awareness of those processes, although this may happen, "but rather to draw attention to the role that these processes play in experiential learning and what individuals need to be able to do to manage their own reflective activities" (1985: 30). This is the point I made earlier that, although children may have difficulty in remembering their past affective processes, acknowledging the role of affect in past learning opens the way for the learner to be more
alert to its influence in the present and in future. It is the general insight and alertness to the possibility of the influence of affect that is more important than the accuracy of the recollections.

According to Boud, Keogh and Walker, significant feelings can become attached to knowledge and appropriated into our value system, making the knowledge less amenable to change. They called this learning 'holistic', "a unity of feelings and intellect," and any learning experience touching this area "can give rise to strong emotions that may need to be taken into account in future reflection" (1985: 33). This affect-affected prior learning is also likely to involve the self. As Tart (1975: 130) said: "adding the ego quality to information radically alters the way that information is treated by the system of consciousness as a whole." Thus, from their socialization, learners bring to the values learning situation knowledge suffused with affect linked to their egos. This notion is at the heart of my thesis: significant affect can be attached to prior learning, and must be addressed in future learning. If learners have metacognitive knowledge about this suffusion of affect, and a metacognitive attitude of tentativeness, then, I suggest, there is the possibility of them making changes even to 'holistic' knowledge.

While Boud, Keogh and Walker's emphasis on affect is useful, it focuses only on large scale emotions to do with self concept, or emotions of high arousal, or with feelings about a whole domain, for example, the student previously humiliated in mathematics who approaches maths classes negatively. They do not acknowledge micro-level affect: 'bits' of knowledge or parts of a schema having these affective elements.

Gunstone and Baird (1988: 240) acknowledged that "learning is both cognitive and affective," but by 'affective,' they mean conative: learners must be willing to learn, and must invest the cognitive and affective effort needed to restructure their thinking. Snow, Corno and Jackson (1996) distinguished the affect involved in conation from other affect, but as with most cognitivist theorists, they did not explore that other affect. The role of affect has been extensively researched in the conation field, especially by theorists of self-regulated learning (SRL).

I look at SRL below when looking at regulation, but first I briefly refer to metacognitive skills, seen to be useful in both monitoring activities and regulation activities. Surprisingly, the literature generally does not mention reflection amongst these skills, although Brown and DeLoache (1983: 280) highlighted self-interrogation and self-conscious participation skills. They discussed a repertoire of skills for metacognition including: predicting consequences, checking results of one's actions, monitoring one's ongoing activity, and reality testing. They also saw the student needing to learn to transfer these skills across
domains. Schraw (1998: 115) found three essential skills in all the literature: planning, monitoring, and evaluation. Nelson (1998) pointed out that 'feeling of knowing' is a much researched monitoring skill, but that the related skill, 'judgement of learning', more relevant to education, needs more research.

As argued earlier, I see monitoring occurring in both the evaluation and regulation stages of metacognition. Dunlosky (1998: 373) argued that "monitoring is fundamental to control," and Borkowski (1996: 392) agreed, and pointed out that different theories vary on the extent of the overlap they identify between monitoring and regulation. I now look at the regulation stage.

Regulation or Control?

Earlier I discussed the question of activities that become automatic through extensive training, but when interrupted require more conscious focus. Brown (1987: 82) called this latter, controlled processing: "a comparatively slow, serial process, limited by short-term memory constraints, requiring subject effort, and providing a large degree of subject control." Metacognitive readers understand the differences between automatic and controlled comprehension, and know when and how to move from one to the other. This principle applies to metacognition with any skill: metacognitive learners recognize the conditions under which they may need to move from automatic to controlled processing.

However, I see the phrase controlled processing implying too smooth and complete a process: I suggest that guided, systematic thinking better conveys the sense of effort required. Monitoring and controlling is appropriate for computers, but I believe that evaluating and regulating is more appropriate for humans. Yzerbyt, Lories and Dardenne (1998) remind us of the many limits on our ability to influence our cognition. Remembering, focusing, concentrating, indeed all cognitions, are incomplete and inchoate, and this should be reflected in the language of metacognition. Regulation of thinking and learning allows for this sense of incompleteness and ongoingness. For these reasons, I see regulation as an even more appropriate word than control when applied to affect.

Executive control, or intentions?

For Kluwe (1987: 32-34), an 'executive' is "something like a central regulatory component in information processing systems," and "in order to maintain cognitive activity, which is subject to emotionally and motivationally determined variation, the human information processing system needs executive decision." He discussed four executive activities that serve controlling purposes: classification, checking, evaluation, and prediction. Brown
(1987: 85) mentioned planning and monitoring as examples of executive functions. (Again we note the overlap between the various aspects of metacognition: the executive idea is involved in metacognitive knowledge creation, in evaluating and in regulating.)

There are difficulties associated with the concept of an executive: Is there an executive centre in the brain? If not, how are decisions made and actions executed? If so, what and where is it? What or who focuses attention? What information is needed for executive decision-making? How do consciousness, intentions, purposes contribute to executive decisions and action? Brown (1987: 82) pointed out that cognitive psychology, having finally escaped behaviourism, accepts that explanation of human behaviour necessitates reference to intentions and "the individual's understanding of what he or she is doing." As she noted that neither intentions nor executive completely explain consciousness and behaviour, she suggested that both concepts be used until better ones are developed. I agree, however, given my emphasis on the self and constructivism, I see intentions as fundamental in the regulation process, and the term intentions more useful than executive in education.

Von Wright (1992) made the point that the computer model of human thinking and learning places an emphasis on the storage, processing and accessing of information in memory at the expense of more complex ideas about learning. I agree: when metacognition is being discussed and taught, the limits of the human brain/computer analogy need to be highlighted rather than blurred by overuse of the term executive. Perhaps the term is useful as an adjective as in Brown's (1987: 86) comment that good planners made many "metaplan and executive decisions and exercised deliberate control over their planning processes." They were flexible thinkers, frequently shifting their focus between levels from the content to their learning. They could self-regulate.

**Self-Regulation**

In the literature there is some confusion and overlap between the terms self-regulation and metacognition. According to Reder, self-regulation may be a kind of metacognition, but, "because self-regulation is largely an automated, implicit process, not all of metacognition is conscious and aware" (1996: 387). In contrast, I start from the position that metacognition is a conscious, deliberate activity, thus metacognition and automated self-regulation are different, as Brown (1987) showed.

Drawing on Vygotsky, Brown outlined a developmental progression from other regulation to self-regulation: "this learning involves the transfer of executive control from the expert to the child" (1987: 100), and the child increasing its regulation of its own learning. Brown pointed out that Piaget distinguished three stages of self-regulation: autonomous; active; and conscious regulation. In the first two stages there is reliance on concrete actions. In the
second there is testing of theories-in-action, but the learner cannot explain these theories. Only at the third stage, from eleven, are children able to mentally construct and reflect on hypothetical situations, and the "entire thinking process can be carried out on the mental plane. The learner can consciously invent, test, modify, and generalize theories and discuss these operations with others" (1987: 90). This is Piaget's 'reflected abstraction', "the end state for a Piagetian development progression of child as scientist" (91), as it requires hypothesis testing, evaluation, imagination, and formal operational thought. Only this last stage should be considered as metacognitive, according to Brown. I agree that 'automatic' self-regulatory actions that occur without the child being able to explain them are not part of metacognition. However, as noted earlier, metacognition can focus on automatic and non-conscious processes. Teachers of metacognition in the primary school would benefit from understanding these distinctions and the Piagetian stages of self-regulation, so that they could evaluate when their students may be ready for metacognitive work.

Self-Regulated Learning (SRL) theory overlaps metacognition theory. SRL theory tends to incorporate the conative elements of metacognition, and even metacognition itself into SRL. Snow (1996: 265) asked if self-regulation is meta-conation, and if it is distinguishable from metacognition. He did not answer his questions, but I see the two as separable: I incorporate conation and meta-conation into self-regulation and thence into metacognition. Thus regulation is a sub-process of metacognition. Winne and Hadwin (1998) placed more emphasis on metacognitive monitoring and control than do many other SRL theorists. In Zimmerman's (1994: 3) view, metacognition simply provides the knowledge base for self-regulation, which "refers to the degree that individuals are metacognitively, motivationally, and behaviorally active participants in their own learning." He sees the goal of self-regulation as independent, autonomous learning. While that is a desirable outcome of metacognition, I see metacognition as also applicable where the student is highly directed: the student can still exercise internal choices. While metacognition can lead to more independent learning, I see more effective learning as the main outcome and goal of metacognition.

I see much of the findings from SRL research being incorporated into metacognition work by teachers, for example, work on affect in conation (Weinert and Kluwe, 1987; Corno, 1993; Corno and Kanfer, 1993; Meece, 1998; Zimmerman, 1998), and work on strategic processes; goal setting and goal orientations; self-evaluation; experiences in social settings; and, acquisition of self-regulation in stages (Schunk and Zimmerman, 1994).

Boekaerts (1997: 181), another SRL theorist, talked about the need for teachers to provide "emotional scaffolding," helping students "to discriminate self-defined goals, intentions, wishes and expectations from those defined by others." While such conative skills are
important, there appears to be no research into modifying affects built into prior knowledge other than domain-level feelings such as fearing maths.

Boekaerts (1998) discussion of the self has important similarities to the emphasis I place on that concept. She sees the self as a 'coherent structure of goals,' and a key to "understanding an individual's goal striving, effort expenditure, satisfaction, social relatedness, and achievement" (1998: 15). She also discussed discrepancies between the actual self and the ideal self. I suggest that when the self is regulating its learning, it is constructing not just its knowledge but its self. Thus I see regulation and metacognition more broadly as part of a larger constructivist exercise: the cognitive and affective construction of the self.

Throughout his work Baird emphasizes the complementarity of metacognition and constructivism, and that complementarity is fundamental to my thesis. Baird (1991: 102) sees constructivism as learners constructing their own understandings of experiences, situations, concepts, people, etc., "in a way that is influenced heavily by what the person already knows and believes," and importantly for my thesis - he also emphasised that "constructivism encompasses cognition and affect, ideas and emotions," and that metacognition enables "reconstruction of personal views, abilities and attitudes." Gunstone and Baird (1988: 239) pointed to the persistence of children's naive theories and the need to "provide learners with opportunities to recognise and evaluate existing ideas and beliefs, and then to build on or reconstruct these ideas and beliefs." They pointed out that dissatisfaction with one's existing position must be replaced by an "intelligible, plausible and fruitful" alternative. Learners, "to become more metacognitive ... need to reconstruct a variety of cognitive and affective issues associated with their views of learning" (1988: 239).

I now look briefly at the developmental literature to see what it says about children in the upper primary school being ready to engage in metacognition.

Metacognitive Development

Flavell (1979: 906) pointed out that "young children are quite limited in their knowledge and cognition about cognitive phenomena, or in their metacognition, and do relatively little monitoring of their own memory, comprehension, and other cognitive enterprises." In reviewing the literature on the development of monitoring and regulating skills, Kluwe (1987: 36) found the evidence patchy, but suggested that by age 10-12 children are acquiring and using these skills. Brown's (1987) review of the literature on metacognitive
development found that rarely is the very young child seen as reflective. As von Wright (1992, 61) pointed out, the four year old "is unlikely to be capable of reflecting about herself as the intentional subject of her own actions," thus, any regulatory activities of the four year old are best not described as metacognitive.

However, Brown and DeLoache (1983) presented evidence suggesting that even young children were capable of a range of cognitive strategies, and of engaging in "behaviours whose sole function is to help them remember" (288), but "what develops with age are strategies and control over these strategies" (284). They stressed the conscious, deliberate and voluntary aspects of that control. They pointed out that where there is an external cue, young children are able to perform better than where "the child must initiate and maintain a purely internal, cognitive orientation to information in memory. The latter requires a greater degree of metacognitive control" (289), which older children have.

Brown (1987: 73) also suggested that their "lack of stable, storable, knowledge is due to children's relative lack of experience in learning situations that occur repeatedly in school; it reflects their novice status as deliberate learners." Perhaps this lack of experience may be the key factor, not the developmental stage: schools could phase in more metacognitive work each year, as there appears to be agreement that by the late primary school, children are capable of self-reflection and thus of metacognition.

Although Flavell, Miller and Miller (1993) provided an introductory account of both metacognitive development and of affective development, they do not appear to make connections between them, unlike Bartsch and Estes (see page 85 above). I have found no research investigating the development of children's capacity to be metacognitive about their affect.

Adopting "the criterion that self regulation, whether consciously carried out or not, is an indication of metacognitive activity," Cullen (1991: 340) cited naturalistic studies to support her claim that some preschool children show metacognitive development. As noted earlier, I do not accept her criterion of non-conscious metacognitive activity, but I note that she also claimed to have found some young children who were able to consciously reflect on their learning strategies. She suggested that teachers could promote this reflection if they were aware of metacognitive goals and provided opportunities for learners to make decisions and to participate collaboratively. Teachers also could make cognitive processes explicit through a range of scaffolding strategies, for example, modelling the use of cognitive verbs, and children adopting tutor roles. I now look at other literature on teaching for metacognition.
Teaching for Metacognition

According to Flavell (1987), parents and teachers formally and informally modelling metacognition, and student practice, reading, and writing, can assist the development of metacognition. Hacker, Dunlosky and Graesser's (1998) edited book reviewed current metacognitive theory, its educational implications, and future research possibilities. In the foreword, Nelson pointed out that metacognitive theory has now developed far enough to permit worthwhile applied research in education, however, most of the studies reported in Hacker's chapter and in most chapters are experimental: few are applied. Sitko's (1998) overview of programs suggested metacognitive instruction has focused on cognitive processes, specifically planning and revising; on text structure knowledge; and, on the social context. She cited one study of students reflecting upon affect, but the focus is on conative and self-image aspects. Dominowski's (1998) chapter, looking at verbalization in problem solving, found 'Think Alouds' useful for the teacher to gain insights into the students' thinking, and also found that to improve performance, students must provide their reasoning. He concluded: "Metacognitive processing can be cultivated with a number of questioning procedures, and talking is not necessarily required" (1998: 43), but thinking and writing appear to work.

Schunk and Zimmerman's (1998) edited book on SRL studies of classroom teaching practice, listed the common components of self-regulation interventions: strategy teaching, practice, feedback, monitoring, social support, fading of support, scaffolding, prompting, and self-reflective practice. They pointed to divergence in the literature over whether modelling and instruction is more effective in promoting SRL than 'self-constructions' in which more informal support from teachers helps students construct their own strategies. I look now at some contributions to their book.

Pressley et al. (1998) stressed the need for long-term strategic instruction and practice, group work, and thinking aloud. Graham, Harris and Troia (1998) also stressed explicit teaching, and that, at least for writing, there is no one correct way and so, flexibility must also be taught. Learners must be given many opportunities for trialing their self-managing strategies, and experimentation and risk-taking must be encouraged. Schunk (1998) looked at the effect of peer modelling, and stressed the role of teacher cognitive modelling. He compared 'mastery' models with 'coping' models that expose difficulties, model mistake-correction, verbalize coping statements, including emotional comments and achievement beliefs, and eventually solve the problem. While there were differences in outcomes related to task difficulty, self-efficacy, motivation, etc., overall he found all types of modelling are effective. Biemiller et al. (1998: 203) reported on the value of learners having the opportunity to use "language to regulate their own and especially other students' work and
make suggestions for improvement." They concluded that all students regardless of ability levels should engage in cross-age and peer tutoring as the consultant, thereby having the opportunity to verbalize their knowledge positively and enhance their self-regulated learning skills.

Brown (1987: 102) argued that supportive experts "serve a major function of initially adopting the monitoring and overseeing role" and thereby making "these crucial regulatory activities... overt and explicit." She cited studies on successful strategies of teachers promoting metacognition: they acted as mediators, promoting self regulation and personal planning by continually prompting children to plan and monitor their own activities, and gradually ceding direction to the learner. They had "students consider new information in light of what they already knew," and they continually focused students' attention on important facts, and used "clever questioning and such Socratic ploys as invidious generalizations, counter examples, reality testing, etc." (1987: 102). Gradually students internalized these processes. Brown provided examples of experts modelling the skills of self-regulation. I suggest teachers could model similar self-regulatory skills in relation to affect.

Baird (1986: 266) warned that metacognitive strategies cannot be used mechanically: "conscious, purposeful application of evaluation strategies is necessary for adequate metacognitive awareness and control, but such application does not come easily; it must be practised." Students need guidance to learn the skills and when to apply them. Anstey (1988) described a three stage process for teachers to lead learners to be metacognitive. Her work built on the self control training strategies of Brown and Palincsar (1982).

According to Rowe (1988), the principles of effective teaching of content and skills apply equally to training in metacognition. The key factors are encouragement, explanation, formative feedback, and modelling by the teacher. She saw the aims of instruction in metacognition as: "(1) to promote knowledge and awareness of metacognitive activity... (2) to facilitate conscious monitoring of cognitive activity... (3) to encourage deliberate executive control" (1988: 229). The student must learn to be aware of four sources of variables that may affect learning: person, task, situational, and the cognitive strategies available. She did not mention affect. She reported that most metacognitive training studies had involved only short-term interventions in experimental situations, that transfer had been achieved more within domains than across domains, and that metacognition had been too narrowly conceived in many of those studies. She also pointed out that often the metacognitive skills were not maintained after training. For that to happen she suggested individuals "must possess knowledge concerning the value of the strategy for improving
their performance" (1988: 232). This would seem obvious, but in teaching often we do not sufficiently emphasise the obvious.

Davidson and Sternberg's (1998: 60) review of a number of metacognitive training programs emphasized teaching in real-world contexts, and pointed to the value of cooperative group work with the teacher guiding, modelling and supporting. Baird (1991) recorded participants' reports on the effectiveness of group discussions. He also found collaboration between teachers and students promotes motivation and transfer of responsibility for learning from the teacher to the students. Brown (1997) also described a program based on a collaborative approach. Sitko (1998: 105) reported on the value of co-authoring, however, she also reported a study that found that "some students used collaboration in a way that undermined reflective thinking," and that social interests can easily intrude upon academic tasks, a point also made by Boekaerts (1998).

Zimmerman (1998) summarized a number of SRL studies and his conclusions mesh with the following conclusions of Gunstone and Baird (1988) about instruction for metacognition:

1. "Training in metacognition should be firmly based on the content and tasks of the usual curriculum and should take place in the usual classroom context" (241).

2. This teaching "should be fruitful to students in terms of specific and immediate short-term goals" (241). The pay-off for using metacognition must be in concrete cognitive terms related to the usual curriculum.

3. As students will not "deduce the specific applications of these general skills for themselves," teachers need to teach the specifics and "foster the active induction by students of more general patterns of learning approach" (241).

4. Metacognitive development requires time, possibly years, and support for learners, and for teachers. White and Baird (1991: 152) also emphasised the time needed to change 'deficient' learners: "Their habits of learning had taken years to establish, and had brought them successfully through the school and examination system." Sitko (1998) agreed about the time and other demands on teachers. A corollary of this is that as students become more effectively metacognitive, instructional time should reduce.

5. Point 4 implies the need for "changes of a fundamental nature in student and teacher roles and responsibilities" (Gunstone and Baird, 1988: 242).

6. They also suggest that action research provides "the appropriate general methodology to use in fostering the individual and classroom change involved in embracing metacognition... this is an argument for students to be reflective practitioners in the sense argued for teachers by Schön" (242).
7. Gunstone and Baird (1988: 242) emphasized the "centrality of the individual and the personal nature of each individual's learning." This is very similar to my emphasis on the self.

The fifteen year long Project for Enhancing Effective Learning (PEEL) project in schools in Melbourne and overseas has addressed these issues and, according to Baird (1999), has had significant results in improving both teaching for metacognition and metacognitive outcomes amongst students. Earlier, in summarizing three of his research projects, Baird (1991: 108) reported that many participants changed their epistemological perspectives "away from a commonly-held monistic and absolutist view of knowledge... to a more pluralistic and relativistic position... For instance, they came to believe that there is not necessarily one best method of teaching and learning." I suggest that developing such an epistemological perspective could be seen as an aim of metacognition. Lucas (1996) reported about a teacher who involved his students in reflecting upon the teaching and learning as it is going on: a teacher reconceptualizing his own and his students' ideas about teaching and learning.

Schraw (1998) provided research evidence on four ways to increase metacognition in classroom settings: promoting general awareness of the importance of metacognition; improving knowledge of cognition; improving regulation of cognition; and, fostering environments that promote metacognitive awareness. He provided instructional aids and regulatory checklists to help teachers focus students on practical examples of declarative, procedural and conditional knowledge. According to Schraw, mastery orientated classrooms are more appropriate environments for metacognitive development than performance oriented rooms. He emphasised the importance of the teacher modelling "reflection on what he or she is doing, and how well it is being done," and he saw a need "to teach strategies, and more importantly, to help students construct explicit knowledge about when and where to use strategies" (1998: 123). He did not explicitly mention affect.

An example of a limited metacognitive focus on affect is provided by Wong (1988) who used student-generated affective questions about the text as a technique for the development of metacognitive skills in reading. However, while metacognition has been studied in maths, science, reading and writing, I can find few references about metacognition in the social education or values education literature, and none linking affect and metacognition to values education. Margulies and Sylwester (1998) have developed kits for focusing children's attention on how their emotion interacts with their thinking, but their foci are the usual conative ones: attention and motivation. Wolters and Pintrich's (1998) study looked at student motivation and self-regulated learning in mathematics, English and social studies classrooms. Banaji and Dasgupta (1998) made links to metacognition in their discussion of
the issue of consciousness of social beliefs. Tappan (1985) discussed what he calls moral metacognition, but only in relation to late adolescence. Swanson and Hill (1993) found links between the development of moral reasoning / behavior and metacognition, across all adolescent ages. Brophy (1990) linked metacognition, values and self-actualization in elementary school Social Studies programs. However, none of the references mentioned in this paragraph are close enough to my approach to assist in its development.

In the next chapter I attempt to draw together many of the ideas from this literature review into a statement of my understanding of what a metacognitive-affective approach to values education would look like.
Chapter Three:
A Proposal for Metacognitive-Affective Values Education

In the last chapter I mentioned many ways in which different findings and ideas from the literature could be used in my approach to values education. In this chapter I draw upon those findings and ideas to explain my basic thesis that metacognition can assist teachers and students in values education if it is focused on the affect as well as the cognition involved in existing values. I call this a *metacognitive-affective approach to values education*. A conceptual framework for this approach is introduced in theoretical terms in this chapter and, with the analysis of the data from the classroom, is discussed in practical terms and developed further in the final chapters.

Values learning occurs through socialization and education. From an early age individuals develop beliefs, attitudes and values through the generally informal, affective and cognitive process of socialization. Formal values education is also an affective and cognitive process, although in it, cognition is generally emphasized more than affect. Education also is concerned with conation: motivation and volition to learn, and these conative processes are themselves a mixture of affective and cognitive elements. Metacognition is generally focused on cognition and conation, and on affective elements of conation. While the framework I propose later includes metacognition about conation, what is new in my thesis is its emphasis on using metacognition to understand better the connections between affect and cognition in both the past learning of values, and in the values as they are presently. My thesis sees focusing on those connections as fundamental to the learner developing their values further. When used in values education, metacognition focusing on both the affect and cognition in existing values, may help bring about values development. I now look at these connections in more detail. While I refer to ideas from the last chapter, there is not room here to discuss all of them explicitly.

**Affect in Learning and Knowledge**

In the literature review I noted that, among other matters, conation theory is concerned with affect built into attitudes and beliefs that motivate or block learning. For example, positive or negative emotion and feelings may be built into attitudes about whole subject areas, such as mathematics or history, or about parts of a subject. It may also be built into beliefs about one's ability in a subject. This affect is relatively easy to identify by asking what the learner feels about the particular subject. I call this *affect about.*
Harder to identify is the affect built into the very knowledge itself, built into the 'bits' of knowledge and into the structures of knowledge, into the schemas, theories, and meaning perspectives that each individual has constructed. This affect I call affect in. The affective and cognitive elements of a 'bit' of knowledge may be described and analysed separately, but in practice the two are intertwined, and interact. In everyday life when the bit of knowledge is recalled, both affective and cognitive elements are recalled. Similarly when individuals respond to a stimulus related to the knowledge, they generally respond with a mixture of affect and cognition.

While some knowledge may be almost affect-neutral: it can be brought to mind and used without the person experiencing much affect, my thesis is concerned with preferential beliefs, attitudes and values that generally have a high level of affect built into them from the time they are first learned through socialization: they are affect-laden. This affect can be positive or negative. It may be hidden, consciously or unconsciously, from outsiders, and possibly even from the self, but it is fundamentally linked to the self. When individuals' beliefs are challenged, those individuals are likely to react affectively, either consciously or unconsciously, to protect their beliefs in order to protect their selves.

Individuals may want to learn, may want to participate in a values development activity, but that intellectual interest may be overwhelmed by these deep affective self-protective mechanisms. It may be that learners take little notice of what is taught because of the affect built into what they already know about what the teacher is teaching. The role of this affect in existing knowledge needs to be understood by the teacher and treated separately from the desire to learn. Students also need to understand this role of affect, and identify - so far as is possible - where affect was involved in their past learning, and what affect is still in their existing knowledge. Such awareness may help them neutralize negative affect and promote positive affect.

Affect in Values and Valuing

As discussed in the literature review, I use the term values as a short-hand term for an individual's more or less coherent system of preferential beliefs, attitudes, and, at the top of a hierarchy of abstractness, a small number of higher-order values. I see two main ways in which values operate in people's lives: i) sometimes people refer to their abstract values system when they make values decisions; they appear to be operating in reasonably rational ways; and ii) often people appear to make their valuing decisions without much reflection or reference to their values; they act perhaps subconsciously, more on the basis of their
feelings associated with their attitudes or beliefs about the matter at hand. In the former, the valuing can appear to be largely cognitive, however, even there, affect still plays some role in the decision-making. The important point is that affect is integral to all values, and involved in all valuing processes, even when cognition appears to predominate. If we think of valuing as an action response, then most of the response is a continuous, complex, affective-cognitive process, and only part of the time might affect or cognition predominate.

I can illustrate this point about affect in values from my work with teacher education students. Asked to identify their values, they often list values to do with family closeness, loyalty, justice, democracy, financial security, love, patriotism, etc. I then ask them to identify their emotions and feelings associated with those values, or with examples in their life of the values in action. I then ask how they came to hold those values. How and when did they develop? Who was involved? What incidents or recurring experiences were important in developing commitment to those values? What affective elements were involved? These questions are about their socialization and the role of affect in their values development. These are the sorts of questions that teachers using a metacognitive-affective approach to values education could have their students consider. Before I discuss that approach in detail, I briefly clarify values development and values education, and I discuss the self, and socialization.

*Values development and values education*

Values development is the process of acquiring, changing and improving one's preferential beliefs, attitudes, and values. Once our values are formed, we are more or less likely to change them when in valuing situations, that is, when called upon either to explain, or to act upon, our values. Beginning early in life, values development generally occurs through socialization within primary groups. It can also occur both formally and incidentally in education situations. Values education involves formal teaching for values development. As noted in the literature review, it appears that beliefs and attitudes are relatively quickly established and not as difficult to change as higher level values that are likely to be later developing and more complex. But even preferential beliefs and attitudes are somewhat resistant to change because of their affective component. However, values may be relatively more likely to change in 10-12 year olds than at adolescence or later, because they are not yet so firmly established. Values clarification approaches to values education attempt to put students in situations where they are exploring and explaining their own values and hearing those of others. Values education works with children's socialized, everyday beliefs, attitudes, values, and behaviours in order to develop more accurate beliefs, more open attitudes, more sophisticated values, and ultimately, better behaviour.
Affect, values, and the self

Perception and memory are influenced by affect; it is easier to remember experiences, people, facts and beliefs that affect has evaluated as important, than those with less affective involvement. In the past (and even today in many situations), 'important' meant that it had survival value, and, as the literature review showed, affect can be traced back to the fundamental survival emotions. Today 'survival' must be interpreted very broadly, and affect, differentiated by cultures, is much more complex. Thus, even when people are presenting a rational argument they are also presenting themselves: they are concerned to appear and feel in control of their circumstances, to support their ego, their sense of their self, their identity. Their identity and values are formed through socialization, first in the family and then in every group to which they belong. Their self grows with and through their values, and affect is an essential component of both. If their identity or their values are threatened, they have an affective response. It cannot be otherwise. If they don’t have the affective response to some degree, they don’t really hold the values strongly.

Izard (1977: 198) pointed out that the strength of the affects involved is the key to the strength of the bonds between affects, cognition, consciousness and the self. So, depending on the quality and strength of the affect, it will be more or less difficult to change values knowledge. I suggest that the learner needs to partly deconstruct that knowledge so that the affect and the information parts are to some extent examined separately. Metacognition can have this de-constructing function as well as a constructive one. Like the academic deconstructionists who use deconstruction to limit the power of the text, I use metacognitive deconstruction to understand and modify the power of affect built into the values. Then a constructive metacognitive focus on affect may allow the affect to be attached to new information, to the changed values, thus enabling commitment to new values. While values clarification approaches talk about building affective commitment to the new values, they do not acknowledge the need to understand and deconstruct the influence of the affect built into existing values.

We can think of affect as armour that protects the self and its values, not allowing them to be too exposed even to reality or logic. We can also think of affect as the glue that holds values and the self together. Values education has to break through the armour and loosen the links between the individual’s identity and values. Metacognition is a tool to focus on the role of affect in the formation and continued development of their self and their values. As learners come to understand how they have been socialized, they may develop some independence of that socialization. My approach to values education aims at increasing understanding of one’s self in social context, and understanding of where one’s values have come from and that they might change without risk to the self. For learners to change their
values, they need to believe that their self will continue into the future despite changes to their values; they need to lower their affective defences. I now discuss socialization and education.

Socialization and Education

The singing of patriotic songs and national anthems is an example of how education inculcates values in an affective way, an example of education through socialization. Values educators need to clearly distinguish socialization and education. Socialization is more informal, less explicit, and less conscious. Much more of the 'teaching' and learning that goes on in socialization occurs through body-language that conveys the likes and dislikes, the desires, fears, hopes, needs, values, of the group. Affective messages are sent often without conscious intent, and are picked up and responded to without much cognitive processing. Our fundamental beliefs about ourselves as male or female, as a member of our family, our religion or our tribe may have been picked up in this non-conscious, non-cognitive way. Such beliefs may be more strongly held than intellectually taught ideas because of this affective socializing, this subtle conditioning that is not easily accessible to conscious thought. Later I discuss this point in relation to my suggestion that metacognition can focus on these subtle processes, but first I make the point that socialization is not only a one-way process.

The individual is not passive, not a tabula rasa, an empty vessel, or malleable clay moulded by others, although socialization is often seen in this way in the literature. However, consistent with the constructivist approach I take, I argue that socialization itself must be seen as a dialectic process in which the individual learns the meanings of the group, but also puts its own interpretation on those meanings, and hence, on the group itself. That learning is subject to error, creativity, interpretation, personality, and to pig-headedness. The two year old is famous for wanting its own way. Rarely do its parents achieve total compliance. Never does the group or the culture replicate itself perfectly. The individual is more or less deviant and creative, and thereby changes the group and the culture. Change is the flip-side of continuity. Freedom, deviance, creativity, complexity and multiculturalism are the flip-side of group expectations and pressures. In both education and socialization, the individual chooses to whom, to what and when to respond. In the modern west, in all but the smallest and most fundamentalist of groups, the individual has a large amount of freedom to choose. Even in many nuclear families, the individual has much freedom, and often is encouraged to exercise individuality. At adolescence especially, the individual is deemed likely to rebel. Given the diversity, the mobility and the media of modern society, most children are exposed to a range of cultures and values.
These opposing forces - the prescriptions of family, ethnicity and religion, and the alternative models of other groups and cultures - leave most children with choices. Even if children go through stages in their values development, (according to Piagetian or Kohlbergian theories), within those stages the individual still has choices. Even children at age eleven who appear to accept unquestionably what their parents say about what it is to be a boy or a girl, a Christian or a Muslim, an Aborigine or a Croatian, are aware of other groups and of conflicting views about those identities. That awareness may not overcome the powerful affective commitment built into the child's identity as a Christian, an Aborigine or a boy, but at adolescence even that emotional certainty is often challenged. The challenges are likely to come more from outside the school's formal curriculum than inside it, and they can be quite devastating in their impact because they are not controlled or contextual.

I suggest that, in the upper primary school in the relative emotional security of pre-adolescence, values education can challenge those 'socialized and taken-for-granted certainties.' This is better done in a relatively controlled and contextual way through values education in which children come to understand how their emotions, feelings, beliefs, attitudes and values were created and continue to influence them. Through that awareness, knowledge and understanding, the children may come to have more influence over their affect and subsequent values development. Education is an affective and cognitive activity, and should be concerned with affective development as well as cognitive development. Saarni (1997: 35) says: a wise teacher "recognizes that learning always involves feelings and... those feelings are experienced as much by the teacher as by those who are taught." The teacher needs to be knowledgeable and metacognitive about her own affect, that of her students, and that which arises in the classroom.

Let me provide an example. A group of children learn at an early age that their religious group is threatened by another group. That other group is demonised and stereotyped, socializing the children to prejudices containing a mix of emotions: fear, contempt, hate, etc., and to more or less conscious feelings. Years later, peace ensues and the children, now adults, want to make peace with the other group. They know intellectually that the 'others' are not demons, but the prejudices remain. They need to change the affective as well as the cognitive settings of their memories. I am suggesting that if they can understand their affect, then the affective links may loosen and they may be able to re-organize them. But I am suggesting that this is best done in childhood. I am proposing a systematic change process built into everyday school learning so children grow up with the knowledge and skills to modify their ideas and to avoid developing 'hard' affective connections that become blockages to further learning.
There is a danger that, in illuminating these affect-knowledge links, students are unable to create new links because they cannot make new knowledge an affective part of their self; they do not plant it in their memory with affective roots, so, it withers and dies. Clearly school learning must have affective relevance to the self. Fortunately, the content of values education has high personal, social, cultural and affective relevance built in.

Metacognition

Metacognition is regarded variously as a thinking process or skill, a learning tool, and an approach to teaching. At its most general, metacognition is thinking about thinking: a higher order thinking. However, the phrase 'thinking about' could be replaced by 'reflecting upon and analysing,' to better describe the "deliberate, planful, and goal-directed thinking" (Hacker, 1998: 3) involved. Metacognition is also a personal process with a purpose, that, in education, is to improve learning. So we could say that metacognition is learning to learn better. To achieve that it needs to focus on both thinking and learning as both content and process. So, a brief definition is: Metacognition involves reflecting upon and analysing what and how one thinks and learns, affectively, cognitively and conatively, in order to learn more effectively.

This definition implies a systematic, long term process, quite different from 'everyday' or spontaneous metacognition. Metacognitive individuals attend to their learning in an analytic and self-conscious way; they are not just vaguely aware. However, they can consciously reflect about something of which they are only vaguely aware, for example, thinking systematically about knowledge that is not easily accessible or storable. It may be: non-verbal; a feeling; an awareness; a feeling of knowing; on the tip of the tongue. Similarly, as discussed in the literature review, metacognition can focus on and promote the conditions for below-conscious ways of learning: intuition; imagination; reverie; day-dreaming; 'mulling over'; 'tact'. We can be aware of, reflect upon and analyse how these below-conscious phenomena may be affecting our thinking and learning, and we can use those phenomena to learn, and to improve our learning. Implicit in this discussion has been the idea of 'evaluating' knowledge and learning processes. Making this explicit, a more complete definition is now:

Metacognition is the conscious development of one's knowledge about, and regulation of, one's learning (including the cognitive, affective and conative aspects), through reflection on, analysis of, and evaluation of past formal and informal, conscious and unconscious learning, and through systematically monitoring and regulating current and future learning processes.

A long-term outcome of metacognition is autonomous learning. In the primary school this does not mean having independent learners working in isolation, rather it has learners aware
of their own learning styles participating interdependently within the 'community of learners' (Brown, 1994). It has students involving the teacher more in their own learning processes.

In education, learning improvement is an outcome of metacognition, and content learning is a by-product. Experimentation with learning is a method and short term dead-ends are to be expected and learned from. For example, in trying to improve second language vocabulary learning, a new approach may turn out to be less effective than a previous method: less vocabulary is learned, but there is metacognitive gain as the student has learned more about their learning.

To keep the definition brief, I left implicit the idea that the learner also utilizes knowledge about other people's thinking and learning. Understanding of one's own learning can come from comparison with the learning processes of others. Teachers can assist students to reflect upon how they and others have learned, and can help students distinguish the learning they do for themselves from the learning others help them achieve. Part of that understanding is an awareness of the limitations and distortions of memory and the role of affect. Part of it is also identifying what one does not know.

A Framework for the Metacognitive-Affective Approach

In the table below I present a conceptual framework showing metacognition applying to affect as well as cognition. For brevity it does not mention values. It is derived from the figure (Appendix One) that I was developing during and after the data collection. I have modified the figure since then, and in chapter six I provide its present form. The table shows metacognition occurring in three stages: developing metacognitive knowledge, then metacognitive evaluation followed by metacognitive regulation. However, the learner is likely to move back and forth between these stages.

Table 1: Metacognition Applied to Affect as well as Cognition

<table>
<thead>
<tr>
<th>Metacognitive Knowledge</th>
<th>Metacognitive Evaluation</th>
<th>Metacognitive Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and awareness of what, how and why one has learned - both affectively and cognitively</td>
<td>Using metacognitive knowledge of how one might learn differently - both affectively and cognitively - to evaluate one's learning</td>
<td>Involves the application of: • metacognitive knowledge of, and • metacognitive evaluation of, cognition and affect... and • metacognitive thinking about cognition to improve learning.</td>
</tr>
</tbody>
</table>
I now look at this framework in more detail. In a metacognitive episode, metacognitive knowledge is being developed and tested. Individuals need metacognitive attitudes and draw upon a repertoire of metacognitive knowledge and skills to monitor and evaluate their learning processes. As they work through the episode, metacognitive knowledge is applied, and will be either reinforced, or modified. They take that reinforced or modified metacognitive knowledge into their next metacognitive episode.

Reflection and analysis occur throughout the process. Metacognition is occurring as soon as learners start to reflect upon their learning, but this must be part of a systematic analysis of the conditions under which learning occurs and of the processes involved in that learning, in order to improve it. If reflection is not part of a learning improvement process, it is not metacognitive reflection, it is simply a basic reflection focusing only on the content of what was learned rather than how it was learned. However, it should be noted that it is necessary to reflect on content in order to focus on the process. Thus reflection on content is part of the metacognitive process if it leads on to or is accompanied by reflection on the learning process.

Metacognitive knowledge develops broad understanding about how meanings, facts, concepts, generalizations, perspectives, beliefs, attitudes, opinions, values, affects and skills develop both affectively and cognitively in both socialization and education. The first stage involves students applying that knowledge to the particular matter at hand (in this case, values): reflecting upon and analysing how and why they have learned the particular values through their socialization and/or their education. They need to think about the situation(s) in which the values developed, who was involved and the affects involved. This enables them to see the importance of the idea to their selves. This is a focus on the past in order to open up or loosen up that knowledge. The focus on the affects involved and on the self, may bring to consciousness nonconscious features, that then may be evaluated, along with more readily statable aspects.

Two related points can be made here: one, when students remember the past, it may not matter how accurately they do so; and two, when they bring to consciousness below conscious knowledge or ways of thinking, it may not matter how accurately or fully they do so. It is not possible to do either of these fully or perfectly. What is important is that students are aware of the influence of past affects and of below conscious affects and cognitions, and are prepared to search for possible ways those things may be influencing current thinking, beliefs, values, etc. This is the metacognitive attitude referred to previously.

Metacognitive evaluation involves evaluating both the content and how the content was learned. The particular values are evaluated to decide if they need to be modified. The
learning process is evaluated to see how it could be improved: how one might gain new information, insights, meaning perspectives, even new feelings about it. There is movement between the cognitive and the metacognitive focus. The cognitive learner is concerned simply about learning the content, and evaluates the content learned, but, metacognitive learners evaluate the content in order to evaluate and improve the learning process. They also focus on the affects involved in both the content and the learning process.

Metacognitive regulation is the application of all that has been reflected upon, analysed and evaluated thus far, to regulate future learning. Learners also need to reflect upon and analyse the content and processes of their conation, so that reasons and commitment to change can overcome inertia, habits, and alternative motivations. All stages involve conation: from the outset, individuals must have some intention to improve their learning. They will not begin this metacognitive process unless they have reasons and desire to do so.

A key issue is how much influence children can have over the affective elements of their knowledge. Corno & Kanfer (1993: 318) suggest metacognitive control of emotion is difficult to achieve and develops later than control of motivation, but Wilson, Gilbert and Wheatley (1998: 177) conclude that people have a surprising amount of control over their affect: they are more successful in resisting contamination of their emotions than of their beliefs. As noted earlier, those beliefs containing higher amounts of affect and more closely linked to the self are more likely to be protected, and less likely to change. However, we can look at Wilson, Gilbert and Wheatley's conclusion from the opposite direction, and ask how can we help individuals realize that it may be in their interest to expose their affects and beliefs to 'contamination'. That realization is a key to unlocking the protective structures. We need to show students that over-protecting their affects, values and selves is counter-productive; that opening up their selves and values is risky, but it may open up their minds and enhance their learning.

It is possible to regulate one's learning processes in a 'trained' manner, a rote fashion, simply responding to the teacher's directions without reflection or understanding of the learning process. Improvement of learning can result, but metacognitive regulation of learning requires a higher level of thinking: the learner is in control of the learning improvement process. However training may be involved when teaching students metacognitive skills. I address this issue in the next section and return to it in later chapters.

The Role of the Teacher - Support or Training?

The above framework for metacognition provides a checklist for teachers who need to understand the broad stages and the principles of learning underlying them. They also need
strategies to trial, and a metacognitive attitude, repertoire and approach that will allow them to continue learning as they teach. As students become more metacognitive, responsibility for their learning moves from the teacher to them. The teacher works to hand over as much responsibility as possible to the students. The teacher’s role is not only to provide the curriculum content, but also through that, to model, teach about, and possibly to train her students for, metacognition.

The teacher can support learners through each of the following stages or only some.

1. *The Partial Support Model:*

   i) The teacher could lead students to metacognitive knowledge of how their learning occurs, and then trust that they will evaluate that knowledge and apply it to improve their own learning.

   ii) She could help them evaluate that information, but leave to them how they might use that knowledge to change their learning.

2. *The Full Support Model:*

Here the teacher would help individual students sort out the most appropriate learning procedures. The teacher would also show them how affective factors influence conation. I discuss how much training may be involved in this in later chapters. This model could also take learners on to monitor their attempts to implement their new learning about their learning.

The literature review was equivocal about the age at which metacognition develops naturally and could be taught, however, there was agreement that it is possible in late primary school. Certainly by then teachers can provide the vocabulary, examples, modelling, and opportunities for practice needed for children to develop their own metacognitive understandings, knowledge and skills.

It may appear that I want students to become deeply and continuously self-conscious, even self-centred. However, self-knowledge and awareness need not be self-absorption: it can lead to greater awareness of the world. It is an awareness of the many ways of knowing and hence, of many different kinds of knowledge. It leads to regulation of the mind so that the relationships between the self, consciousness, the body and the world are enhanced.

The ‘metacognitive-affective’ approach I am proposing aims to help students understand better the role of affect in their memory and values development, to understand their own role in constructing their own naive theories, and their own capacity to influence the future development of those theories. Flanagan’s (1996) ideas about people needing to be in control of themselves are pertinent to whether students will find this approach attractive. I
believe they will see it as an effective tool to achieve greater self and environmental control, because it helps them learn more effectively and more independently of their teachers. Also it is focusing on beliefs, attitudes, opinions, values, the self, and affects - much as children did before they came to school and as they do outside of school. Children work hard at trying to understand the social world, their relationships, and their affects, and at gaining more control over themselves in social contexts. They want to know more about their own and other groups, and about why there are differences and conflicts. Children know the prejudices of their parents and the multicultural mantras of their teachers, but they also want to know why those contradictions exist. At this point it is appropriate for me to put my position on the relativity of values issue in values education.

The Relativity of Values Issue

The metacognitive-affective approach to values education can include a study of values diversity, and can assist children to clarify and develop their own values - possibly through stages (Piagetian, Kohlbergian, or other). This is education about values. However, the values teacher also needs to identify those values that are seen by the community as fundamental, and that will be educated for. Some procedural rules or values are needed to help the social group, the classroom, to function, but also terminal or fundamental values - perhaps justice, fairness, or caring - will be taught. The teacher needs to justify why she sees them as fundamental. Procedural values are easier to justify in the name of social functioning, achieving goals etc. Terminal values are more difficult to justify without resort to other values. It is desirable that at certain times, all values including these terminal values, are investigated in an open way. Thus, the teacher is not indoctrinating, or influencing acceptance of those fundamental values as the universal fundamental values. For example, the teacher might encourage discussion and inquiry into alternative forms of expression of the particular values, or inquiry into alternatives to the value itself.

I do not believe it is possible to be value-free, and it is better that the students know the teacher's fundamental values. That way, the student is ultimately able to question the teacher's values, although, they might not do so during their time with that teacher. This is the closest we can come to making a complex problem and a complex situation work. I want values teachers who are open-minded and able to question their own values, even fundamental ones. This does not mean teachers will be confused, indecisive, or ambiguous, rather it provides the teacher with a middle path between indoctrination and laissez-faire relativism. It is not a clear cut path, but that is the nature of education in a democratic society. Schools and teachers cannot reflect everyone's opinions. We have to give teachers guidance on their rights and responsibilities in this area without making it appear too simple, or too complex.
Chapter Four: Research Methodology and Design

This chapter considers: i) the philosophical and practical reasons for choosing the particular research methods; ii) details of the methods; iii) an introduction to the data; and iv) issues arising from the methods. First I provide a brief overview of the research.

In October 1996 I wrote to the teacher outlining my broad idea for values education - to use metacognition to focus on the affect as well as the cognition in values (Appendix Two). In February 1997 she agreed to work with me to develop that idea as a teaching approach that she would trial. From then until July, in eleven interviews we discussed her understanding of the concepts and issues covered in chapter two, and she explored her interpretation of the original idea and how she would implement it in her teaching of a history unit. I observed her teaching of the unit from July to September and we discussed it in detail during that period and in two follow-up interviews, attempting to assess the success of the metacognitive-affective teaching strategies and the value of the original idea. Since the middle of 1997 I have developed the original idea from the early versions of the conceptual framework shown in Appendix One to the most recent version in Figure 3 (see Chapter Six). I now look at the methodology in detail.

The Methodology

Patton (1990: 39) advocated a paradigm of choices that "rejects methodological orthodoxy in favor of methodological appropriateness." My approach is pragmatic and draws upon a number of different interpretive paradigms. Eisner and Peshkin (1990: 9) point out that our methodological philosophy provides us with cognitive maps that "help us find our way in the territories we wish to explore." Using several different maps left me insecure about my eclecticism until I read Lincoln and Guba (2000) after I had completed my data collection. They pointed to a degree of commensurability amongst interpretive paradigms that has helped to legitimate my approach in my own eyes.

My research approach was an action research-oriented, evaluative case study in the interpretivist, naturalistic, phenomenological, social constructionist traditions. The constructionist view posits that knowledge is "ideological, political, and permeated with values" and affect (Schwandt, 2000: 198). My study was naturalistic: it was conducted in the classroom where the perceptions and actions of the teacher and the students were contextualised within their everyday reality. Within interpretivism, I lean towards hermeneutics in the way that Schwandt (2000) describes it: "meaning is negotiated
mutually in the act of interpretation; it is not simply discovered... there is never a finally correct interpretation" (195). Also the interpreter is affected by the interpretive process, and does not objectify what is being studied. Denzin and Lincoln, (1994: 15, Note 2) suggested that hermeneutics emphasises the way prior understandings and prejudices shape the interpretive process. This fits not only with my methodology, but also with the pedagogical theory that I am developing, as I discuss later.

My approach had elements of grounded theory. Merriam (1998: 49) noted that grounded theory research must come out of existing theory, but also that the hypotheses of grounded theory "are not set out at the beginning of the study to be tested" (18). I started with the broad idea of applying metacognition to the affect in values, but that idea was grounded in my own teaching experience, and was elaborated and implemented by the practitioner in her normal teaching. It was not 'grand theory' but 'substantive' theory that had as its referent specific, everyday-world situations and usefulness (Merriam, 1998: 17). It was not an hypothesis to be tested experimentally, rather it was an approach to be developed and trialed. My research did not seek to manipulate variables, or use control groups or statistical checks. It was designed to produce qualitative data for inductive analysis, not quantifiable data for deductive analysis.

When attempting, in interviews, to find out what the teacher understood about the concepts and issues, I took a phenomenological stance. However, my research is phenomenological only in a general sense. Van Manen (1990: 22) said that phenomenology cannot be used to show or prove the effectiveness of methods of teaching. While I was not trying to 'prove' the value of my idea, I was seeking to show its potential, to understand and develop it through gaining a rich, deep account of the teacher's implementation of it. Phenomenology is interested in both the particular and the universal: the essence, whereas my interest was in the particular: a case study. I look now at case study and then at action research.

A Case Study

My research was an evaluative case study (Guba and Lincoln, 1981; 1989), leading to a negotiated judgement about the value of the original idea. This evaluation was somewhat unusual in that the 'client' was the first researcher, and the main 'judge' was the teacher-researcher. The case study report is an excellent form for such a judgement because it provides readers with a thick and holistic description of the processes involved in generating the judgement; the theory is grounded; it illuminates the actors' meanings, and the researcher's purposes and biases; and it carefully weighs information to produce the judgement (Merriam, 1998).
My research meets Merriam's (1998) essential feature of a case-study: clear boundaries - a single teacher, in one classroom, trialing the approach within one unit of study, over a defined period. It traced the teacher's thinking from a relatively naive initial position through the interviews, through her reading about theory and practice, to her planning and teaching of a unit of teaching, and her reflecting on that teaching, to her reflections on the whole process afterwards. It also documented the changes in my thinking about the original idea, through its implementation as an approach and its formulation as the conceptual framework.

Merriam (1998: 19) says that in a case study the "interest is in process rather than outcomes, in context rather than a specific variable." The case study "aims to uncover the interaction of significant factors" (29), and is particularly suited to where it is difficult to separate variables from their context, and to explaining why an innovation "worked or failed to work" (31). Thus case study method suited the complexity of trialing and developing my original idea.

Similar case studies can be conducted with different actors, or in different contexts, and each additional case can add to understanding of the topic. As interpretations depend for their validity on local particulars, caution is needed in transferring the results, even in similar classrooms. However, as Lincoln and Guba (1985) point out, depending on the degree of fit between the contexts of cases, there may be tentative transferability of findings. Stake (1995) also points out that readers bring their own experience, interpretations and understanding to the data reported, and can develop their own 'naturalistic' generalizations by connecting these new data to their own experience. The knowledge generated from a case study "resonates with our own experience because it is more vivid, concrete, and sensory than abstract" (Merriam, 1998: 31), and because it is more contextual. Donmoyer (1990: 189) pointed out that the knowledge created in a case study is not purely intellectual: much of it is tacit, and "often affect-laden." I used the perspective of my co-researcher to challenge and deepen my own understanding of the original idea. Readers of my report will develop their own view of the developed conceptual framework and its potential. In this context, I now comment briefly on 'objectivity' and 'validity'.

Like Lincoln and Guba (2000: 181), I am persuaded that "objectivity is a chimera, a mythological creature that never existed, save in the imaginations of those who believe that knowing can be separated from the knower." Guba (1990: 90) suggested that in a constructivist, hermeneutic / dialectic paradigm there is no need for objectivity but great need for informed, sophisticated subjectivity deliberately seeking out data "that challenges one's existing constructions." I have sought such subjectivity throughout my research.
My research takes the 'naturalistic' stance towards objectivity. It sees traditional criteria, such as internal and external validity, reliability, and objectivity, as inconsistent with the characteristics of naturalistic inquiry. Alternative criteria such as credibility, transferability, dependability and confirmability (Lincoln and Guba, 1985) enable us to affirm the trustworthiness of naturalistic approaches. To assist credibility, later I list my values so that we - I and my readers - can attempt to evaluate their influence.

**Action Research**

My research has features of action research methodology. According to Carr and Kemmis (1986: 162), action research is "a form of self-reflective enquiry undertaken by participants... to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which the practices are carried out."

They suggest that a key characteristic is the development of "a critical community of action researchers" (224). Practitioners are involved collaboratively in all the research stages: planning, action, observing and reflecting. Carr and Kemmis also argue that action researchers should attempt to change "people's 'subjective' understandings of situations" (183), and should become "aware of how aspects of the social order which frustrate rational change may be overcome" (180).

To what extent did my research meet these criteria of orthodox action research? While it did not follow all the formal procedures, and it involved only the one practitioner, as Kemmis and McTaggart (1988) pointed out, action research must start small, and strategic compromises may be accepted. While the main goal of my research was, through reflection on practice, to develop the original idea about metacognition and affect, the teacher was also improving her practice, and questioning her own theory, practice, and aspects of societal and curriculum contexts. My research had characteristics of what Carr and Kemmis (1986: 202) call 'technical action research', of 'practical action research', and of 'emancipatory action research'.

It had emancipatory potential if it is seen as the initial stage of the development of a pedagogy that could empower learners. Engaging teachers and students in metacognition about their affect and values is emancipatory because it involves them questioning the social institutions - including their schools - in which their affect and values have arisen. Because of the complexity of the conceptual framework, I have not provided a critical theory analysis of the relationship of the conceptual framework to broader school or societal structures. However, in the interviews the teacher was concerned about social justice and empowerment of students, and she was aware that "much teacher action is the
product of custom, habit, coercion and ideology" (Carr and Kemmis, 1986: 189). She also explored the "correspondences and non-correspondences" between "language / discourse, activities / practices and social relationships / forms of organisation" (Kemmis and McTaggart, 1988: 43). Often, and especially in the last interview, she explored how to extend the approach within her school and to teachers outside her school.

To some extent I played the 'facilitator' role prescribed by Carr and Kemmis (1986: 202). I resisted the teacher's attempts to put me in the role of outside expert. I believe my role was generally Socratic. I did not import criteria for judging the implementation, but tried to help the teacher to clarify her criteria. I sought to involve the teacher as a co-researcher in the research, and while overall direction resided with me, the teacher had complete control over the implementation stage. Thus as action-researchers we had separate and joint foci in the research. (I look at these in more detail later.) I respected the limitations on collaboration imposed by the teacher: she did not see herself as a political activist or the research extending beyond her classroom. She agreed to only a limited co-researcher role because of other demands on her time. As Walford (2001: 111) points out, there is much time and expertise needed to do research well, and "teaching is itself a complicated and exhausting enough job."

Walford emphasizes the pragmatic features of research: "the real world of research is one of constraint and compromise" (2001: 5). He points out the researcher's role is influenced by the situation and people involved. It must also be guided by ethical considerations.

**Ethical Issues**

While I met the formal ethics requirements for human research of my university, I also see research ethical issues more personally: how I related to the people I worked with, the teacher and her class. I approached them with respect and care. The teacher-researcher was as fully involved as she wished to be and her time allowed. I kept her informed and she kept her students informed, and that fits well with metacognition. And I had to be responsive to how the research affected them personally. I believe that my presence and the research only positively influenced the students, so here I pay attention to the impact on the teacher.

As Dockrell (1988: 181) said: "The presence of a researcher over a considerable period of time may be a source of considerable stress." In my research, as I report later, the stress reached a peak at the start of the teaching stage and waned thereafter. Two characteristics of the qualitative researcher identified by Merriam (1998: 20) that I endeavoured to put into practice are sensitivity and being a good communicator. I believe that generally I was
sensitive to the teacher's needs, to the classroom context, to the nature of the data being generated, and to my own biases. I believe that our communication was effective and, despite its depth and intensity, enjoyable. I show later that the teacher's difficulties were not caused by a lack of sensitivity or poor communication on my part, but that they were more situationally induced. I believe my research focus on affect helped increase my sensitivity to the teacher's affect. Through much of this chapter and the next I describe the impact of the research upon the teacher and my reactions to that impact.

Schwandt (2000: 204) talks about the way different moral philosophies are related to the research stance. My moral philosophy encompasses caring and justice, the personal and the communitarian, reflection and action. Our values derive from our socialization and life experiences. I started my career as a primary teacher and was trained in quantitative research methodology, but by 1970 had embraced a symbolic interactionist, phenomenological approach to sociology that, along with constructivism, critical theory and action research has influenced my research and my teaching in values education and teacher education. Fundamental to my methodology are the ideas that reality and knowledge are socially and personally constructed, and that people construct their selves and the social situation, but are also influenced by culture and the social context. Understanding requires knowledge of both the social context and actors' meanings. I value descriptive, detailed accounts of everyday life situations as the basis for grounding theory in reality. I believe that social research should contribute to the betterment of people's lives, in this case, through the improvement of pedagogy. Finally, I agree with Solis (1990: 248) that "education is, at base, a moral enterprise," and with Tom (1984) that teaching is a moral craft.

I have not identified the teacher or her school. Later in reporting and analysing the data I use the pseudonym Jean when talking about the teacher. She would be happy to speak about the research and can be contacted through me. My 'portrait' of the teacher is very positive. She participated generously, creatively and effectively in the research. She should be enormously proud of her contribution to her students' development and to the research. In interview six, I reminded her about how I would represent her in this report, and that I would want her to read and give assent to this representation. I discuss this in detail later. In the following I adhere to Denzin and Lincoln's (2000: 5) notion of interpretive reporting being about selecting and combining slices of reality that bring "psychological and emotional unity to an interpretive experience," and that "create and enact moral meaning." Now I look at the aims and goals of my research.
Aim of the Study, Specific Goals, Focus Questions and Research Design

The aim of the study was to trial and develop the use in values education of metacognition to focus on the affect and cognition associated with values. A specific goal was to gain insights into how the teacher planned, implemented and evaluated a teaching unit using metacognition applied to the affect involved in values. Data were gathered to describe and understand:

A. the teacher's existing lay and craft knowledge about metacognition, affect and values, about associated issues, and her initial understanding of my idea linking those three
   i) What were her existing understandings about the concepts and their links?
   ii) How did she interpret and understand issues raised in the literature review?
   iii) What understanding, questions or concerns did she have about the original idea linking the three concepts?

B. how the teacher would translate the original idea into a planned program of instructional intervention within a teaching unit
   i) How did she adapt the original idea to the practicalities of teaching?
   ii) What strategies did she envisage?

C. how the teacher would implement, evaluate and modify the original idea
   i) What difficulties would she experience in implementing the idea?
   ii) How successful would be her teaching strategies related to each of the three main areas: metacognition, affect, and values development?

In order to evaluate success, the teacher needed to describe and evaluate the students' responses to the relevant teaching interventions. Thus data were gathered about the extent to which the teacher saw the students:

   i) reflecting upon how their values, beliefs and attitudes, and the associated affect, had arisen and were likely to develop in the future.
   ii) are likely to be able to influence those changes in the future.
   iii) responding to teaching activities designed to develop their metacognitive knowledge and skills in relation to their values and to the affect associated with those values.
   iv) changing their values and / or their valuing in response to the teaching program.

As the primary focus was on the teacher's understandings and activities, I report on the children's responses only in the context of the teacher's responses.

Two subsidiary goals were to gain insights into:

   i) how the teacher saw her own learning and teaching developing throughout the above, and
   ii) how she envisaged other teachers learning about and developing the approach in their teaching.
Before and during the interviews, the teacher was attempting to read widely about the concepts. She also asked me to provide her with readings from the literature. This added another element to the research design, and two additional research questions arose:

   i) In what ways did the literature contribute to the teacher’s conceptual understandings?

   ii) What potential did she see literature having in assisting teacher development and informing teaching practice?

The teacher readily assented to my formal request to work with her. I pointed out then that, while I had been developing the original theoretical idea linking metacognition, affect and values development, I had few ideas about how it could be implemented in primary schools and that she, as an expert practitioner interested in theory, could help develop the idea by trialing it in her classroom.

The research design had two major components:

A. Semi-structured interviews with the teacher at each of the following stages:
   i) preliminary discussions about the concepts and the original idea;
   ii) planning for the interventions in the teaching unit;
   iii) implementation of, reflection on, and evaluation of, the interventions within the teaching unit, and
   iv) reflection on the whole process including the usefulness in practice of the original idea or modifications of it.

B. Observation and audio-taping of the teacher’s classroom implementation of her teaching unit.

Appendix Three provides tables showing the foci, tasks, research questions, appendices, etc. associated with each of the researchers at each stage of the research.

Choice of Research Site and of Co-researcher

Lincoln and Guba (1985) pointed out that in qualitative research the sample is purposefully selected; there is no claim for representativeness. Merriam (1998: 33) suggested that a case study can be undertaken "for its very uniqueness," it can help elucidate the upper or lower boundaries of cases. I chose to research in a middle-class, private, single gender school with few Non-English-Speaking-Background children, in order to focus on values about other groups in a situation where prejudices are not overtly or aggressively expressed, but where subtle prejudices, what Young-Bruehl (1996: 73) calls ‘modern’ or ‘symbolic’ racism, probably still exist. My experience has been that there are many children in such apparently homogeneous and harmonious schools who have deeply held, negative beliefs
and feelings about other groups that they do not express in front of teachers. I hoped that research in such a school would help develop more effective ways of teaching those children. I believed that, given the complexity of the issues, my research would be facilitated where prejudices are not everyday, emotional issues, openly expressed. Our focus could then be on those children who hold those views quietly as well as those who express strong views easily. Similarly, in a single gender school, gender factors might be less intrusive than in a mixed gender school.

I chose the grade six level because: i) in the childhood years, affect and prejudices are less widely and overtly expressed than in adolescence; and ii) while race awareness can exist from three years of age and prejudices are developing during childhood, the Literature Review suggested that metacognition is more likely to be effective from late in primary school.

I chose an experienced teacher skilled in the fundamentals of teaching because the research was investigating complex and difficult teaching, education, and social science research matters. This teacher was experienced in the use of co-operative learning, inquiry, reflection, and integrated curriculum. As she read widely and was involved in professional development for other teachers, I surmised that most teachers would have less knowledge than her. Thus we might regard this teacher as an upper-level test case: if she struggled to put the theory into practice we could assume that most other teachers would also. If she managed to do so we would know it was possible, but we would then have to establish the conditions under which more 'average' teachers might do so.

Roles of Each Researcher

The teacher had full responsibility for the design, implementation and evaluation of the teaching interventions, and, as I detail later, participated to varying degrees in the interpretation and analysis of the data, and in the evaluation and modification of the original idea. She was also developing her own craft knowledge and together we monitored and described that development. It is appropriate to speak of two co-researchers. Whenever I use the term 'the teacher', it is with the understanding that she was both teacher and researcher. As a co-researcher, the teacher constantly reflected on the progress of the dimension, and on her own progress and feelings about it.

Merriam (1998) says that an essential characteristic of qualitative research is the researcher as primary instrument of data collection and analysis. During the teaching of the unit, as far as possible I played the role of a non-participant observer as I believed it would be more effective than having two participant observers. An exception was when the teacher asked
me to run a simulation game because I had used it before and she had not. I did so as a master of ceremonies, rather than as a teacher. Then the teacher conducted the de-briefing using the game's script, and I participated only in a low key way. Later I report other occasions where I participated briefly.

Although I chose not to be a participant observer, as a teacher of children and adults I am partly an 'insider': I had the potential to perceive and understand the multiple realities, the 'tacit' or intuitive knowledge, the subtle nuances, the non-verbal signals, the unique interpretations, biases and reactions of participants in the complex social situation of a classroom. My perspective complemented my co-researcher's participant, 'full insider' perspective. I checked my interpretations with her whenever possible, as I report later.

While we were co-researchers, we did not have equal positions in the research. Gender separated us, though feminism brought us together. We were both experienced practitioners, she at primary and me at the tertiary level, although she had also taught for a year in my faculty. My reading of theory in the research area was greater than hers. Carr and Kemmis's (1986: 45) point about the way theory and practice have been dichotomized in education is apposite here: my collaborator was a 'professional educator' and a 'teacher-researcher' in their terms, who understood the dialectical relationship between theory and practice, but despite that, sometimes, under the pressures of her work, she pushed me into the role of 'expert' and 'mentor' to her as 'novice'. She sometimes seemed to forget that she was the expert practitioner developing and trialing the teaching approach and potentially transforming the original idea. On those occasions she appeared to view that idea as fixed and me as having fixed ideas of how it should be implemented. Guba and Lincoln (1989: 135) pointed out that negotiations in this form of inquiry need to pay "great attention to egalitarian concerns and... to requirements of human dignity, self-esteem, and self-agency."

Throughout this report I discuss the ways in which our roles ebbed and flowed according to situational pressures and our feelings about ourselves.

A vignette illustrates this: after lesson fourteen the teacher, Jean, told a colleague that she was 'unwell and crotchety' and I had been 'watching it all'. I joked that I had it all on tape, but unfortunately I couldn't use it against her as my PhD isn't interested in that behaviour. In fact, as usual her teaching had been exemplary. In our discussion after her colleague left, Jean asked me whether she had been correct in a particular teaching instance that day. I replied: "I don't know what's correct or not. I think what you're doing... is exploring... taking those issues, those theoretical aspects... and trying to make them work in practice with the kids." I pointed out that neither of us was sure of where we were going, but that I was enjoying finding out, that we were both finding out different things, and some things together. I said that I did not expect the processes to be neat, but that did not worry me and
it should not worry her. This vignette highlights a number of features of our work together: humour; her honesty and frankness; her insecurity about our roles and about the difficulties of her task; her requests for help; our uncertainties about what we were doing; and, my style of responding to Jean.

Data Gathering Instruments

Different types of data collection provided information and differing perspectives about what transpired. Denzin and Lincoln (2000: 5) point out that triangulation, the use of multiple methods, is not only an attempt to secure in-depth understanding of the phenomenon, but also that it is "an alternative to validation," that "adds rigor, breadth, complexity, richness, and depth to any inquiry."

Interviews

A major data gathering tool was the semi-structured interview, audio-taped with the teacher's consent. While I asked prepared questions, the teacher often influenced the direction of the interview. Prior to the unit, there were eleven semi-structured interviews varying in length from 60 to 100 minutes, and, after the unit, two 90 minutes follow-up, semi-structured interviews. While the unit was on there were many semi-structured interviews and frequent informal discussions before, after, and even during lessons, ranging from 2 to 60 minutes, and sometimes initiated by the teacher. Most interviews occurred in the classroom, four in the staffroom, and two, including the final interview in January 1998, at the teacher's home.

Walford (2001: 87) says interviews are abnormal social constructions influenced by context, appearance, gender, ethnicity, clothing, accent, and tone. Misinformation, evasion, lies and fronts can be involved, and, incomplete knowledge, faulty memory, and subjective perceptions influence what picture interviewees present. While sharing his scepticism, I suggest that a repeated, extended, informal interview process has the advantage over one-off interviews and questionnaires in that we are able to revisit first responses. Also, much data from our interviews suggest that the teacher was positively involved in making the interviews work. She worked hard on her thinking in them. I believe she was honest and frank. In one interview I asked about the possibility of control over feelings, and the teacher replied: "yes... and I said that probably too quickly without reflecting... yes, I think we do have.. we could have." Here the interviewee was warning about accepting her first response. Another danger of interviews is that the respondent seeks to meet the expectations of the interviewer. I spent much time in disabusing the teacher of this. I made the point often that I did not have the answers and that, as an expert practitioner, she was likely to be able to generate them.
My preference is for 'open' interviews, as used by Perry (1970), but they are time consuming and thus I used semi-structured interviews. I generally phrased open-ended questions. On one occasion, Jean remarked: "these are open-ended questions aren't they? [hopefully!] right... I'm never going to ask another one again... I'll do 'yes/no's' from now on (laughs)." She was finding the questions challenging, but she proceeded to answer the question, and continued doing so for an hour after the busy school day.

The purpose of the preliminary eleven interviews was to establish the teacher's initial thinking about the original idea, her understandings about the three major concepts and related concepts and issues, and about teaching in these areas. This would then enable us to see how her understandings might change during the interview process and during the teaching of the unit, and also to see how her initial understandings might affect the way she developed the planned intervention.

Appendix Four provides a copy of my planning notes for the preliminary interviews, including the sequence of the questions that became the broad structure of the eleven interviews. I worked through that document with the teacher at the first interview, virtually reading the sections, 'Introductory Comments to the Teacher' and 'My Role as Facilitator'. I outlined the stages of the research, what it was about, and what research relationship I envisaged with her, pointing out that I valued her ideas as an expert practitioner, and that neither the theorists nor I had definitive answers on these matters. I told her that I had an open mind about what might work, and I would not be judging her.

Audio-taping of the Lessons
A second source of data was audio-taping of the 25 lessons and associated interviews from late July to mid September. I transcribed the 42 hours of tapes, generally within 24 hours so that I could remember the context. The small cassette recorder was placed to pick up the teacher's comments. Occasionally I noticed the teacher remembering that the machine was recording. However, we both believed that overall its influence on her was minimal.

Walford (2001) talks about the seduction of the tape-recording with its quantity appearing to provide 'hard' evidence. Similarly he ridicules the 'fetish of transcription'. His warnings echo my own long-standing scepticism, but despite that, I found that most of my data collection and transcription were worthwhile.

Written Data
A third source of data was written material of the teacher, myself and the students. Throughout each stage of the research the teacher kept a reflective journal of her own
thinking, activities, and observations in relation to the work. She also kept notes of the reading she did. All the teacher's normal record keeping procedures provided data: for example, the children's written and art work; the teacher's planning sheets and anecdotal records. Many of the assessment techniques that the teacher devised could be seen as 'qualitative probes' providing data about the children's values, thinking and affect.

Finally, I kept written notes of: all non-taped discussions with the teacher; my observations of the classroom activities, including four non-taped classroom sessions in October preparing for the culminating performances of the unit; products (e.g., writing on the whiteboard); body language; whispered asides; my interpretations of intended meanings or slips of the tongue; and my reflections about every aspect of the research.

Analysis of Data

There are over 600 type-written pages of transcripts of interviews and classroom sessions, the teacher's reflections and notes, and my observations and reflections. Most of the transcripts are also held on floppy disk. Some of those data have been cited in the body of this report or in appendices; all are available for auditing purposes.

To summarise the interview data, I edited the 202 pages of interview transcripts and 49 pages of the teacher's notes and journals to around 100, then to 60, and finally to 29 pages, each time attempting to retain the essential points, the sequence, and the essence of the original. Most repetitions were omitted, however I retained enough hesitations and 'I don't knows' to show the uncertainty and flexibility of the teacher's thinking. Using only a few comments from so much may appear to highlight inconsistencies, but my purpose was to demonstrate the teacher's understanding of the concepts, her openness in trying to understand them, and her reflective and metacognitive processes.

Miles and Huberman (1994) listed twelve tactics for developing tentative conclusions, and these guided my analysis of the data: I frequently questioned my impact, weighed evidence, searched for spurious cases and negative evidence, sought to uncover similarities and differences, to examine outlier cases, to establish groupings and categories of instances, to discern patterns and relationships in order to clarify the original conceptual framework. As (Stake, 1995: 29) pointed out, in reporting and analysing the data one has to decide whether it lends itself to coding and categorization or more to direct interpretation. My case study is better suited by the latter and I report it in a narrative style. The narrative form allows both the teacher's voice and my own to be heard best, and it allows me "directly and openly to deal with human emotion" (Lincoln and Guba, 2000: 182). In van Manen's (1990) terms, I
am seeking *themes* in my data and I often use *anecdotes* to illustrate those themes and build my narrative.

Before I provide a brief introduction to the data as a context for later detailed analyses, I make three related points. First, in our discussions, the teacher and I used the term *the dimension* as a 'shorthand' to refer to affect, values and / or metacognition. Here and in chapter five when I analyse those discussions I use *the dimension* to retain the feel of the discussions, but in chapter three and in the final chapter I use the term *the approach* (short-hand for *the metacognitive-affective teaching approach*) or the more theoretical term, *the conceptual framework*. I now believe that when talking with Jean it might have been better to have used the term *the approach* because it has more of a sense of the links between the concepts, whereas *the dimension* allowed us to focus separately on the three components - affect, values and metacognition - singly or in combination, but did not remind us of the link between affect and values that metacognition was intended to make.

Second, towards the end of the interviews we discussed the readings that I had provided at Jean's request, and Jean also needed to talk about teaching ideas for the unit. This meant there was not enough time in the later interviews to discuss the role of metacognition linking affect and values, (although I did briefly in interview ten, as I discuss in the next chapter).

Third, I did not show Jean the figure (Appendix One) that I had started developing just before the unit began until the January interview well after the unit, because I believed that showing it to her would have 'solidified' the framework too much for her. However, with hindsight, I believe this was a mistake: it would have been better to have discussed the figure regularly with her, and thus to have encouraged and recorded her metacognitive reflection, evaluation and modification of it.

**An Introduction to the Data**

Prior to the interviews, in her journal Jean noted her initial thoughts about the research and explored possible teaching ideas (see Appendix Five for examples of Jean's journal). Her interest in the research was reflected in her constant search for texts to assist her understanding of the theory, and in the enthusiasm with which she tried teaching ideas in the unit prior to the main unit.

In the interviews Jean worked hard at distinguishing and clarifying everyday concepts such as 'emotion' and 'feelings', and more technical terms such as 'affect' and 'metacognition'. Conducted at the end of her tiring days of teaching, the interviews were difficult for Jean:
she had to respond "on the hop." She saw her professional knowledge "under the spotlight." Overall she was more satisfied with her responses about teaching activities than her attempts to clarify the terminology. However, throughout those attempts Jean showed great patience and a high level of reflection and, at times, metacognition.

In the first six interviews, as the interviewer, I did not make inputs, as I was attempting to develop an uncontaminated picture of Jean's understandings about the three main concepts and subsidiary concepts. When she complained about not having access to theoretical literature, she was hoping I would provide such literature, but I pointed out that there was no literature linking affect and values via metacognition. Jean's initial confidence in her knowledge and experience declined as the interviews made problematic her existing knowledge: she commented about her knowledge 'slipping away' and about her difficulties in explaining her understandings. She was being metacognitive about her feelings and understandings.

From interview seven - in response to her requests and to support her waning confidence, I changed my role. I provided articles and books for her to browse, and I was more prepared to contribute to discussions with her about the concepts. Especially in interviews ten and eleven, in response to her concerns about the forthcoming unit, I contributed ideas about teaching the dimension. When Jean said she needed something in writing she could respond to - "I've had enough of trying to discover: I need a telling," (note her metacognitive awareness) - I summarized her comments from the first nine interviews in a five page draft (Appendix Six), with the invitation to challenge my misinterpretations. I discuss this document later. I also reminded her that I did not see myself as her mentor, rather we were "joint researchers" each bringing different expertise to the research. I acknowledged that some of my questioning had made her feel inadequate; I added: "but from now on I hope you'll start to appreciate that your answers have been extraordinarily adequate."

I document in chapter five how time ran out for Jean to plan separately to add the dimension to her teaching. Consequently her planning for the dimension consisted mainly of her reflections in her journal about teaching the dimension and our discussions in the preliminary interviews. By the last interview before the unit I was providing enough of a sounding board for Jean to express some confidence about incorporating the dimension, although she expected still to find better ways. She said that she was:

happy just to have this amount of planning.. and also at the end of each session I would think that I will probably have come up with ideas.. and you
will probably have seen things that I've missed that we can build up with the kids. *

This made me realize that I would have to provide more of my perspective after most lessons than I had intended, but I hoped that 'lending an ear' would generally be enough. Later I try to gauge my influence on Jean's teaching strategies.

In Appendix Seven I provide a summary of teaching activities in the unit. The first lesson was interesting for the students and me, valuable from the research point of view, and successful pedagogically. However, in the interview after the lesson I had to make further positive statements to build up Jean because she was so down on herself and in herself about the lesson. By lesson two her worries and difficulties reached almost crisis level. In a frank and dignified way, she pointed out that unlike when she previously had a researcher in her room, now she felt lost and embarrassed because we were not jointly teaching, not both making mistakes and finding our feet. I was watching her do those things. There was no mentoring, no scaffolding, no modelling from me. Also, because she was concentrating on how to incorporate the dimension, she felt that she had lost her spontaneity, her natural flow as a teacher, and was "trying to pursue too many little focuses in values." She felt like a student teacher.

As I was concerned about the stress on Jean I discussed with my supervisor the idea of suspending the research for at least a week, and, if it re-started, we decided that I would be more a participant observer, and provide still more suggestions. I documented practical suggestions about implementing the dimension (Appendix Eight), and talked with Jean about them and the whole situation on the Friday after lesson three.

Over the following weekend Jean worked out her own way of coping with the stress, as I discuss later. On the Sunday night she said she was more confident, and insisted I attend the next lesson and that I not change my role. Given her assurances, I did attend. However, in that lesson I did not take notes and I joined a class discussion about feelings. I continued this low-key, limited participant role in lesson five. It was remarkable how quickly and strongly over one week-end Jean had reflected upon the total situation, and had taken control of it and her feelings. She made the decision for the research to continue and she made that work emotionally for herself. She was exhibiting an effective metacognitive-affective approach.

* Throughout the transcription I used dots .. or .... (an unusual procedure) to indicate pauses with each dot representing approximately one second.
Daily, Jean became more relaxed and confident. By lesson five her difficulties with how to incorporate the dimension and with my presence were largely behind her, although there were still instances where she would involve me in class discussions or when I would choose to contribute. My criteria for participating were: i) not to change the direction of the lesson, and ii) that Jean especially, and the children, might be more comfortable with my presence. Generally I believe I met these criteria. Occasionally Jean still reported concerns. After lesson five I wrote that her concerns derived now from her "not performing at the high standard she knows she can and that she expects of herself." I reminded her again that my ideas were being trialed, not her teaching, and that "we are on a journey of discovery to see how" to put the theory into teaching practice. After lesson six I mentioned that she seemed more relaxed about my presence now: she agreed. In the middle of lesson eight she reported her satisfaction with the preceding discussion and activity. She added: "We're getting there... it's all about finding the right spot." However, throughout the unit Jean would criticize her teaching: she commented after lesson thirteen: "Well that was a shemozzle!" because she felt that she hadn't achieved all she had planned and that she did not know her material well enough. Once again however, I had been impressed with her teaching.

On one occasion when Jean said she had been 'too expository' in her teaching, I argued to the contrary. I reminded her that I was not judging her teaching, but that was not entirely true because clearly I did make positive judgements about her teaching. As Guba and Lincoln (1981: 149), point out, qualitative researchers do not measure, but they do judge. Occasionally I silently wondered why she did something, but even then I was intently aware of her great expertise and experience in primary teaching compared to mine. I had few preconceived ideas about how the teaching program should unfold. This reinforced my research stance.

Despite the uncertainties of the interview stage and the difficulties of the first week of teaching - and possibly partly because of them - Jean's teaching of the unit was productive from both the teaching perspective and the research perspective. The data I explore later demonstrate that she was able to take a brief introduction to the original idea and with virtually no mentoring support, and in the face of many challenges, translate it into a sophisticated and effective teaching program. She made the history unit - Slices of Time: Australia in the 20th Century - an interesting, even exciting one for the students, herself and me. Its content - federation, wars, depression, migration, national identity and maturation, racism, sexism, multiculturalism - provided unlimited opportunities to introduce the dimension. I analyse how Jean did that in the next chapter.
In the two lengthy interviews after the completion of the unit, Jean reflected on the contribution of the dimension to the success of the unit. In the last interview she critically responded to the figure (Appendix One) that I showed her for the first time. As I document in chapter five, she made suggestions to improve it. She also reflected upon her own development and upon the possible development of other teachers. She was very honest about the difficulties of adding another focus to teaching given the excessive demands already placed on teachers.

Methodological Issues

There are two major issues I address here in turn. One, to what extent does my description and analysis of the data present an accurate interpretation of Jean's thinking and work? Two, to what extent did I influence her responses and teaching?

The credibility of my interpretations of the data

My role in interpreting the data is crucial. I transcribed the tapes, chose what to record as observations, and selected from and interpreted the data. All data are a selection from and a distortion of reality. The challenge is to reduce that distortion, and to expose possible sources of it. A simple example of the difficulty of the interpreting challenge is that so often the teacher concluded a thought with a comment such as 'maybe... I don't know...' as in: "perhaps this is the value that we could explore with the kids... and so, maybe... I don't know." Often this signalled her tentativeness. However, sometimes I read it as a signal to say: 'Let's move on.'

Difficulties of interpreting 'discussion' type interviews also arise from unspoken words, and phrases and sentences left uncompleted. The listener generally knows what the speaker meant to say, but the transcript is difficult to follow, as in the following example:

when you're talking about one of those key understandings... that would be one that very much... and I think I never knew I was doing... but though I do that [I think she means in her teaching]... but I've never made it... yeah.

I wrote the comment in brackets at the time of transcribing. Jean had not spoken some words including the word "explicit" before the word "yeah". My reply indicated my interpretation of what she meant: I said that she was starting to make explicit a lot of thinking and work that she had previously done more implicitly in her teaching.

Member-checking is a way of increasing the credibility of data. However because it was time-consuming for her, it was not surprising that Jean chose to restrict it. In interview four, she provided another reason for not reading the transcripts:

I wouldn't want to read the ums and the ahs and also how I'm still coming around... I keep mulling, I'm changing, I don't want to know the change process at the moment.
I'm aware of how I'm changing, of how I'm trying to formulate ideas, so I don't need to know all of that confusion that I'm going through. I'm living it.

On two occasions she listened to a short segment of tape to clarify what was said, and on four occasions I read her extracts from the transcript to check her meaning. About one of her comments she exclaimed: "What on earth?!" I replied that I understood her meaning because I knew the whole context of the comment. When I explained it, she agreed with my interpretation.

In order to check my interpretations, I started interviews by asking questions arising from previous interviews. Thus much of interview five reviewed what she had said previously. In general, in these reviews, she agreed with the interpretations that I had made. Sometimes she disagreed with what she had previously said and indicated that she had moved on. This gave me confidence in the validity of my interpretations. On one occasion I quoted her from an earlier interview and she replied: "Oh.. well... I wouldn't even like to say that I think that's so anymore [laughs heartily]." She often noted the development in her thinking.

I provided the five page document mentioned earlier, "Summary of J's comments about the concepts" (Appendix Six), in response to Jean's request, but also as a way of checking my interpretations of her thinking. At the following interview, she said she had glanced at it, and had ticked parts. For five minutes we discussed her responses to it. She had written her disagreement with my provocative comment that it might be better not to promote any particular values: "No, we can promote 'safe' values like dignity and democracy." Otherwise she saw nothing that needed fundamental changing. She then said that she now disagreed with much of what she had written in her journal in the first weeks: it was too simplistic and it did not take any account of emotions and other important aspects. She did not further analyse the document because she was already starting the unit. I asked her to keep adding to her comments in different colours at different dates so that we could trace her changing thoughts. However that was naive of me given the demands on her time. On a later occasion when Jean read a draft of an interim report that I was preparing for a conference, she agreed with my interpretations of her thinking.

My influence during the interviews

Fundamentally the research involved introducing the original broad idea to the teacher, discussing her understanding of its main concepts, observing how she implemented it and how she might change it through her practice. While the research was primarily about the development of the original idea, an important by-product was the development of the teacher's teaching. However, after initially outlining the broad idea, I endeavoured, as far as practical, not to influence her thinking or how she developed the teaching approach, in
order to discover what this experienced practitioner would make of the idea in practice. Here I explore ways I may have influenced her.

As indicated on page 129, because I played a neutral interviewer role in the first six interviews, my influence would have been minimal. However, from interview seven, by providing Jean with an overview of the seventeen articles and books on values and emotion that I had selected for her (Appendix Nine), and by linking the readings to her own work and thinking, I must have influenced her thinking. I indicated that I did not necessarily agree with those readings but that they were the most readable. I suggested that she might glance at them, but entreated her not to if that meant she could not read her novel over her holidays. She said she would skim them to decide which parts to read more fully. Ultimately she reported that she looked at twelve, she read those parts that fitted her purposes, and that at first the reading had been onerous, but eventually she was "into a rhythm."

Often I helped Jean to organize her thinking. Occasionally that went further to 'guidance', such as when I spent time unnecessarily persuading her that an upright pyramid was more appropriate than her inverted pyramid to represent a values hierarchy. Here I forgot the detached interviewer role, relaxed my guard about influence, and became over-involved in developing the ideas. However, generally where I made inputs, I was answering her questions, or assisting her to see connections with her previous thinking, or to clarify points: I was not introducing new ideas or changing her thinking on the particular point. For example, in answer to her question about phenomenology, I said that it is about respecting the subject of study, so in our case: "I respect the knowledge that you bring. The teaching situation is your field, so I'm not coming in as an expert from the outside trying to impose order on it. What I'm trying to do is learn the order that you make of it." On another occasion, when she was struggling with cognition and affect, I talked about Descartes, and I then asked her about the degree that she saw cognition and affect linked.

An example of where my question may have influenced Jean: I asked if beliefs or attitudes have to be demonstrated, and she agreed that they do not. My question appears to have influenced her, given the number of times she had previously mentioned attitudes requiring action. Perhaps in the overall scheme of things this made little difference, but when one considers the number of questions I asked and the multiple ways that I possibly influenced her thinking, I appreciate that these interviews were not simply an exposition or clarification of the teacher's thinking. The social context of the interviews, our professional and friendship relationship, the flow of the dialogue, body language, current feelings of the two people, etc., mean that the interviews provided a very complex picture of Jean's thinking. It would require much deeper analysis than I have room for here to be more definite about
my influence. However, it was my judgement during the interviews, and that judgement has been substantiated by repeated reading of the transcripts, that Jean would not allow herself to be influenced on small points or on major issues such as the overall value of the approach unless she found compelling educational evidence or logic for the point. Generally she found the evidence or logic rather than me providing it.

Overall, in the later interviews I contributed minor teaching ideas as we 'bounced' ideas back and forth. However, apart from the initial general approach, I do not believe that I changed Jean's thinking on particular points or that I provided significant teaching ideas. Most of the time I was provided a sounding board to reflect her ideas back to her. I have not uncovered matters of significance where I changed her position other than introducing the original idea. I believe that how she interpreted and planned to implement that idea was mainly a product of her own experience, philosophy, reflection and analysis, and only in small degree influenced by me through the interviews.

*My influence on the teacher's teaching during the unit*

While Jean was developing and implementing a new approach to her teaching the unit, I endeavoured as far as possible not to influence her. Here I attempt to document ways that I might have influenced her implementation.

I reported earlier that in response to her worries about the first two lessons I provided Jean with a two page document "Some thoughts about how we could plan for values, attitudes, and beliefs, and emotions or feelings in the unit" (Appendix Eight). How much did that document influence her? At the time, she reported that she took little notice of it. Later, in response to my mention of the possible influence of the document, she reported that it had helped to develop her "confidence to then go about planning what I wanted to do." After the unit, in interview twelve, she said: "I think I just read it and felt reassured." She thought she may have internalized some of the questions suggested in the document, but she doubted its influence as she didn't take up most of its suggestions, and some she was going to do anyway, and others "just didn't seem to fit with what I was on about with the content." She reported that over that first weekend she had decided that in the first two lessons she had tried the wrong approach by focusing "on their values as the content" rather than allowing the content to give "opportunities to explore values." She realized that she had "always been doing some of these things, but not explicitly, not planning for it, but asking at times a lot of these questions." From these comments it appears that the document helped her to regain her confidence in herself and her teaching over that important weekend, but that she believed that it did not change her teaching.
As in the preliminary interviews, sometimes my questions appear to have influenced Jean's teaching. During lesson five, I asked whether in the previous unit she had the students clarify the terms 'racism' or 'racist'. She indicated that she had not, so I asked her whether she might. Quite reasonably, she saw this as a suggestion that she should do this. She agreed with the idea, and wondered about where to do it. I suggested she do it incidentally. In fact, she spent several minutes discussing racism later in that lesson.

Sometimes during lessons Jean sought my assistance. On those occasions I replied with whatever knowledge I had and then retreated. My responses made no difference to the course of the lessons: I was simply another source of information. This was also the case on the three occasions where I contributed briefly to lessons uninvited. It is difficult to know where Jean's teaching ideas sprang from, but often I was able to exclude my influence as she would explain that she had done something similar previously, or that she had been thinking about it for some time. On one occasion however Jean discussed at length and took notes on my suggestion that she might explore the children's thinking and feelings about conscription by building on her Mapping My Feelings activity. Subsequently she designed and ran several activities based on that.

Most of my inputs reflected back what Jean was saying, or asked her questions. As in the preliminary interviews, I was helping her to clarify her own thinking rather than providing new ideas. As on most of these occasions, I was surprised by what she ended up doing: not that it was different in broad direction, but that it was novel in its practical implementation. The resulting teaching activities were not something I would have thought of. Jean always retained control over the teaching agenda. While the preceding discussion indicates that I must have influenced her teaching on particular occasions, I do not believe that my presence caused her implementation of the approach to be significantly different to what it would have been had I not been observing. Had I participated as a mentor or co-teacher, undoubtedly the implementation would have been somewhat different. What we are left with is a reasonably clear picture of what this one teacher made of the approach in practice with little assistance or interference. I now look at examples of how my thinking changed through my interaction with the teacher, and through my own metacognitive reflection.

Examples of My Change

Because I approached the research as a learner, my understandings about the concepts and their connections, about issues and about how the original idea might be implemented changed during the research. Here I document some of those changes, and I look at the development of the conceptual framework in the final chapter.
In interview five while discussing Jean's thoughts about feelings I joked: "you've almost persuaded me to agree with you (both laugh)." I added: "you have helped me clarify a lot of my thinking." The interview process was causing me to rethink my ideas gleaned from my reading of the literature. I found thought-provoking Jean's attempts to distinguish affect concepts. Similarly her view of socialization as individuals being fitted into society challenged my constructivist views of socialization. Also her suggestion that personality may explain why people go though similar experiences and develop different values also caused me as a sociologist to think again about the role of personality. We were jointly - and sometimes in different ways - clarifying the terminology and the issues: while I had read much more of the literature, I was often just as confused as the teacher. I had written much in my own earlier attempts to clarify the literature, but during the data collection I was able to clarify it further.

Since gathering the data I have modified my views about being able to state exactly what the teacher's starting knowledge was. There are two main aspects of that change. First, while it was always likely that the teacher's views would change through the interviews, I had not realized how difficult it would be to 'pin down' her initial understandings. At the end of the first interview Jean alerted me to that when she said she thought she had contradicted herself because she hadn't rehearsed what she was saying, she had been thinking aloud. I pointed out that that was a valuable approach for the research.

Where there was consistency in Jean's responses over time, we are in reasonably strong position to accept the reliability of those views. Where - as was often the case - her views seemed to change, we have to take into account more information if possible about the context. And even then we must be tentative. As she said: "I keep mulling.. I'm aware of how I'm changing." Also Jean realized she had known and understood more than she had thought in earlier interviews. Jean was not only developing her understandings through her own critical reflection over the course of the interviews, but she was also remembering much that she had taken-for-granted. These in-depth interviews showed that stated knowledge is problematic in many ways.

Second, as the research proceeded I started to realize that at least as important as the teacher's starting knowledge was that she should have a reflective and critical approach. Perhaps in a metacognitive approach we should be as much concerned about learners' attitudes and skills starting points as about their knowledge starting point. Their starting attitudes are much influenced by their past learning experiences and the affect associated with that past learning. Perhaps to the focus questions on page 121 above I could add another concerning the teachers' starting attitudes and affect. I return to these matters in the
next two chapters. In the next chapter I analyse the data concerning the teacher's thinking and work.
Chapter Five: Analysis of Data

This chapter is in two sections:

5.1 - data from prior to the teaching unit, including the teacher's planning for the unit, and
5.2 - data from during and after the unit.

The following are the main issues and themes that recurred throughout the research. They are discussed incidentally throughout most of this chapter where other matters are also briefly discussed. They are then treated explicitly at the end of the chapter.

1. Finding time for the metacognitive-affective approach in a busy teaching schedule.
2. The extent to which language needs to be explicit and precise.
3. The teacher's thoughts on the impact of the approach on the students.
4. Professional development of other teachers about the metacognitive-affective approach.
5. The role of theory in teachers' thinking about their practice.
6. The extent to which students need to be trained in the approach.
7. The role of existing affect and knowledge in a metacognitive-affective approach.
8. The teacher's metacognitive-affective approach to her own learning about, and her teaching of, the approach.

These themes contribute to the main question of the research: the value of the original idea and how it can be developed. In the final chapter I address that question explicitly.

5.1: Analysis of Data from Prior to the Teaching Unit

The preliminary interviews, Jean's journal and notes from her reading treated many topics covered in the literature review, related issues and most of the above eight themes and issues that arose during the research. Here I explore Jean's views on these topics, themes and issues, and relate them back to the research questions under the following headings:

The Teacher's Approach to the Research
The Teacher's Views about Affect
The Teacher's Views about Values and about Issues in Values Education
The Teacher's Views about Metacognition
The Teacher's Views about Her Own and other Teachers' Development
The Teacher's Planning Prior to the Unit
The Teacher's Approach to the Research

I reported at the end of the last chapter that during the research I came to see learners' starting attitudes and skills as important as their starting knowledge. Consequently, here I consider not only the original research questions about Jean's starting knowledge of the concepts and their links, but also how she approached the research: the attitudes and skills she brought to the research. That also provides a context in which to analyse her later work on the research and her evaluation of the approach. Given the range of pressures on her as a senior teacher teaching full-time, the following shows that her attitudes were extremely positive from the outset. I treat those attitudes as part of her starting affect.

Jean was highly reflective; she thought deeply about the issues, questioned her own comments, and was tentative in her conclusions. Her journal entries show that she was eager to learn: "I grasp at anything that can help me make sense of what I am about to do." In the first interview she indicated she wanted the stimulation of trying new things, and that she agreed to the research mainly for her own personal growth: "to look at my teaching in a different way." She believed that it would add "another dimension to planning or thinking" and "richer teaching, more informed, different questioning."

From February Jean started taking several ten minute lessons a week on the language of feelings and emotions; she started searching the teaching literature; and, in her journal she was exploring teaching ideas related to the research, for example: modelling reflection and recounting; using role play, drama and literature; and, activities for students to explore their affect. She made four journal entries prior to the first interview in March, (Appendix Five has the first journal entry dated 10 February). In these entries she reflected upon her past teaching and her ideas about implementing the original idea in the forthcoming unit. She noted that her existing teaching repertoire included Reflection; Metacognition; Emotional processing; Mindful practices; Introspective procedures; Exploring moods. She also made notes distinguishing critical thinking, reflective thinking, metacognitive thinking and creative thinking.

Those first four journal entries indicate Jean's commitment to the research and her initial thoughts on aspects of the dimension. Her subsequent journal entries continued this wide-ranging reflection and, from the start of the interviews, she also reflected on matters raised in the interviews. Her first comments in her March 11 entry (Appendix Five), indicate how the first interview challenged her thinking and what she had been writing in her journal. This 'challenge' occurred despite the fact that I had not at that time seen her journal: she was making the connections and challenging herself. Jean was also developing her ideas about
what the overall research was about. In her 21 March journal she wrote what she thought "Phil is on about":

he would like students to be more in touch with their feelings, identify these and in so doing enhance their learning. I also think he wants students to be aware that their feelings and emotions are learned and to identify the source, reasons etc so that they can more easily identify and clarify their values.

Here Jean was interpreting the original idea in her own terms. She used her journal to reflect on many aspects of, and issues related to, affect, values and metacognition, for example, one entry looked at: values change, socialization to values, which values? values assessment, Australians hiding their values. However, in her journal Jean did not look in detail at possible links between affect, values and metacognition.

In her journal Jean also reflected upon her reading of teacher texts about affect and values: several entries recorded useful teaching activities. She wrote of her frustration that she had been unable to find theoretical literature, and that the activities in teacher reference books were not underpinned by any theoretical explanation. In the first interview Jean reported her belief that her practice should be informed by theoretical understanding: "I try and find the theory, something - the basis - then to work out how I can apply it.. I don't like just doing the activities." She was critical of the teaching literature, especially its uncritical and vague use of jargon, and its sometimes dense text. She said that too often writers assume teachers have little or no theoretical foundation for what they are teaching, whereas she read educational theory and original educational research, (she was on a review board for an educational association). Initially she was defensive about my suggestion that other teachers did not read as much theoretical literature as she did, and while later she agreed, she pointed out that teachers are not given enough opportunity to engage the theory.

Often in the interviews, Jean mentioned her feelings about herself as a teacher (for example, frustration, pride, anxiety), and her feelings stemming from her involvement in the research. She was generally positive about our research, although occasionally in her journal or in an interview she said things like: "it's confusing.. like it's in a fog." Overall Jean reported that attempting to clarify terms that she had taken for granted - for example, emotions, feelings, attitudes, metacognition - was initially a shock, was surprisingly difficult, sometimes frustrating, but a challenge she relished.

Overall, Jean's starting attitudes and skills were very valuable for the research. She was a teacher used to critically reflecting upon and evaluating her teaching. She was able to reflect upon her own values, and upon her own affect and its influence on her thinking and her work. I note other examples of that ability to reflect upon her affect and values throughout
this chapter, but here I emphasize how important that capacity was for her to draw upon as she thought about how to get students to use metacognition about affect.

I now look at Jean's initial and developing understandings about the three main areas: affect, values and metacognition, in order to throw light on the first research questions (related to Goal A, page 121) about her beginning knowledge about the concepts, their links, related issues, and her questions and concerns about the original idea. Having used metacognition in previous teaching and having written about it, Jean reported confidence about it, but not about affect or values. Consequently we spent more time on affect and values than on metacognition.

**The Teacher's Views about Affect**

I believe that the following profile of Jean's thoughts about affect and associated concepts shows that her difficulties are the difficulties most teachers would experience in trying to clarify and distinguish concepts they have previously taken-for-granted. It also shows Jean's commitment to herself as a teacher being clear about the language, and her desire to understand the theory behind her teaching. Through the interviews, Jean came to see definitions as less important than she had previously thought, but that it was more important to understand the different usage of terms, and how the concepts function differently to each other in everyday life and in her teaching. The following illustrates her efforts to achieve clarity and precision.

Initially Jean was unsure what affect is. In interview two, she said that feelings and emotions maybe "are synonyms... no, I think there might be a difference." She thought that perhaps emotion is the higher order concept, and perhaps emotion means that you explore or demonstrate "the highs and lows of your feelings... anything moderate might be feelings." Emotions can have a behavioural element: fear may involve the urge to flee. Later she wrote that she liked Strongman's (1987) definition: "Emotion is a complex physiological, muscular, phenomenological process, with biological and psychological functions for the individual and a social function in interaction." Generally, but not always, she saw emotions as externalised responses to internal feelings. She noted that feelings are "bodily experiences," and emotions are the "combination or collection of bodily experiences, cognitive aspects, and an external demonstration, and varying according to situational factors and cultures." She noted that different cultures have the same emotions but demonstrate them in different ways. By July, she was happy with the following definition of affect from Beane (1990) because she was able to link it to attitudes and values, and to metacognition: "a dimension of humanness that involves preferences. Related
to cognition. [ ] preferences are informed by experiences we reflect on in framing thought
and action regarding self and others." *

Jean thought that there was a strong relationship between affect and thinking, and that they
can operate together. Although unsure as to which influences the other, more often she
believed thinking influences affect, so she had doubts about Strongman's statement that
emotion "predominates over cognition." She saw sympathizing and empathizing as
examples of positive involvement of emotion in thinking. Other notes record that:
"Cognition and affect may not always work together harmoniously. Cognition may override
\control affect. Both cognition and affect needed to determine behaviours." She also
explored the relationship between the mind and physiological responses, and between the
sensation and the expression of feelings and emotions. Some people may be more "in tune"
with their emotions or feelings and others with their thinking. Overall, she thought it "more
likely people can identify their emotions better than they can identify their thinking
processes." Later she was not sure that was correct because she found herself in tune with
both. Thinking "does affect our emotion. If we think in another way we can change the
emotions."

All of this reflecting and questioning is evidence of what Jean said about herself: that she
was trying to make her own sense, her own theory of what affect is, and, that she was not
sure. The detail in her journal and her notes on the reading was matched by the depth and
flexibility in her thinking aloud in the interviews. She explored issues such as: voluntary
control; demonstrating emotions; disguising emotions; and, the variety of children's
emotional responses related to their family's emotional repertoire and culture. She saw
'emotional' and 'unemotional' as negative terms: both are extremes; in between would be 'a
feeling person.' She was not sure whether moods are "shades of emotion or shades of
feeling... you just are letting that one take over for that amount of time."

Jean constantly extrapolated from everyday life, for example, she explored whether we say:
"I feel anger," or "I can feel anger rising inside me" or maybe: "I feel the symptoms.. or the
signs of anger." She wrote about: insights into own emotional state; understanding others'
feelings, especially through imagination; how emotions develop; and, about children having
"theory-like understanding of the mind. Can explain and predict people's behaviour and
emotions by considering relationship between beliefs and desires." In an interview she
indicated that she had not heard the term 'conation', and she thought that 'volition' might

* Here I used square brackets [ ] to indicate that I omitted words from Jean's original sentence. Most often
in the transcriptions the square brackets indicate omitted words that another speaker (e.g., a student, or the
interviewer), had spoken in the middle of the original speaker's sentence. The dots ... indicate time elapsed.
mean 'decision' or 'initiative'; and 'motivation' "is some sort of internal drive to go about achieving something."

In interview eight, Jean attempted to link emotions, attitudes and values: "maybe that's how they get the hierarchy of... values and hierarchy of the different sorts of attitudes that you have... maybe it's because of your emotional... goals... or your emotion... I don't know." I did not ask Jean to clarify this at the time and nor did I note it when I transcribed the tape, so I did not follow it up. That I did not is surprising and disappointing given that these links are so central to my work. At the time perhaps I thought she was confused, or perhaps I was tired or not listening carefully or thinking ahead to my next question.

It can be seen that Jean's initial thinking on affect (and on values as I show next) was uncertain and confused, and that her uncertainty and confusion initially at least, was increased by my questioning. However, she showed determination and persistence to develop her understandings. These qualities of determination and persistence in the face of uncertainty and confusion are important to my approach. By explicitly calling it a metacognitive-affective approach I emphasise the need for learners to focus on their affect. In Jean's case her affect was sometimes frustration. As I show in section 5.2, she worked on her uncertainty, confusion and frustration to develop a most worthwhile teaching approach. I explore later the extent that other teachers, with more assistance from a professional development action research program, would be able to move from Jean's level of uncertainty and confusion to develop the approach in their teaching. Now I look at Jean's views about values and values education.

The Teacher's Views about Values and about Issues in Values Education

The following profile of Jean's knowledge about the terms and her thinking about the issues related to values education also shows how she went about developing her knowledge and understandings in this area. In the interviews it quickly became apparent that Jean's initial knowledge was very much that of the 'person in the street,' and what became important to document was how she worked metacognitively on her starting knowledge and how much development of her knowledge occurred. She was both creative and critical in her reading of the literature, and was constantly relating her thinking about the concepts and issues to her teaching and to what children would need, as the following shows. In the first section I note Jean's thoughts about the terminology and about the involvement of affect in values.
Values terminology and the role of affect in values

Jean had not clarified the terms - values, attitudes and beliefs - previously and found the task difficult. Her journal noted that perhaps values and attitudes are the same. In an interview she criticized the way that she and other teachers used attitudes and values synonymously in planning checklists, and that values and beliefs are lumped together in many books. She wondered if teachers "really know what is meant by each term. Why don't the writers elaborate on them?... I have fallen into this trap in my professional writing. I have used these terms but never outlined what I mean."

Jean's journal noted that "values have both affective and cognitive components," and after reading Rokeach (Appendix Nine), she added "behavioural (action) components." She was reasonably happy with Rokeach's ideas about values, but she noted that with her students she would use the wording: "a preferred way of behaving or... a preferred way of living your life." She explored the evaluative and behavioural aspects of attitudes, and thought that some attitudes have strong emotional aspects, others do not. I asked whether values might be formed directly from beliefs without the intervention of attitudes as her diagram implied, and if values affect attitudes as well as vice versa. I indicated that I was not certain of the answers to these questions, and Jean was pleased to see me also struggling with them. She continued to ponder the questions.

The following are examples of Jean's reflection, as part of her metacognitive approach to her own development that she showed throughout her journal and the interviews. She was originally unsure whether beliefs have an affective element, but later she thought they could: "Could I say that a belief is tied up with facts but that it's to do with your emotions?" She added that she would have to look that up. Initially she thought that emotion might be heavily involved in valuing and values, but then she tried to think of concrete examples "because then I might find I don't believe that it is an enormous amount." She recalled students crying while she read a story about an abused child, and she surmised: "it would have something to do with what they valued. The children valued that children shouldn't be abused... the value would be freedom, maybe respect... so emotions and... yeah.. I haven't quite got a link there yet." On another occasion, Jean was struggling to clarify her ideas about knowledge, beliefs and faith, and then she said that she had gone backwards in her thinking: a statement of frustration. As usual, she moved on from that feeling after acknowledging it.

Jean often wrote and talked about the difficulties of assessing and measuring affect, values and attitudes. She listed indicators and outcomes related to these, and wrote: "It appears I'm outcomes driven." She wondered whether, even if she did develop satisfactory indicators, would she report on these to parents when the "current educational climate doesn't value
these?" Would she alter her teaching to work towards these goals, "or would the pressures of literacy, numeracy, big picture knowledge take precedence?" I report later her answers to these questions in the interviews after the unit. Here we see Jean's acute awareness of the pressures on teachers.

**Values systems**

We discussed values systems and structures of values at some length as these were new ideas to Jean. I helped her clarify her understanding of Rokeach's hierarchy of beliefs, attitudes and values. At one point, she changed her mind: it "would be the reverse of what I had.... from the very beginning I'd actually thought that there were beliefs that override the values." She then drew diagrams exploring those relationships and how a teaching sequence might operate to develop attitudes first and then values. However, she was not sure about this, and still unsure in a later interview, but she used the notion of a hierarchy of values in the following: "individuals may have the same values, but they have them in.... a different order, a different ranking." She wrote: "I can't really order the values I hold for myself. This will require much introspection," but she added that she would rank equality highly. She decided she would have students order their values, but she would also "push" some values such as respect.

She thought that people probably do not operate on their values consciously because "I don't know whether I'd be able to list, pretty quickly what values I actually have." However, she thought that our values "determine" our actions, although "we probably don't think about what our values are... but we have got a values system somewhere there, and so...[it] does influence what we do, but we perhaps never think about why we're doing it." Thus she saw values unconsciously affecting actions. She then introduced the concept of 'conscience'.

I asked whether she saw an articulated values system as important. She replied:

> It could make it easier for you to understand your own behaviours... ['] but I believe you can survive without knowing that... I think I have managed... but it enriches your... like all learning... it's just another whole aspect of your being that you're aware of... opens up a few more doors and new ways of thinking about things.

In replies such as this Jean was applying new concepts to her own situation, and testing them against her own experience, before going on to think about their significance and application in her teaching. I now look at what Jean said and wrote about values change.

* The dots ... indicate time elapsed and, unless indicated otherwise, the square brackets indicate omitted words of a different speaker - in this case, me, in others, a student or students. Often those words are neutral, e.g., *mmm*, other times an affirmation, e.g., *yeah*, and other times a statement or question.
Values Change

Despite a colleague having told her that you can't teach values, and a book saying values are hard to change, she said that her own values had changed in response to experience, and were changing now because of the interviews. Later she modified that statement: maybe her values were not changing, but that the current focus on values was causing her to review and clarify her own values. Jean then made the link to educating children: "we're just making them aware that they have this core of something that might change or... wonder how they stand on a particular issue... so maybe the best that we do in our education is just make them aware like I'm becoming aware."

Continuing to sort out her thinking about values change, in a later interview Jean came to see values as partly situationally contingent. She said: "I think perhaps values change according to contexts... [ ]... your values aren't set in concrete... which I perhaps thought originally that they might have been... [ ]... they can change as you have different experiences." Later she modified that idea: perhaps a value may not change in a situation, it is simply being over-ridden by a value higher in the values hierarchy. Jean's thinking about values change is a powerful example of how she dealt with her initial ignorance or uncertainty. My questions challenged her taken-for-granted, everyday versions of concepts, or introduced new concepts. She responded in a systematic, reflective process that worked back and forth between her own experience and what she believed children needed and would respond to. She also took into account the pressures and curriculum demands on teachers. She was developing complex and sophisticated ideas in an area relatively new to her.

I asked Jean about the learning process involved in values development. She said that she had talked about this the day before with the religion teacher and her students. She thought that children's experiences, and their stage of cognitive and language development were important. She thought that the actual process involved

an uncomfortableness inside almost... there's not a balance, there's a conflict somewhere... and... maybe that's what happens with kids that they finally are sorting out what's happening to them... and maybe when a value is formed... it is that they've got a balance... [ ]... but it has to be a real... umm thinking process they're going through... it could even be a fear.

We discussed the cognitive, affective, and behavioural aspects of the process, and she repeated that the mental activity may not be conscious.

Jean spent a lot of time sorting out her thinking on the relativity of values issue and whether teachers should inculcate or clarify values. I look at those matters now.
The relativity of values and the issue of inculcation versus clarification of values

Jean often used questions to herself: this was particularly evident when she explored the relativity of values issue. In an early journal entry, she asked: "Are we saying that because students study particular units and do certain activities they will develop appropriate values? What values? Appropriate to whom?" Later she wrote: "I know all our teaching is value laden," and she listed examples of values issues she had talked about with her students, and the behaviours and attitudes she encouraged. She wondered whether she had a right to explore what she perceived as her 'old-fashioned' values in the classroom. What about teachers with different values to her own? She listed values clarification teaching strategies, but criticized the values clarification approach, asking: "where is this going to lead? Can values be changed? Is it our place? What if we have off-line values?"

On most occasions, Jean seemed comfortable with clarifying values, and with modelling values, but not with inculcating values. However, when pressed, she admitted that she did try to instil values such as tolerance and honesty in a didactic way. Initially she talked as though these values override others, but laughed when admitting that she herself is not always tolerant. These are two examples of Jean's first stated position appearing to change. It may be that the questioning changed her position, however, I think it more likely that the questioning exposed complexity that initially she did not think of - for example, shejust needed to be reminded of her didactic teaching and of the limits of tolerance. In a later interview Jean emphasized the comment: "We are not intending to teach values, but rather providing the children with the opportunity to learn values." She thought that could be done through a values clarification approach.

Jean saw multicultural education as somewhat artificial when it is a one-off unit "teaching about other cultures" and "trying to talk about tolerance." She felt very "insecure in this field," but to her, "multicultural education should be all-pervading," not only teaching about other cultures, but also developing "respect or understanding, and tolerance" of other cultures: "I expect children to value other cultures." We discussed many issues concerning migration and whether multiculturalism is working in Australia. She was strongly critical of Pauline Hanson, (a populist politician): "I actually make it quite known to the kids."

She explored the dilemma of needing to foster society's values or those of the school, but not necessarily agreeing with all those values. I asked her to clarify which values she was committed to, which she believed she must inculcate because she belonged to this school or society, and which she would not be prepared to promote. She subsequently developed a list of values important to explore in primary education, and was disappointed that she could not find such a list in teacher texts. There was a small core of values she was definite
about, such as equality, cruelty to animals and children not drinking alcohol, and in classes she had discussed them strongly. She was less certain about many others of her own values. Some values she would explore rather than inculcate: she thought 'democracy, dignity, and diversity' may provide a "basis for values clarification." She has tried hard to present a range of perspectives and to encourage her students to explore issues from many perspectives, however, in her journal she wrote: "but perhaps I still only allow this within my value system. OR am I making informed decisions as an educator and deciding which materials will best develop big picture knowledge?" She would model sorting out her values as part of her metacognitive approach to values education. Jean also expected that she would be clarifying her own values while teaching for values development.

I asked about the differing responsibilities of parents and the school in values education. Citing drug education and sex education, Jean said the school's job is to inform, but "it's a parent's role then, and I think that's where the values" are developed. She thought it inappropriate for a teacher to have a sticker on her car about liberalizing drug laws as that may subtly influence students. Both parents and teachers should teach tolerance, but not all parents do.

In the following incident Jean was reflective about her own affect, was open with her students about her affect, and metacognitive about the impact of her feelings on her teaching. She believed that in the unit she was then teaching about Aborigines, her own values had influenced her selection of readings and videotapes, and "have come out all the time." She had reacted to criticisms of Aborigines on a video she had previewed: "I was feeling angry, quite depressed and uncomfortable at what I'd seen." She reported that in class: "I was just going off... [] I was just very much articulating my personal views on things." She said that she had made the links rather than posing questions and allowing students to discover the links: it was not "inquiry learning." Reflecting on this, she had asked herself: "Hang on, was I, in my unit presenting the wrong view of the Aborigines to the kids?... [] a very skewed view of the world, pro the Aborigines." While wondering whether to show the video to her students, she "found herself" talking to them about it: "I talk about, mull about what's happening in my head at times. So when we got on to talking, it just came out." She also said: "I felt I had to tell the kids how I felt." We then discussed whether it is pedagogically more effective not to show your values as a teacher, and the extent children can discern your values anyway. She indicated that children "dish back what you've said." and she tried hard to discourage that.

In her journal, Jean listed values education issues, amongst them: "the need to provide clear expectations versus creating a community of unlike people; educating to change society rather than society dictating education; morals as part of identity; evaluation; the effect of
reflection and feeling." She also wrote that "it is important for teachers to help students understand that writers, teachers, parents - in fact all people - bring to situations their own values and attitudes." This led her to consider 'key understandings about values' that she would want students to develop and that she would use in her planning, such as: "Some of our values may be based on emotion rather than fact." Other such understandings would explore what values are, how they affect behaviour, and why people's values differ. Jean said that she had worked in that direction previously without being aware that that was what she was doing. In those statements about understandings Jean was starting to sort out how she saw the original idea being translated into plans for her teaching. She was making links between values, affect and socialization. I discussed the role of socialization with Jean in some depth in the interviews because of its importance in the development of values.

Values development through socialization and through education

Jean saw her emphasis on girls avoiding "stereotypically girlish behaviour" such as squealing, as an example of her "hidden agenda with the kids," her socializing her students. Initially she saw socialization as "putting people into a mould so they don't make waves in society.. and education is learning beyond just society's view.. [beyond]" what your own society values... But that's another one that I'd have to think a little bit more about." She continued: some teachers socialize "almost to the point of institutionalizing because it's easier to manage groups." She pointed out that socialization involves copying and imitation, and "not empowering the individual to think, just getting them to conform," but "the individual is also testing out what they can do," and "they don't lose the complete identity." Thus she saw individuals as capable of resisting socialization to some extent.

In contrast, "education is maybe seeing more possibilities within that society.. that there can be alternatives.. of thinking." But, when asked how successfully education does promote alternative thinking, Jean became more pessimistic as she talked. She did not know whether values education "does make them think, help them think for themselves.. I think it's just helping them know that these things are acceptable and these are valued." She was not sure whether teachers really want students to think for themselves, and if so, whether she or other teachers know how to help them do so, although group work, encouraging talk, providing choice to students, and teaching philosophy are attempts to achieve that.

Jean thought that socialization is generally successful: most people fit into their society. However, her students, after twelve years of socialization and seven years of education, are not passive in response to those processes. Perhaps education has taught them to question their socialization, and she mused about individual differences in questioning and

* this second beyond was unspoken.
conforming. She considered that socialization is more powerful an influence on children's values up to age twelve, but "you would hope that education starts kicking in, and maybe it has started already. But I think education perhaps is going to be the most powerful as they go along now... but I'll change my mind what I write in my journal [she laughs]." Children come to school with values, but teachers can "broaden them" and help them to "be more aware of" their values. She thought that it would not be as difficult to change her students' values as those of adults.

Jean reported that explicit teaching of values occurred at her school through religious instruction and through the principal emphasising school and community values at weekly assemblies. The staff consciously modelled caring and compassion, and the school had structures that provided care for children in difficulties. She was unsure the extent to which all of that teaching, modelling and care, influenced students, but given there was so much of it, "even if they just pretend to dish back what the teacher wants, I think some of that rubs off." Here Jean was indicating the difficulty of knowing what happens when children are exposed to modelling and to more didactic values teaching. We talked about what happens in learning and whether children learn when the teacher teaches. She thought that her students really do take notice when she signals that something is a "critical teaching time... this is going to affect the rest of your life."

Jean traced her own values to her family, although "sometimes it was because I did not want those values." She noted that attitudes are "learned through interactions and observations," are "similar to parents," and are "influenced by gender, race, religion, education, social class." Children acquire their values sometimes through explicit 'teaching' by their parents, through punishments and through exhortations, and sometimes through them 'reading' and absorbing their parents' values-in-action that may contradict their parents' stated values. She cited as possible influences on children's values: the media, television programs, literature, laws, friends, clubs, and people outside the home such as shopkeepers.

Although she had not heard of Kohlberg's developmental stages, Jean thought there may be such stages and that it would be useful for teachers to know about them. When I explained Kohlberg's stages, she thought about which stages her students were at, and she indicated that if she provided appropriate experiences, development to the next stage could result. She said students "experience values clarification... whenever the teacher reinforces desirable behaviours and attempts to inhibit undesirable behaviours," but she was unclear about the formal Values Clarification approach. She felt the need for more knowledge and that there is "a big need for teacher education" about values education. It appears that the interviews had contributed to Jean's knowledge and to her awareness of her own and other teachers' ignorance in the values area.
In her journal Jean listed ten reasons why values education "hasn't kicked on," and we discussed this issue in some depth. There had been more emphasis on it in the 1980s and many teachers incorporated it into their teaching. For example, cooperation as a value is developed now through cooperative learning, and other values have "just become part of the teacher's repertoire." She thought that affective education and values education are not regarded as important in the current "climate of outcomes based education and creating an education system to provide fodder for employers." She suggested that apart from citizenship, the present government did not see values as important. She thought she should do more values education, but she would not rate it highly compared to numeracy and literacy because no parents ask about their children's values.

The Teacher's Views about Metacognition

At times Jean seemed to confuse metacognition and reflection, especially when she tried to include affect. However, putting together all that she said and wrote, I find that from the outset Jean had a sophisticated view of metacognition. In an early journal entry, she rejected as "too simplistic" a definition that she had co-authored for a teacher text, so she listed the following six indicators for Metacognitive thinking: "Modifies ideas; Makes informed decisions; Selects appropriate strategies; Self assesses; Sets goals; Acts on goals." She also mentioned "planning for further learning" and setting "goals to improve your thinking." She said that metacognition is focused on one's own thinking: "you are very much aware of your thought processes." She saw ordinary thinking as undisciplined, but it could become more reflective, and then, metacognitive.

Jean provided her clearest descriptions in her journal. Reflection is:

the act of thinking about what has happened. It involves analysing, synthesising, questioning, making connections, predicting...

Metacognition is more involved. It involves reflection, but then requires the learner to understand and use the knowledge of how they think (conditions, strategies, types of thinking) to plot, map out, track or monitor and/or control their thinking (and actions as a result of thinking?). Metacognition may lead to goal setting, making decisions, acting on decisions.

For Jean, metacognition also included children learning to think in different ways, for example, to be more creative, analytical or critical. She was not sure how successfully teachers do this.

Often when thinking about relationships such as those between values, thoughts, affect and action, Jean drew diagrams. She saw her 'mulling over' her own statements, her use of diagrams, and her learning style as examples of her metacognition: "I had made an
informed decision, I used several strategies to arrive at it and I acted on the decision by changing my point of view." She was often metacognitive about how her own affect related to her learning, for example, when she explained that often, when she thinks she has grasped something, "it slips away", but she doesn't feel so bad when she realizes that the books also are not clear on the concepts.

Thinking about why metacognition might not have taken on with teachers, Jean listed: "Jargon. Not accountable/reportable. Hard to measure. Hasn't been promoted." In contrast 'reflection' and 'self-assessment' are commonly used by teachers. She thought that self-assessment may be metacognitive if it asks how the learning has occurred. For example, she says to students: "I really want you to get inside your cognitive material and tell me how you did it." (Later I report occasions in the unit when she used this strategy.) She reported that with her students she uses the words "cognitive and cognition because it's vocab... I like the kids to be able to play with words." She thought that perhaps she encouraged students to think metacognitively, but often was not aware she was doing it as this strategy had become so much part of her repertoire. The depth and extent of her use of metacognition in the past is unknown however. She had recently added 'critical literacy' to her repertoire with the students, and she saw this as related to metacognition.

Through her journals and the interviews, it appears that from the outset Jean understood metacognition both in theory and practice, and that the interviews assisted her to further clarify those understandings. However, I did not probe enough how she saw metacognition being applied to affect in values education. Later I report the ways that she made those links in her teaching of the unit. I now look at Jean's thoughts on her own development and briefly at her thoughts on the development of other teachers in relation to the research ideas, and I return to these two research foci in section 5.2.

The Teacher's Views about Her Own and other Teachers' Development

Often during the interviews and in her journal Jean reflected upon the implications of the research for her teaching development and for teacher change more generally. Having taught for a year in a teachers' college and having conducted many in-service workshops, she was convinced the best methods are mentor modelling and peer support. She valued: having a colleague going through the same process; knowing the theory; a practical application to trial; and, the opportunity to reflect regularly with a mentor: "I love to try new things and if they fail I just try another way or accept that I need help. Help in the form of someone to bounce ideas off."
The original research design did not involve a colleague or a mentor, but as noted previously, I did modify my role, and by interview ten Jean indicated that I was providing the sort of assistance she needed. She reported how hard and frustrating parts of the interview phase had been, but now she was "just starting to sort out a lot of the theory into how it will apply." I pointed out that teacher development was a subsidiary goal of the research, and that, if I was doing Professional Development, I would start at this point, not with so much theory, and I would have provided more information. However, because Jean provided so many valuable insights into her own development and about the professional development of teachers, these aspects of the research became more significant than originally envisaged. Examples of insights about other teachers are that Jean thought that many teachers do not differentiate frequently used terms, such as beliefs, attitudes and values, and also, that teachers could benefit from understanding concepts such as 'values hierarchy'.

Jean’s reflections in the preliminary interviews and during the unit, in her journal, and in her reports to me about her thinking at home, showed her to be frequently thinking metacognitively: reflecting upon and evaluating her teaching, and thinking about how she might improve it. Generally she did not use the term metacognition: she would say she was ‘mulling over’ or ‘reflecting’. However, that reflecting included evaluation and regulation: it was part of a longer term metacognitive process. Her comments about the past led me to believe that she had been metacognitive about her teaching for many years and it had become habitualized and partly automatized.

I saw Jean’s knowledge and use of metacognition to develop her teaching as greater than that of other primary teachers in my experience. However, she had little knowledge of and had not reflected much about affect and values, and in those two areas she was probably typical of most teachers. Given that this particularly intellectual teacher found difficulty in discussing these concepts, then we can predict that most teachers would be similarly or even more uncertain. However, a professional development approach would provide more explanation of the concepts and framework than what I provided for Jean. I discuss this further later.

Jean made both negative and positive statements about the the overall impact of the interviews on her thinking, and she went through periods of confusion and uncertainty. Her initial confidence waned, but returned strongly. For example, her 2 June journal entry (Appendix Five) shows increasing clarity, coherence and confidence about values matters. By the last interview before the unit, Jean reported that she would now revise the section on value concepts in a book she was co-authoring whereas previously she had let the other author write that section as Jean had not felt confident about values.
In interview seven Jean indicated that the interviews had given her "a lot of things to think about... and... I feel like I'm studying and I'm not... I think I'm knowing myself a lot more because that's the things I obviously love doing." She continued: "as yet I don't think it's changed or altered any teaching." When I suggested that the interviews could create confusion for her, she replied:

Yeah, well... I suppose that's a disadvantage in myself because I feel at the moment I'm not synthesizing... my information yet... []... but then that's been an advantage because it's also made me understand a lot more about the learning process.

This is an important statement of Jean's capacity to see confusion positively. It is also an example of her reflections that were part of her overall metacognitive purpose to develop her knowledge about learning.

The challenge of the interviews to Jean's taken-for-granted views on affect and values led to significant clarification and development of her thinking in those areas. Jean talked and wrote much more about those areas than about metacognition because she felt she needed to work harder to understand them. Jean was clearly metacognitive about her own learning about the concepts and about how she would implement the dimension, but less explicitly metacognitive about the links between the three concepts. As I pointed out in chapter four, I now believe that late in the preliminary interview period I needed to focus Jean's attention more often and more explicitly on those links. Ideally we should have been discussing and developing the first version of the framework (Figure 1, Appendix One) then rather than six months later. I believe that much of Jean's uncertainties and difficulties in the late interview period stemmed from her need to discuss the 'theory' rather than just the concepts in isolation. (I also believe that her obvious and continuous metacognitive activity had led me to under-respond to her requests in that direction. Also my desire to limit my influence on the way Jean implemented the original idea was a factor in my not focusing on the links often enough.)

Jean constantly worked back and forth between clarifying the concepts and thinking about how to implement the dimension in practice. In the next section I focus on her planning for that implementation, exploring data that provide insights related to Goal B and the research questions about planning (page 121).

The Teacher's Planning Prior to the Unit

Jean believed that when she taught it the previous year, the unit had not been successful because she had not been involved in planning it. This year she expected to plan it with the
other grade six teacher early in the semester break. Jean then intended to work on her own to add the dimension into those plans. In fact, while the two teachers had two planning meetings, Jean did not have time to plan separately for the dimension. Thus her planning for the dimension was limited mainly to what she had done already in her journals and our interviews: it was not a separate stage of the research as we had originally envisaged.

Jean had been thinking about how to incorporate the three aspects of the dimension - affect, values and metacognition - from the first mention of the research. Stimulated by her reading of teacher texts, her journal entries from February noted teaching ideas about the dimension, and she raised them in the first interviews. She said that the activities must be embedded in the unit: "the integrated unit will create the context [for] students to explore, identify and monitor their feelings related to particular events, incidents, experiences." Students would be clarifying their values, their choices, conclusions, and behaviours, and she would be posing planned and incidental questions about values. She was unsure whether she would only be treating values that arise or also be introducing values herself. She had doubts about using simulation to explore feelings, but she might use artificial scenarios and self esteem activities. I now look at a number of matters that arose in relation to her subsequent planning.

How and how much to document planning

Early in the interview period Jean added a heading 'Attitudes and Values' to her planning proforma. Although unsure as to what would go in it, she thought there would be activities at the Reflection and Action stage of her unit exploring particular values. Jean listed the following 'understandings' in her journal: 'Understands that people have different values'; 'Understands that personal values affect the way that people live their lives'; 'Justify own stance on issues'; 'Displays sensitivity towards other people'; and 'Finding origin of own and others' values'. In the unit Jean focused on the first four more than the fifth. At interview nine, she reported that she was still unsure about how and how much to document her planning: perhaps it is just "implicit in your teaching, so it's not something you even have to put down?"

Language issues

In her first journal entry (Appendix Five), Jean noted the need to "ensure the students have a language to talk about their feelings, values, thought processes etc. I could do this through vocab activities, spelling activities, literature discussions." In fact, she started this work well before the start of the unit. Thus, one week they did synonyms for 'happy' and 'sad', and the next week she had them "brainstorm words that are feelings." In discussing her distinction between 'physical feelings' such as hunger, and 'mind feelings' like sadness, she indicated
she would focus the children's attention on the physical and emotional aspects of those feelings that are partly in their minds. I asked if it might be better to call them emotional feelings from the outset. She was not sure. This was an example of Jean, with some help from my questions, sorting out her thinking and rehearsing how she might teach it. She used her pencil to draw diagrams as we talked.

During the interviews - and during and after the unit as I discuss in section 5.2 - we often discussed these language matters, and throughout the research period we both generally moved towards more flexibility on language use, although sometimes either or both of us came back to seeking more precision. Prior to the interviews I thought Jean needed to define the terms so that she could be clear in her planning for her teaching and especially in the teaching itself, but, in interview five, I suggested that she had to decide about what language to use, and how precise it needed to be. By interview nine, Jean indicated that she "wouldn't be worrying about being precise about" some terms, although she was not sure whether to use 'feelings' or 'emotions' with the students, but then she asked: "Why can't they be interchangeable?" because she might get the same responses whether she asked what their emotions are, or, how they are feeling. I pointed out that I had been pushing her for more clarity for my research, and because I had thought it important for her teaching. Now I repeated that it was up to her. In interview ten, she indicated that the coming unit is "all trial and error:" she might use terms and then find them not useful. Then, while thinking about the students focusing on both internal and external affect, she thought she might have to use both 'emotions' and 'feelings'. By interview twelve, Jean said: "I thought it was so important to have correct terms, but I'm not so sure anymore."

*Sources of ideas for the dimension*

Jean frequently thought about how she could develop teaching ideas from her reading and from the readings I provided. Also Philosophy for Children might provide "ways of questioning, guiding discussion." Another school's Mental Health program explored the relationship between thought, feelings and behaviour. Reading and discussing literature with the students would assist in the development of attitudes and values. Ideas from Intrapersonal and Interpersonal learning modes could develop students' affective learning and help explore issues.

She found Beane (1990), (Appendix Nine) applicable to "grass roots planning," although "not point form enough" for busy teachers. She liked his suggestion of "a combination of direct and indirect teaching within a context (ie unit)." Prompted by her reading of Beane, she added another 'understanding', about immigration, to provide a values focus running throughout the unit, and her journal noted: "I also see the unit focus moving between individual and society level."
Treating affect

Jean wrote and talked extensively about adding affective questions to her planning, and using question prompt cards about affect. She saw indirect instruction occurring through the provision of experiences, part of which may be about affect, and she would listen carefully to students' responses about feelings, values and attitudes "to build other questions." Sometimes she would be very explicit in focusing the children's attention on values and emotions. She would encourage students to "talk, draw and write about their personal feelings or emotional responses." She would read poems daily to explore feelings. In the unit Jean did use most of these techniques.

Changing attitudes and values, and assessing values change

Jean made the significant decision that values change could be facilitated in stages: working out their existing values; giving them information; having them self-question; ranking their values. She pondered about how she could have the children articulate their existing values, and she wrote that by exposing students "to a range of people who will present different perspectives and viewpoints... the students may explore the origin of their values and clarify and justify these values."

In the following transcript, the pauses are important: "if you give them lots of correct information, does that change their beliefs? So maybe we should be working at changing beliefs... not... first off.. I don't know." The 'not' refers to 'values' which is unspoken. She continued: after providing a lot of information she would ask the students: "do you believe this?... do you think it's true?" She pointed out that teachers have always done "that cognitive, fact-based approach," but now, after you "feed them the facts," you would ask about their feelings and those of others "and get them to be in the other person's shoes or perspective, so that they're thinking that way." She used these techniques frequently in the unit.

One article Jean had read provided instruments for assessing values and thus values changes, but Jean said that teachers haven't time to construct such instruments "for such a small aspect of their whole curriculum." However, she immediately thought of examples such as "physical continuaums or written continuaums." Her notes criticized the article as "too shallow.. So many of my questions were listed but once again NO answers." She also criticized the crudeness of a 'tick the box' and scored activity. In her notes Jean designed four Likert scale activities to measure children's attitudes, but she wrote: "need to be careful when designing / interpreting" these. She was concerned about validity: "I wouldn't assume they are really measuring what I set out to measure, (not concrete, demonstrable enough)."
She mentioned measurement often, and in the actual unit she devised and used several assessment tasks. She also noted that the teacher may misread or misinterpret children's behaviours, or children may act contrary to their values: "Students may be just as clever as adults in doing one thing and valuing another! They may regurgitate what they think the teacher wants or values."

**Planning to use metacognition about affect and values**

At the end of interview seven I asked Jean whether metacognition might help her students become more aware of, more reflective about, and perhaps even more in control of their affect and values. Jean replied that it could be used frequently, and suggested the children would have to justify why they chose a particular point, and she might ask: "where do you think you got this idea from?" She ended confidently: "But I think that we can really do it fairly well." Jean's responses here did not explicitly develop the links between the three aspects of the dimension, so at the end of the next interview I gave a brief account of how I thought those links might be made in the classroom. Jean indicated that she had done much of that linking in practice previously, but not systematically or with planning. She also mentioned the difficulties of finding time to incorporate metacognition. I briefly suggested that perhaps finding time to develop students' metacognitive skills might save much more time subsequently. I return to this issue later.

In interview ten, I explicitly explored with Jean the application of metacognition to affect and values in her forthcoming unit (see Appendix Ten). Initially Jean seemed unsure, she wondered about using a learning log, but with much more input from me than I normally provided during the interviews, Jean became more clear and pondered about questions to have the children focusing metacognitively on their affect, for example: "I feel anger.. Why do I feel like this?" I suggested that she might also focus on the social and cultural derivation of students' feelings. Jean then linked that to children regulating their feelings in the future. She would ask: "Have you always felt this way?" and "leading towards that metacognitive aspect, then 'how can I change my feelings?'" I also asked if Jean would have the students focus in a metacognitive way on the difference between their socialization and their education. She replied that she might talk with them about what they are being educated for. She imagined that she could talk about the need to fit into society's mould, but also about the need to break out of the mould.

**Further examples of my assistance with the planning**

In the above I took a strong role in explaining how metacognition might operate on affect and values in practice. I now look at other ways in which I assisted Jean's planning. As the unit approached, Jean focused the interviews more on teaching the dimension. At one stage
she indicated that she could not visualize what the children might be recording about the dimension. As she often had the children making lists, I suggested they could make lists of beliefs, attitudes, values, and feelings, or they could write "about what it would have felt like to have been - ", but Jean interrupted because she could now see how to do it: she 'ran' with my brief input about listing. Similarly I made other suggestions about incorporating the dimension in incidental ways that fitted with her style of teaching.

In her final journal entry before the unit, Jean wrote that she needed "help with big picture questions" similarly to the way she asks for help with maths. She subsequently asked the philosophy teacher to play this role. While I had indicated that I did not wish to play the mentor role, through my questions I was helping her to clarify her thinking and her planning. For example, I asked how she might explore and gather data on the children's feelings, beliefs, attitudes, values and metacognitive development. Jean replied that she would have something for the students to do at the start of the unit and again at the end of the unit, probably on immigration. First she suggested she would measure their development, but she corrected that: "we don't measure, they demonstrate."

Another example of my assistance to Jean occurred when she suggested that her values teaching activities in the past had been trite. When I disagreed with that judgement she started to think of similar activities for the coming unit. I suggested that she might use the four terms - feelings, values, attitudes, and beliefs - as a checklist of the sorts of concepts to be alert for in the children's talk or writing, and to stimulate questions she might ask. Although she agreed, she was not satisfied about aspects of this: as was generally the case, Jean made her own decisions as to what to implement.

By interview ten Jean was thinking in detail about teaching strategies, for example, a 'graffiti wall' to encourage the children to write freely about their feelings or the feelings of protagonists in the various eras about the issue of immigration. This would help them link the past, present and future, and also link the personal to the societal. She would ask the children about their beliefs and have them think about what beliefs are. She was "trying to work out some statement that would be a bit contentious," but was not happy with her draft understanding: "Immigration patterns influenced change in society." We worked together to polish the statement, but were not satisfied with our last version: "Different immigrants were received differently by existing citizens." Jean concluded that her main concern was to be able to get the students to "clarify their attitudes towards migrants."

Jean thought about how and where the dimension could be incorporated: she saw the students still doing their normal activities in the unit, but the dimension "may be at the end when it's the share time, or it may be at the beginning where I give them a focus: 'As you're
doing this I want you to think about..." She expected that "when I move into actually working with the unit I can see probably a lot of the links" between the topics of the unit. I suggested a link between the suffragettes and other rights movements through the century, and I made other suggestions derived from my document 'Points for discussion Wednesday 23 July' (Appendix Eleven), such as, Point 2 that recommended having students consider changes in their own thinking and if and how they might play a role in future changes.

In interview eleven Jean indicated that, while teaching the dimension, she would need help from me. I suggested she use as prompts the three big ideas of the dimension - affect, values and metacognition - and below them sub-headings, for example, with values there could be the sub-headings: attitudes and beliefs. Jean suggested these were "organisers," and she then thought about how she could incorporate a question about attitudes or values into the children's note-taking while on an excursion. I also suggested specific questions to focus on the children's knowledge about feelings and beliefs associated with Anzac Day and Australia's wars. I said that I did not want to push Jean in any particular direction, I was just wanting to see how she could treat the dimension during the introductory stage of her unit. She pondered whether to do this in groups or individually, and thought about questions like: "What sort of feelings may have been around at that time?" I suggested she could ask that question prior to the students watching a video about soldiers going to war. Jean then thought she would be able to ask similar questions to follow the video, and before an excursion to an historic home. As she was not sure again, I made further suggestions about focusing on the different generations that lived in the house and about the servants and the owners.

Jean valued this opportunity to 'bounce' off me, but clearly, we were extending each others' ideas. I came to see focusing on the groups as a useful way that affect and values could be brought into the unit. I developed this point, suggesting that the students could focus on the children of the era, on objective matters such as clothing, but also on relationships between parents and children, attitudes towards children, and values.

Towards the end of interview eleven Jean passed me a copy of one version of her planning for the unit, showing resources and stages. She stressed that it was changing constantly. We also discussed whether we were exploring, developing, fostering or clarifying values. Jean was thinking about the outcomes she would be striving for. She might "work out an umbrella thing" listing the values and attitudes to focus on in the unit, and indicating "what product, what behaviour would tell us that the child had developed." She showed me a black line master "Thinking about My Learning" for a book she was writing. She saw that as a way of having the children focus on their values. Also she was thinking that a graphic
activity where the children draw themselves inside a frame might be suitable for values and affect. She said: "I can think of a lot of product that we'll have." As I note in section 5.2, she implemented many of these ideas in the unit.

The teacher's concerns about teaching the dimension

Two weeks before the unit, Jean talked about her knowledge "slipping back." However, two days later, after a conversation with her colleague who had had a similar experience of her knowledge slipping away, Jean felt better and more confident to try the dimension in the unit. My observation notes record that Jean now started "formulating questions incorporating attitudes. She now thinks that it will come reasonably readily in her planning for the next unit." My notes also record that she said: "I suppose its a learning thing.. learning about my learning process." Here Jean was talking about the metacognitive approach she was using in her planning to incorporate the dimension in the unit. As part of her metacognition she was monitoring the ebb and flow of her confidence. Jean's ability to articulate that affect showed how important her affect was in her learning and her planning.

At the end of the last interview before the unit, Jean said: "I reckon that this will be a real muddle first off for me." She was concerned that, because she had not taught this dimension before, she would be going more slowly through the unit than her colleague and the children would notice this: "I'm going to be laboured when I'm talking to the kids more." I replied that she should be able to cover the same topics but would possibly find different foci and different activities, and the students' products might be different. Jean also expressed concern that the 'dimension' might interfere with her normal teaching, that her students' ordinary understandings, knowledge and skills might suffer, and she pointed out that she had to write reports based on the latter not on the dimension. Later I discuss how these matters unfolded.

By the start of the unit, Jean felt that her attempts to plan for the dimension had been unsatisfactory: she found it difficult to see how the dimension might work, where it might fit, what sort of activities might best explore it. She still wanted more guidance from me than the suggestions I had made. Her confidence had been up, down, up and now was down again. She decided that she would incorporate the dimension as she went along, that she would be able to see how to do it once she started the unit. Given the pressures she was under, and given her immense experience in innovative teaching, I trusted that her decision was correct. However, as has been noted, her lack of time to plan for the dimension and her uncertainty about how to incorporate the dimension contributed to her stress at the start of the unit.
Jean believed that her current unit on Aborigines would have been better for the research because values and feelings were so explicit in the videos, literature and factual articles, and in the children's responses. I suggested there may be an advantage in what appeared to be a 'drier' unit because it was not so obviously emotional: perhaps we could be more 'rational' in our planning for including the dimension. I said this to overcome her feeling that the unit might not work and perhaps to mask my own disappointment, because I thought that she could be correct. However, it turned out that our concerns were groundless, as section 5.2 shows.
5.2: Analysis of Data from the Implementation of the Unit and from Interviews During and After the Unit

Here I describe and analyse how the teacher attempted to extend her students' affective and values development, how she used and promoted students' metacognition in her teaching, and what she had to say about her work on the dimension. That analysis moves back and forth over the time of the unit building the picture of how Jean treated the dimension in her teaching and briefly discussing the main themes and issues listed on page 139 to throw more light on the focus questions from page 121, especially those related to Goal C. Towards the end of the chapter I draw upon data from the two interviews after the unit to focus in more detail on the first five of the main themes and issues, and then I draw upon a range of data to address the final three themes and issues.

As background, Appendix Seven summarizes the unit's teaching activities. Also as background I now describe Jean's teaching style. She had a very positive manner towards her students, even when she was tired or unwell. While she often praised the children for their work, their behaviour or their achievements, she did not see herself as a lavish giver of praise: "it's not my natural style." She did not see herself as a friend to the children - "I'm not really going to be soft on the kids" - but she gave "them the absolute best I can." It was true: Jean was not effusive; she did not overdo praise; she did not try to be liked by the students; there were rare times where she was grumpy and short with the children. Her teaching style was positive, engaging, intellectually challenging, professional, and obviously effective. She was open with her students, treating them in an adult manner. She frequently used humour, sometimes building it into her teaching. Other keys to her success were her clear instructions, and her management skills: almost all children most of the time were 'on task'.

I now look at how Jean treated affect in her teaching, then her treatment of values, then her treatment of affect and values together, then her metacognitive treatment of affect and values, and then at more isolated examples of her work involving metacognition. These five sections provide data and insights mainly related to the second and third goals from page 121, to understand:

B. how the teacher would translate the original idea into a planned program of instructional intervention within a teaching unit, and
C. how the teacher would implement, evaluate and modify the original idea
Within each section, the treatment is basically chronological in order to retain the sense of narrative showing how the teacher built the unit and the dimension over time.

The Teacher's Treatment of Affect

Jean explored affect frequently and in many different ways during the unit. In this section, I analyse in some detail the more significant of those occasions where affect was the major focus of a part of a lesson.

At the start of the unit Jean asked the students to imagine how she might be feeling about me being there. The tape begins at the point where her apprehension had been identified, (T. indicates the teacher is speaking and C. that a child is talking):

T.: emotional feelings... how do you reckon I might feel if I'm apprehensive?...
How does my body sort of feel?.... What do you reckon?....
C.: Jittery
T.: it is a bit jittery, but what part of me is jittery?
C.: Your hands
T.: yeah.. you know you fidget a bit.. what else?
C.: legs
T.: yeah you tend to move a little bit around.. what else?
C.: Shoulders?
T.: yeah.. which way when you're a bit apprehensive?
C.: Up
T.: Shoulders have gone up a bit.. a bit more alert.. watching what you're doing... what else?
C.: Your hands perspire
T.: Yeah, sometimes when you're feeling a bit like that they get a bit perspiry..
what about my heart?
C.: fast.. beating..
T.: Yeah... what's that word?.. you know, it means it's going a little bit faster than it normally does?.. it starts with 'p'...

Jean provided the word 'palpitating', and emphasized its pronunciation and spelling. She then reported: "I have been so excited waiting to start this new unit..." and then she switched the focus from affect to the children's existing knowledge.

Already in this introduction to the unit Jean had signalled four aspects of her teaching approach to affect: i) it would have a prominent place in the unit; ii) it emphasises language; iii) it is personalized - related to herself, and through her questioning, to the children's affective experiences; and iv) it is grounded in both bodily sensations and in behaviour.

The prominence that affect was to have was evident not only in Jean starting the unit with this focus, but also in the amount of time she devoted to it. That amount increased in later sessions, but throughout the unit her allocation of time seemed to me to be appropriate. Jean talked about spending less time on it in future because this was her first attempt at implementing the dimension.

In the first half of the unit, Jean continued to take the ten minute morning lessons on the language of affect that she had commenced in February. I was unable to attend those
lessons, but I have Jean's reports about them. My observations of the children's responses indicated that those lessons had extended their affective vocabulary. In most afternoon lessons, Jean reinforced and developed the language emphasis. This showed her taking an intellectual, analytic approach to affect. It was cognitive, and given the element of reflection, it could almost be seen as pre-metacognitive. In early lessons it set the stage for the more explicit metacognitive focus on affect of later lessons.

In lesson three Jean used a vocabulary expansion strategy related to affect: at first, with humour to emphasise her concern about spelling: "I will be savage, furious, disgusted, mortified.. if"... students don't correct their spelling; and then, more seriously because that morning she had found a child plagiarising: "I was disgusted, horrified ... I was actually furious, I was so furious I was shaking inside, have you ever had that feeling? I was shakey [outside]." Jean started lesson ten similarly with the words: kind, gentle, loving, savage, furious, thrilled, and a child suggested frustrated. Jean reported that she had used this technique extensively in the past as part of vocabulary work.

Evident in these examples, and often during the unit, is a focus on the self: here on Jean's own feelings, her body's reactions, and her affective behaviour. Here there was little focus on the mind, but that occurred in later sessions generally combined with the body focus. Jean drew out the children's memories of their own affective experiences and their ability to empathize with the affective experiences of others. She also modelled ways of recognizing and articulating affective experience.

Because she was pioneering this affective education before Lewkowicz (1999), Bocchino (1999) and similar texts were published, Jean was intuitively developing her own model of affective teaching, as the following paragraphs show. She would plan aspects of her teaching about affect the night before, but also quite often it would occur to her as she was teaching. Sometimes when affect would arise incidentally, she would not pursue it. In lesson one, when a child pointed out that the video film had suggested that there was an increase in family break-ups, Jean responded: "it's really sad when it happens, but..." and then she directed their attention to the connection between the family and the society. Here she acknowledged the affect dimension but chose not to develop it. Perhaps she saw it as outside her present focus, or as too emotional a topic for children from some families. Often she was similarly selective about when to explore affect.

One of Jean's major affective foci was on how others might feel. For example, later in that first lesson, while discussing the migration of Italian migrants to Australia, Jean asked how the students thought Anglo-Australians might have felt at the arrival of the Italians. As no response came, she asked how the migrants themselves might have felt. A child suggested:
"scared... coming to a new country, they didn’t have any money." Jean said: "Think about the problems they might have had..." and a child replied: "didn't speak the language." A child talked about her grandfather's difficulties with the language as an Italian migrant. Jean asked if he might visit the class (he did visit), and then repeated her earlier question about the feelings of people towards migrants. One child said: "they might feel uneasy about whether they should accept them." Another said: "they might have thought they were taking their jobs." Jean asked whether they knew of another time when that feeling had been expressed, and a child suggested the present with Pauline Hanson saying that migrants take our jobs. Then the students wrote about society-level changes over the century. Jean asked a child to read her last sentence - "Over the years people seem to have a happier life" - and Jean focused attention on happiness as the lesson ended. This latter was another frequent affective focus: to describe and analyse aspects of emotions and feelings.

Jean and I then talked with the tape on in the staffroom over coffee. As I reported briefly in chapter four, Jean was disappointed with her teaching and relieved the lesson was over, saying it had been a "disaster" and "nerve-wracking;" it had not gone the way she had anticipated. She had felt under pressure and asked what I had written. She relaxed somewhat when we read through my observation notes. She then reported that my comments from the previous day were in her mind:

I was thinking about what you'd said yesterday about the groups of people and... when you've got groups of people it's an opportunity to explore emotions, behaviour and metacognition. But it's all in the head... and it's not there - like it's not in my fingers... or in my mouth... it's not automatic.

Not being able to teach fluently was an additional stress for Jean. Not surprisingly, affect prevailed this interview. We discussed Jean's difficulties of knowing where to go in the lesson. She was critical of herself for not following up some points and for getting caught up on others. She felt that she had let herself and the research down, and that I would also be critical of her. I, on the contrary, felt only positive responses to the lesson. Several times I reported how positively she had opened up important aspects of the research. However, I was concerned about her embarrassment and disappointment. As reported earlier, the second and third lessons were no more satisfactory for Jean, but by the fourth she had resolved the difficulties remarkably effectively.

When I arrived for lesson four the class was singing a song about Aboriginal children stolen from their parents. I pointed out how moving the song and their singing was. Jean described a strange feeling in her arms from the emotion, and asked whether the children have similar reactions. One child and I reported our feelings. Jean built on my comment and then moved on to her lesson. While discussing factors leading the colonies to unite, Jean asked what the colonies were worried about. A child suggested 'war', and Jean
modified this to: "worried about defending the country... every one of them was a bit frightened... worried." A child said another worry was that so many Chinese would come and work for low wages, and Jean pointed out that the colonists "were worried about the sorts of people coming." This led to discussion of the White Australia Policy. I believe that Jean would have used this language about worries and fears even if the research was not occurring: some references to affect are almost unavoidable, but as this chapter shows, Jean focused far more and more often on affect in this unit than she would have previously.

Another affective focus for Jean's teaching was the children's empathic feelings and their possible feelings if in another person's situation. People's wants and feelings were briefly discussed in lesson seven on World War One and conscription. Jean pointed out that many people were "resentful" and "very cross" that some men were not volunteering. She asked the students how they would feel if they were in the situation to vote on conscription, but otherwise she did not explicitly focus on affect. While there was mention about the sending of white feathers and other potentially emotional elements of this controversial period, there was no analysis of the affective aspects of the issues. This was another example where Jean may have overlooked the potential for affective analysis or she may have deliberately limited it to focus on reasons and beliefs.

Lesson nine started with a discussion of the meaning of 'morale' and the feelings soldiers might have experienced at the front, and how the students would feel in that situation. It was a detailed, thoughtful analysis of hope, loss, determination, anger, fear and other "driving forces". When children talked about hiding behind dead bodies, about disease, dirt, flies, smells, there were groans and exclamations from many. They discussed the Christmas truce, and Jean asked how the students felt about that, but before she took an answer she also asked how they felt about war. The children were eager to respond, but the discussion was about the confusion and pointlessness of the truce, and about whether soldiers could be friendly to their enemies, but no discussion about the students' feelings about war. One child insisted that some soldiers would not be able to get over their grudges against that other race and could not participate in a truce. They suggested the truce would help lessen disease by enabling the removal of bodies. Jean asked if that was a 'selfish' reason, or perhaps 'self-interest'.

In our brief, untaped, but later written up, discussion after that lesson, Jean talked about providing evidence for my research, suggesting she needed an activity to establish some baseline data related to affect (and values) that could then be compared at the end of the unit. I suggested that she might design a worksheet similar to that day's worksheets, Thinking about my learning, (Appendix Twelve, and discussed in the Metacognition section later), but focusing on affect related to the students' beliefs about war and conscription, as
she might return to those issues in relation to World War Two and the Vietnam War. She started to explore the idea, and, although she seemed unclear as to how to do it, she used the idea in lesson eleven in her Mapping My Feelings worksheet.

Literature provided the stimulus for many discussions on affect. In lesson ten, about the Depression, Jean first explored the economic and psychological meanings of the word 'depression', then she read movingly from a novel about hunger and evictions: students were shocked about someone eating an apple from a rubbish bin. The powerful sense of tragedy and empathy in the room was destroyed by a parent's arrival with photos of the children from that morning's dress-up parade. Returning to the story, the class explored attitudes: they decided that the mother saw the family as lucky to be surviving whereas the father was annoyed, determined, proud. Jean then cut to an activity generating statements of fact about the affluent and the unemployed during the Depression.

While the children were working, Jean volunteered to me how she had not planned for discussion of the dimension that day, but it was occurring to her even when she was focusing on fact acquisition. My notes record that Jean indicated that "the unit is turning out to be very good for the dimension and that she is still surprised about that. She is also now pleased with the way the unit is going in contrast to last year." In marked contrast to the first difficult week, a new positive phase had begun.

In lesson eleven Jean introduced her Mapping My Feelings worksheet (Appendix Thirteen), asking students to recall the lesson on the war, and to explore their feelings and other people's feelings about conscription. They were to list their feelings about, and the feelings of, three characters in the film, Boy Soldier. She focused attention on feelings and evidence of feelings: behaviour, words, voice, colour of face, facial expression and body language: "you're going to explore their feelings.. you're actually going to step into the shoes of some of the characters and try and imagine how they feel.. Then.. what are my feelings about any of this." They were to write their feelings about conscription, and why they feel that way, and she rephrased the last instruction three times using believe and beliefs instead of feel. The discussion was animated and thoughtful with many children contributing and many participating by miming feelings.

This was a productive activity in relation to affect. The worksheet and the discussion were complex, sophisticated explorations of affect, so it was a shock to me when, after setting the children to work, Jean said to me: "That was a lesson going nowhere." Then she was interrupted, and I did not get a chance to find out why she was disappointed, other than that she thought there were too many boxes on her worksheet. It is my perception that she was setting too high a standard. My observation notes report: "Excellent discussion which
strongly involved children," and "Children worked very diligently on the task. There is obvious concentration," and, in response to Jean's negative remark about the lesson: "I pointed out the skills of her questioning and the model of questioning, wondering and researching she is providing for the kids." My notes also record that again we talked about how successful the unit now is. This is another example of how Jean initially could be critical about particular aspects of a lesson and could even generalize that to the whole lesson, but that with some prompting, she could see the positive aspects of her work.

Much of Jean's work on affect was analytical. Lesson Thirteen began with Jean revising the difference between feeling in the sense of touch, and feelings to do with emotions. That morning they had done classification work, listing 25 feelings on the whiteboard, and Jean had modelled a descriptive piece about the senses. She referred to those lists and her modelling as she asked the students to write for homework their own descriptive piece focusing on feelings.

Affect was explored most powerfully in lesson sixteen. First the children identified Hiroshima and Nagasaki on the map, then Jean read and briefly discussed two extracts about the end of the war from an Australian perspective. Positive emotions were identified. She then read a Japanese child's first-hand account of the bombing of Hiroshima. It was moving and confronting: the room was subdued, the students hanging on every word. Jean then reported to the class that the librarian did not think that story was suitable for them as it could make them feel sick. She asked how they did feel, and a range of emotions were identified, including feeling sorry for the Japanese. Several children indicated that the story caused them to change their mind about "the Japanese deserving to be bombed." This was an example of where during a discussion of affect values arose. During the discussion Jean asked whether they would have felt like that if they were Australians living then, and also warned against them becoming depressed by the incident. She was skilful in evoking, in 'reading', and, when necessary, in calming her students' emotions. Next, she had them write what they thought, and felt, and what someone living then might have thought and felt.

I believe that other teachers and many parents might share the librarian's view. However, I saw this as a most effective learning experience for these students. Jean was an emotionally intelligent and emotionally competent teacher with excellent knowledge and skills for teaching about affect. She was able to scaffold the children's discussions on affect, knowing 'tactfully' (van Manen's sense) how far to pursue discussions. By expressing her own feelings freely she was able to model much that they talked about. Jean's affective knowledge and skills were important from my research perspective, and highlight the question I return to later, of whether other teachers would start with comparable affective intelligence and competence.
Sometimes affect arose incidentally but very powerfully. On the weekend before lesson seventeen, Lady Diana was killed in a car accident and Jean reported the children’s reactions to me in the interview prior to the lesson. She had raised the matter by asking the children to comment on their feelings as she marked the roll. The children had responded with many comments about the death and its impact on them. The discussion had continued for over an hour, with little input from Jean who was shocked by the depth of the children’s feelings: she felt that she was engaged in some sort of group grief counselling. As she said, these children had grown up with media saturation of the ‘Lady Di phenomenon’. Jean considered having the children write about the matter, but decided it was not necessary as they all had been fully involved in the discussion. When I said good afternoon to the students at the start of lesson seventeen, I asked them how they were now feeling, and we talked about that for three minutes. This was one of those occasions when matters of high emotion intrude into the classroom. Jean not only took advantage of the opportunity to extend the research dimension, but also managed to assist the children to deal with a matter they regarded as very significant and that she believed would have interfered with normal academic work.

Empathy was a major affective focus in lesson seventeen on the large-scale post-war migration to Australia. Initially a number of values and affective matters were raised but not explored in depth. Jean developed a complex concept map on the whiteboard showing links between many significant issues arising from migration, for example: difficulties for and treatment of non-English speaking immigrants; orphan migration and its similarities to the ‘Stolen Generations’ of Aboriginal children; women being displaced from employment by returning soldiers. In the last fifteen minutes Jean had the students write how they might have felt as a child migrant to Australia. She explicitly instructed them to consider their feelings, thoughts, actions, feelings in their bodies, and their facial expressions. They were to put themselves in the shoes of the child and inside the head of the child. After ten minutes she asked children to share the feelings they had recorded. An impressive range of feelings was identified, for example: nervousness, confused, disoriented, lost, homesick, shy, anxiety, fear, anger, determined.

By this stage in the unit Jean was finding incidental opportunities in every lesson to explore the affect of others and to have the students exploring their own affect. For example, in lesson eighteen, following a visit that morning from a child’s grandfather who shared his war and post-war experiences, the class discussed his relief and restlessness at the end of the war, and the suffering of prisoners-of-war, and again the children explored their own emotions. In addition there were activities in which Jean planned for affect to be explored in most lessons. For example, lesson twenty focused on the experiences and feelings of migrants, and Jean directed attention to feelings of confidence derived from belonging to a group, and the extent to which Australians support newcomers. An extensive list of these
matters was recorded on the whiteboard. As a follow-up the children wrote and drew about what they thought and felt about migrants, and explained why they thought and felt that way. Jean reminded them of the simulation game and also included the word 'attitudes' with 'thoughts' and 'feelings' in one of her explanations of the task.

Much of the last six lessons was taken up with the children working in groups on posters summarizing the era they had been researching. These were to be used to collate a class data chart, and to prepare oral presentations and dramatizations using music and poetry to present their findings to an audience of parents and grandparents. During this period Jean conducted shorter class lessons in which affect was treated both incidentally and in planned ways. In one lesson Jean asked groups to report on their progress by sharing thoughts and feelings from or about their era. Affective responses such as irritation, sorrow, helplessness, and disappointment were expressed.

At the start of lesson twenty two I asked Jean about her prompts on the whiteboard under the heading, 'Reading Response': Explore * Your feelings about the content as you read the book * Your attitudes towards events, people and place in the book * Others' Attitudes - main people - community leaders - friends. She indicated that it had been part of an English class and the prompts had produced better student responses than her normal prompts that are more about the content of the book and less focused on feelings and attitudes. Jean was obviously pleased and surprised at how successful the activity was. She had moved from struggling to know how to incorporate the dimension at the start of the unit, to now emphasizing affect in a different subject area, English.

When there were only eight students in class at the start of lesson twenty four, Jean was angry that she had not been informed about the activity involving the others, and she was disappointed as she had planned a review of the unit. Despite that, the lesson was more upbeat than any other. Jean started by talking about how "down" you can feel when you have a cold and that she was looking forward to the holidays. She took an activity she called 'Startling Similes' in which the students thought of personal similes, and similes for the school, for parents, siblings and for Australia. They eventually performed their similes for Australia. It was a stimulating and fun activity with creative results that demonstrated the power of metaphor in learning. These children may remember many of these similes because of the interesting connections they made and in some cases because of the affective connections involved, e.g., "sisters are like cuddly bears.. like sometimes they can be really mean and pounce on you, but sometimes they can be really nice and help you."

Again, in that second last lesson for the term, Jean had been open about her own affect with her students. She had moved from anger, disappointment, and other negative feelings to
very positive feelings. She was implicitly modelling the use of affective knowledge, understanding and control. The above section has provided a glimpse of what the transcripts also show: that Jean had the children thinking about affect much more often and more deeply than I had observed in primary classrooms before, and by the latter stages of the unit the children were frequently mentioning affect and values without teacher prompting. In the next section I look at examples of how Jean focused on values during the unit. While affect or metacognition arise incidentally and briefly in some of the following examples, their main focus was on values.

The Teachers's Treatment of Values

The number of times that values issues arose and that values, attitudes and beliefs were discussed in the twenty-five taped lessons and associated interviews and discussions is far too numerous to summarize much less analyse, so here I focus on some of the most significant aspects. I do not analyse the values instances in as much detail as the instances of affect, because they are not as novel: this teacher and many teachers have conducted many such discussions of values, so I provide a 'feeling' for those activities here. That is not to devalue them: they are excellent examples of values teaching. It should also be noted that throughout her work on values, Jean often explored the distinctions between values, attitudes and beliefs, and we frequently discussed the issue of how important those distinctions might be.

Examples of planned activities

Jean planned many values activities: for example, in lesson three she had the students list "what's great about living in the 1990s." In the next lesson she discussed differences between the six colonies prior to Federation and had six groups decide rules, laws, postage stamps, taxes, etc. Her question "Who should be able to live in your colony?" prompted responses from "anyone" to "only people with blond hair and blue eyes." The latter response brought gasps and giggles from some children, but Jean simply asked: "OK, what was your reasoning behind that?" A child explained that they thought that at that time "it might be like Pauline Hanson." This led to a lengthy discussion about the origins of the White Australia Policy. In that discussion a child commented further about Pauline Hanson's fears about Chinese migrants taking jobs and working for lower wages. Another said that Hanson doesn't say that about other migrant groups. These comments indicated children's existing knowledge, and their knowledge about what is 'politically correct'. The discussion demonstrated Jean's skills in provoking and conducting sophisticated values analyses. Afterwards, she asked me if I had provoked the group to come up with the 'blue eyes, blond hair' criteria. I said that I had not, that I generally made only non-significant remarks.
Discussions and activities such as these provided students with opportunities to talk and argue about, construct and de-construct beliefs, attitudes and values. Jean conducted informal mini-debates on the issue of conscription after extensive discussion and before watching a videotape about the issue. She read stories that raised issues such as pacifism or the internment of German-born Australians. Videotapes provoked discussions about social issues such as the rich and poor, unemployment, child employment, sexism, family breakdown, prejudice against Italians, Aborigines and Chinese people. Simulation games explored cultural differences and discrimination, and role-plays were used on the conscription issue and briefly on other topics.

Jean provided much factual information and opportunities and resources for the children to gather information on each topic. On six occasions she explained to the children the need for them to have a lot of facts and to build those facts into generalizations on which the beliefs and values could be based. Lesson thirteen began with a discussion about conscription in World War Two and then children provided 'facts' they already knew about that war. Many of those facts were also issues that provided the basis for later discussion of values: for example, the Holocaust; the Atomic Bomb. Jean then read a factual book about the war and students asked questions about the meaning of fascism and dictatorship. They checked atlases for locations of cities, and they discussed pronunciation and spelling. Then Jean read a story about conscription, internment and pacifism. She focused on facts for some time, until she asked students to imagine that they were a pacifist when Australia was being bombed. She asked: "What do you think?" and after a child replied, she asked: "Is that how you feel?" This is the only mention of affect, and Jean then provided further information, and set the children to work researching their own facts about the period. This lesson was unusual in its emphasis on facts, with brief discussions of values issues, and its sole mention of affect. However, I saw that as appropriate, given so many lessons where affect and values were emphasized. I see it as appropriate to have lessons where affect or facts or values are emphasized, and others where these are interwoven. Jean provided that variety and balance over the unit.

Many written activities were used to help children sort out their values thinking. Some were quite directed: matching sentence beginnings and endings. Others were creative and open-ended with children invited to write poetry or brainstorm their thoughts and feelings. Throughout Jean continued to work on basic activities such as vocabulary and spelling words such as 'discrimination'.
Incidental treatment of values

Values issues also arose incidentally in many lessons, often raised by the students, probably because Jean has traditionally been prepared to talk with her students about important social issues. However, given that she treated sexism and racism in relation to each of the eras studied, it is clear that both were significant in Jean's 'values agenda'. Certainly racism was part of her explicit agenda as it was written into her planning. Jean told me that in the previous year she had "talked quite savagely... because someone said something so derogatory [about race], I couldn't help myself." She reported that students of Asian background had been spat upon near the school, but she believed there was almost no overt racism in the school itself. She seemed very concerned about racism, as other comments she made indicated that she had often talked about tolerance and ethnic and racial issues in the past.

In the interview after lesson twelve, Jean reported that she still hadn't worked out what questions to use to focus attention on attitudes. I asked how important she saw that, perhaps she might not need to push it? (I was wondering whether our pre-unit interviews had over-emphasized differences between beliefs, attitudes and values.) She mused that she might be starting to force it and that she might relax a little and let it happen at the right time. She discussed other difficulties she had and then said: "I'm more relaxed about it... and I know it will all fit in... I know... I can see the fitting in parts coming." I then asked whether she might hold a discussion about conscription in World War Two and in the Vietnam War. She jumped at the idea, immediately suggesting wording for the questions she might ask: "How have your views changed? Why have they changed? Those sorts of things..." She did not explicitly mention their metacognitive focus, but these questions fitted well into a metacognitive approach. A little later she wondered about finding time to classify the values. I asked if that was necessary, and she thought it might not be. She then pointed out how well the unit was going.

As with affect, much of Jean's work on values was analytic. In chapter four I reported that I asked Jean during lesson five about clarifying the term 'racism' with the children. Fifteen minutes after my question, after class discussion about the dictation test for non-white immigrants, Jean asked the class what 'racism' and 'racist' mean. There ensued an excellent discussion in which most students contributed. In the next lesson Jean had the children write what they thought racism was, and she indicated that she would return to these questions at the end of the unit. (She did so: the written focus in her work program for the last week of the unit was racism and 'fears about Asians'.) Matters of ethnicity and race would inevitably arise in a unit on the history of 20th century Australia, but whether she would have emphasized them as much without the research, and without my question about
racism, I do not know. Jean certainly put a lot of thought and planning into the treatment of racism and treated it effectively when it arose incidentally.

The teacher's approach to clarifying and defending values

Jean frequently encouraged children to clarify their thinking about their values and to articulate their thoughts precisely. For example, in lesson eight Jean asked a child: "Is that what you are thinking? (mmm)... No... be precise... yes or no?... You don't have to agree... I'm just trying to clarify what you're saying." Jean also encouraged the children to see issues from multiple perspectives, for example, asking about a character in a film: "Is he considering the other side?... I'm just asking... I don't know." Jean also was careful not to impose words or phrases on students: in lesson nineteen, she asked a student: "Do you think... or am I just putting words into your mouth?" On the other hand, on two occasions Jean expressed her own values explicitly without prompting. In lesson eight, she said: "War is really ridiculous", and she repeated similar sentiments in lesson twenty-five. However, generally she did not state her own position, but led students to express and explore their values in an encouraging and supportive way. She explicitly promoted the procedural values of tolerance and listening to alternative perspectives.

In lesson twenty-two, when a child put an argument to restrict migration and most others disagreed, Jean supported the first child despite disagreeing with her views. When another child picked on that child, Jean angrily rebuked the aggressor: "You are entitled to your own opinion... everyone is entitled to their own opinion... and what you do is you support your opinions, you justify them... if you weren't entitled to your opinion we'd put you in a communist country." Jean reported to me later that the victim had almost been crying. Jean was embarrassed about her own anger, but she was genuinely supporting a victim who had expressed her opinion frankly and bravely against the majority position. During the next lesson Jean complimented the victim: "What I like about you... you had your opinion and didn't get swayed."

The teacher's approach to influencing values

When Jean found her students continuing to hold a perspective opposed to her own, she would think about how to influence their value position. She made this very clear in lesson twenty-three where the thoughtful and frank discussion about migration saw students expressing sympathy and empathy towards migrants, but also some students saying that migrants contribute to crime and unemployment. My observation notes report Jean telling me that "she has a small concern about this unit that children are seeing migrants as a whole and as a problem and as less capable and as having problems." She reported being similarly concerned about the children's attitudes at the end of the previous unit on Aborigines. Their
attitudes were examples of the subtle racism mentioned earlier. However, on listening to the tape of the children's comments on this occasion, I believe that Jean here overstated the extent of the negative comment, and was not focusing enough on the development in children's thinking that had occurred. Perhaps she had too high expectations of how much change should have occurred in the short space of a unit. My expectations are more modest even with such outstanding teaching as Jean's. This is part of the reason I do not see pre-testing and post-testing as likely to prove much in the short term in this complex area of human valuing and affect.

In many sessions Jean asked the students to make value judgements: e.g., about the nature of the society; about what was good and what was not. She used incidental opportunities to reinforce concepts such as 'valuing', for example, she asked the children what criteria she might use to judge their group projects. She would ask: "What sort of value am I placing on the importance of this?" Or she would make an explicit statement: "I value bibliographies written properly," or she would include it in an instruction: "Show, through the symbols you draw on the stamp, what your colony valued."

In the interview after lesson fourteen, we talked about the question Jean often used: 'What belief is driving that person?' and we briefly discussed affects, attitudes, beliefs and values influencing action. She mentioned that she wanted to explore the 'voluntary / involuntary action' issue, and make more connections between affect and values than she had been able to do until then. In the above first two sections on affect and values, I have cited some examples where affect or values arose incidentally while the other was being treated. Next I analyse occasions where Jean treated values and affect more closely.

Treatment of Affect and Values Together

Jean planned to link affect to attitudes and values explicitly in lesson six. After a concert in the morning, the children were still very excited at the start of the lesson. Jean shared her own feelings with the class: she had been "grumpy and stressed out" yesterday, "scared" for them before the concert, "motherly" towards her students from last year, and feeling "pride" in these students' performance. However, at that point there was an interruption and Jean lost her train of thought, so she introduced the written task about what the children thought racism was, examples of racism, and what their thoughts and attitudes might be about related matters, for example, about immigrants. Jean asked what the term 'attitude' meant and a child replied: "it's how you feel about things" - an identification of the affective component in attitudes. Jean replied: "Yes... how could you feel... about them [or] how could some people feel about them." Children suggested 'angry' and 'scared', and then Jean asked them to write about "any reason why people might feel like that... It might not be
what you think, but what some people might think." This was an example of switching from 'feeling' to 'thinking' that many of us do, sometimes within the one sentence. Jean did this on several occasions in the unit. It is also an example of an incidental metacognitive-affective question about the sources of feelings and attitudes that Jean had not planned for and that she did not follow up.

After the lesson Jean reported that she had intended to move from mentioning her own positive feelings, to make the link to the development of positive attitudes, and had planned to have the children clarify the concept of 'attitudes' by having them focus on their own positive attitudes. This whole discussion including the interruption shows the situational difficulties for and influences on a teacher, and is a fascinating example of the complexities of decision-making during teaching.

Lesson twelve began with a discussion about poverty during the Depression and then focused in detail on their Mapping My Feelings sheets, especially feelings related to conscription. These were listed on the whiteboard, then Jean switched attention to the stem, "I believe..." on the whiteboard. Students wrote up their completions such as: freedom, democracy, right and wrong, voting, choice, and contributing, and Jean described these as 'belief statements'. When the Religion teacher came to the door, the third interruption in as many minutes, Jean said: "I'm not exasperated ... I think I might have frustrated today" - a word joke about feelings with the Religion teacher. She also told him that she was talking about beliefs, his area. He left and she continued the discussion, now linking beliefs to values:

"OK, if you believe in freedom, I reckon I could even tell what you value from that [writes VALUE on whiteboard]... If I read your belief... statement... your statement... I know that your belief is that conscription is wrong... but I reckon I can tell from it what you think is very important: what value... what you hold to be... oh... I don't know... pretty important in life... anyone have a guess what... perhaps... V's value is?"

'Freedom' was provided, and then Jean repeated the process to arrive at 'equality', 'rights', 'democracy', 'life' as other values of either the characters in the film and / or of the students. Throughout the latter part of this discussion affect was not explicitly mentioned, but was implicit in phrases like 'driven by', and in the idea of people being proud of their beliefs and holding values strongly. The children were engrossed in the discussion, many talking amongst themselves, but Jean allowed that buzz to continue because she knew the children were on task.

Also in that lesson Jean asked the students to think about her behaviour, feelings, and statements in order to infer what her beliefs, and hence, what her values might be. They
came up with equality of women and men, and between races. She then pointed out that sometimes she gets angry about things Pauline Hanson says, so perhaps she values equality more than freedom of speech. A child suggested that Jean did not believe in homework. Jean agreed and asked the class why she did set homework. They explored her dilemma about following school policy, and she indicated that she valued childhood more than homework, and she asked whether you can always tell from people's actions or statements what people's beliefs are. This was a teacher exposing her views and taking risks to extend the students' thinking about values in a complex and sophisticated way. It was engrossing to observe, a privilege to be part of. I reported something similar to her at a subsequent interview: "there was just this marvellous ferment and excitement which you could feel through the tape... your voice and the kids."

In the interview afterwards, Jean said that in the previous lesson she had felt a confusion about feelings and beliefs, but this lesson had gone very much to plan:

Now I didn't explore feelings too much ... I mean I dropped off that onto the beliefs bit... but I ... originally I was going to just try and get a difference between .. what they .. their feelings and what they believe.. and then when I was trying to mull it over last night - because I still didn't know how I was going to do it - I thought well maybe if I started wording / using stems: 'I believe that...' It makes it easier to get away from what a feeling is because you can't say: 'I believe.. anger'.. So I thought they would actually differentiate that bit.. But then I didn't make the link for the kids.. the difference there.. but I thought I had enough then when I went on to values.

Jean explained that she "muffed" that bit. I understand her point: the hesitations and repetitions in the classroom transcript indicate her uncertainty. Also she might have made the link between affect and values more explicitly. However, now as I carefully re-read the transcript of the lesson, it shows a remarkably effective treatment, especially given the interruptions at key points. She had become much more confident about exploring the links between affect and values. This is an example of an insightful teacher reflecting as part of her metacognitive approach to her own teaching development.

In lesson fourteen Jean frequently switched from feelings to beliefs and back again. This often happened where literature was used to provide information and as a stimulus, probably because literature often explores affect and values. This lesson began with a reading about the situation at home during the war as recalled by a woman to her granddaughter. Its mention of spies and suspicion prompted a child to ask if an Australian woman was married to a German, would she be suspicious of him. There was much discussion around the concept of trust although the word was not explicitly mentioned. Jean asked them to put themselves in the shoes of people at the time, and then did that herself. She reminded them that her husband is of X background and she asked: if
Australia were at war with X, what did they think would be her feelings, her reactions, his feelings and reactions, and those of their friends? She then generalized the issue again, and then asked how the children would feel if it were their friends. Jean used her own case several times in the unit: each time to personalize the issue before she generalized it again.

In the discussion about attitudes towards internment of old immigrants from enemy countries, Jean used the words 'attitudes' and 'beliefs' interchangeably: "And you're really getting out your real belief there, isn't it? .. You believe that you shouldn't judge someone? [Yeah] Yeah.. OK.. So.. that's another attitude.. another way of looking at it." The story reading continued about traitors, black-outs, air-raid shelters, etc., and Jean asked about the meaning of 'patriotism'. Then there was discussion about the bombing of Darwin and about possible reasons that the Australian population was not informed of the extent of damage: the danger of panic and loss of morale were discussed. They discussed the anger against the Japanese when the submarines shelled Sydney. Jean then asked how they would feel if they had been living there and they noticed the arrival at a neighbour's house of the telegram informing of the death of a soldier. Children pointed out that they might feel both sad at the death but relieved or happy that it wasn't one's own family: an example of mixed feelings.

A videotape of a wartime newsreel shown in lesson fifteen raised numerous examples of emotion and of values issues. Jean had the children role-play the experience of going to the movies to get news of the war. They were to focus especially on the sound-track and the style of presentation of the voice-over. Before the videotape they talked about patriotism and other feelings generated by the war. Many children laughed when they saw soldiers smiling and laughing as they left Australia, and, as the music swelled and the national anthem was played there were smiles, perhaps of embarrassment, amongst the children. After the videotape Jean worked hard for about ten minutes to focus the children's attention on the emotional style of the videotape, but so many other significant points were discussed, such as sexism, that she lost the battle.

Affect and values matters were also prompted by the voice-over in a short video clip Jean showed separately: *We used to like brunettes but now we’ve seen the light... What typist doesn't cherish the dream of paralysing the boss with a hair-do like this? Why what mere male doesn't feel the urge to run his hands through those dangerous curls.* Several students groaned, and there were smiles and laughter all round. A child highlighted the humour in the segment. Jean focused attention on the language of the voice-over, and a child pointed out that it was trying to cheer the audience during the war. Then Jean directed attention to the sexism by asking whether we would hear those comments on the news today. There was animated discussion about that and the 'blonde' comments.
Another video clip had marshall music playing as Australian soldiers killed a Japanese soldier and the voice-over said: "Another Jap accounted for." Children gasped at the graphic picture of the dead soldier. There was much discussion of the racist overtones in much of the language of the commentary and about the dehumanising of the enemy "because then it would be easier to hate." Jean concluded the lesson by reviving the role play: they "are in the theatre in 1945; what do they expect to see and hear outside the theatre?" Their suggestions were wide-ranging and thoughtful. They role-played their way back to their seats. This was another lesson in which imagination, feelings, facts, attitudes, beliefs, and values had been effectively interwoven.

A final example of this interweaving of affect and values occurred in the class discussion about their thoughts and feelings about values in lesson sixteen on the bombing of Hiroshima. Jean focused both on facts - *how many people died? how much information did Australians receive?* - and on affect: *how delight at the end of the war was tempered with concern about such a fearful weapon.* Even in the two information books she read, a number of affective elements and values issues were discussed. Before Jean read the child's story of Hiroshima the class discussed what normal life in the city would have been prior to the bombing. Jean had the children think about similarities and differences between that life and life for Australians at the time. Similarities and differences of feelings were also discussed. They also discussed the continuing effects of the bombing and a plaque in Hiroshima about peace. As reported earlier, strong feelings were expressed during the discussion, and the children also grappled with the dilemma of whether the atomic bombing was an appropriate way to end the war.

This frequent interweaving of affect and values shows why I believe it would be counter-productive to treat values separately from affect. It is possible to ignore the affective elements in the children's comments about values and in their values, but to do so loses the opportunity to understand the affective dimension of values and how they operate in normal life, and also loses the opportunity to use affect to develop values.

Next I look at examples of how Jean used a metacognitive focus on the development of affect and / or values, and on the relationship between values and action.

**Metacognitive Focus on the Development of Affect and Values and on Motivation to Act**

In this section I explore the following:

i) how Jean drew students' attention to how their or others' affect, values, attitudes or beliefs had arisen, and examples of where she treated the connections between affect, values and action;
ii) the extent to which Jean focused attention on the content or the processes of those developments and connections;

iii) whether she had her students consider the future development of their affect and values, and their future actions related to their affects and values;

iv) whether Jean explicitly focused students' attention on their metacognitive development;

v) the extent to which she planned these activities, or they arose incidentally.

Parts of these activities share features with critical thinking and values clarification activities. What distinguishes these activities as metacognitive is that they are part of the larger metacognitive development program: the teacher has metacognitive developmental purposes as well as critical thinking or values clarification purposes.

Extended metacognitive activities

In lesson eight there was extensive metacognitive treatment of affect and values, commencing with discussion about the development of conscience. On the whiteboard were words and diagrams from a discussion about the word 'conchey', a conscientious objector in world war one. There was a lengthy and animated discussion about the root word 'conscience'. A child talked about the cartoon technique of showing two angels arguing about right and wrong (part of the whiteboard diagram). Another child described it as "your moral sense of right and wrong." Jean asked: "a moral sense?" and the child replied: "like probably what you've been taught... like if your parents said it's bad to steal then obviously well... it's your moral sense that stealing is wrong." Another added: "or people tell you," and amongst a number of unclear comments, another said: "you feel is right." Another child pointed out that conscience comes in when you do something against what you have been taught is right. Jean asked: "do you have to be taught?" and several children said yes, but one said: "you know... you know that something is wrong," and Jean asked: "Well how would you get to know whether it's right or wrong?"

Then Jean used similar questions to focus children's thinking on the origins of their beliefs:

T.: OK, another word for he thinks it's wrong. He might be more than just thinking it's wrong... C.: believes

T.: Right, he probably believes it's wrong... Well where does he get this... idea or belief that wars are wrong? Where might he have got that? C.: His parents

T.: It could have been his parents. Do you know whether that's where he got this belief from? ... We've seen his parents. What do you know about them?

Jean continued challenging the students to provide evidence for their suggestions. Statements of the conchey's mother and father were examined. They then discussed whether his fear of being killed was his motivation for refusing to enlist, and several children suggested that he was not scared of dying but worried about having to kill someone else.
Jean asked: "What's made him decide that he doesn't want to harm anyone?" In this discussion Jean had prompted metacognitive reflection about affective and values influences on action as well as about the development of affect and values.

The lesson involved lengthy discussion about the thoughts, feelings and values of the protagonists in the video and of the students. Mixed feelings and moral dilemmas were explored. When a student mentioned the meanness of the sergeant, Jean asked if the student was annoyed with him, and why the sergeant and others might not have understood the conscientious objector's feelings. Jean continued to use a range of questions to probe children's own affect and values, and provoke them to explore the origins of their affect and values. While this questioning was part of Jean's program of metacognitive development of her students, she did not draw attention to that development.

In the following, Jean attempted to have her students think about the possible influence of their values on their future action. After asking the students to consider the meaning of the word 'principles' Jean asked:

Would there ever be a chance... an example... ever in your life do you think that you would have to stand up like that for your beliefs?... Is there anything that you reckon that you would do that much for?.. stand up and be ridiculed and teased for your beliefs?

She indicated that she had been trying to answer that question for herself while the videotape was running. These questions about the values-action link (and implicitly about volition) were part of Jean's overall metacognitive development program to develop the children's knowledge about how beliefs, attitudes, values and affect develop, influence each other, and how they are ultimately involved in action. However, these questions failed in their purpose as the children did not respond about their own beliefs, future actions, or will, so Jean moved on to reading extracts from soldiers' letters. Again there was much discussion of affect, focusing on bodily sensations of feelings, the behavioural manifestations of feelings and how we read others' feelings.

There are several points to be made about this lesson related to my discussion of the metacognitive-affective approach from chapter three:

i) Jean had the students reflecting on the content of, and on factors in the development of, affect and values; she did not have them identify the processes of that development.

ii) She had the students developing metacognitive knowledge, not engaged in metacognitive evaluation (see page 110).
iii) She did not have them reflect upon where she was taking them, upon how this discussion fitted into the larger metacognitive development picture. Thus, this lesson must be seen as an example of the teacher utilising the Partial Support model (page 113).

iv) She did not have them think about changing or developing their values. They were not engaged in metacognitive regulation. However, it is possible that during this lesson, some students came to question their own beliefs. This could have occurred through traditional learning processes - students attempting to resolve cognitive dissonance through values clarification - or through a developing metacognitive focus. We have no evidence concerning these possibilities. However, I emphasise that Jean achieved much in this one lesson, and that this lesson has to be seen as part of her long term metacognitive development program for these students.

Jean reported in the interview after that lesson that she had not planned for the dimension to arise so much. It appears that she had developed enough confidence to incorporate the dimension incidentally, and she was surprised how much it had come up. She pointed out that in literature sessions in the past she would discuss feelings, but that she had not expected to do so in this history lesson despite planning to read the letters. She also felt that she had over-emphasized the dimension, but that she was not yet having the children define terms like 'attitudes' and 'beliefs', but just simply using them in context: "I'm trying to use that vocab naturally." She was also not sure about her own use of the terms. I reassured her on all these counts, telling her that the lesson had been successful both from the research point of view and as a learning experience for the students, and that she should trust her teacher judgement. I also asked her whether she thought she would need to have the children more formally defining the terms. Musing about that, she said she might if the opportunity arises, but if it did not arise, she would not force it.

It seems to me that Jean was developing her metacognitive-affective approach in action. She had not had time to develop it theoretically nor to develop a figure like mine in chapter three. She had grasped the essentials of the approach and was 'running with it.' Whether it would have been more effective - for example, in this lesson - if she had articulated the approach more formally for herself, and then for the students, are issues I address later. In several lessons Jean attempted to focus her students' attention on her teaching purposes. I look at an example now.

In lesson sixteen on the Hiroshima bombing, Jean had the children think metacognitively about her purposes in reading the story: "we're not reading it to try and get ourselves depressed. What we're trying to do is show the two perspectives... and.... ahh.. I wonder what else you think we've been possibly trying to do? What was I trying to do by just reading it to you?" She was unsuccessful in this attempt to stimulate the children to think
metacognitively as the children were too involved in the content to step back from it. Then Jean set the written task: on an A3 sheet folded in half they were to write on the left side what they were thinking, "whatever's bouncing around in that head," on the right side what they were feeling (said softly but with emphasis); on the other side of the page, what a person in 1945 might have thought and felt. They worked on these sheets for ten minutes and completed them at home.

Next I briefly analyse these fifteen written responses. There was a range of responses, some very simplistic: the bombing was not nice; some very sophisticated in exploring the dilemmas involved. Eight were against the bombing of Hiroshima. Three were equivocal. Some anti-American feeling was expressed. Three children seemed to think Australia had dropped the bomb. Some were confused on other points, and the one whose language was the weakest actually wrote: "Why are we so mixes [sic] up?" - a lovely metacognitive question. Most children indicated that Australians at the time probably were in favour of the bombing. Some looked at the bombing from the perspective of a Japanese person, others from an Australian or American and some from several perspectives. When the multiple perspectives, including their own, are taken together, there emerged overall many sophisticated attempts to make sense of this moral dilemma. Their responses indicated that this single powerful story appears to have had a significant impact on these students. It is possible that the affect generated during and after this story may have entered many of these students' beliefs and coloured them significantly. Long term and deep interviews might throw light on the extent of this colouring, but I believe that Jean's metacognitive questioning played an important part in the development that did occur.

Several times in lesson eighteen Jean challenged the children to think metacognitively about how and why people's feelings and beliefs change over time. Most of the lesson was devoted to children working in groups extracting information from texts on topics such as health, music, and fashion in the 1950s. Many values issues were discussed briefly, with race and gender issues prominent. At one stage, Jean asked: "I wonder why we all have different sorts of feelings like that...or different beliefs?" She was inviting the children to metacognitively consider influences on the development of their feelings and beliefs. Later she asked what actions brought about changes in society-wide attitudes towards Aborigines, and the children recalled the Freedom Rides. At the end of the lesson Jean asked the children to construct concept maps and she emphasized the links and connections between the concepts. Jean saw this work on students establishing links between parts of their thinking, their beliefs, their feelings and their values, as an important element in her metacognitive education program. It is also possible that following a class lesson such as this one, some children could continue to reflect. Jean's questions were thought-provoking,
and there were occasions that some children raised issues from previous lessons indicating that they were reflecting outside class.

The simulation game, RaFa RaFa, provided students with insights into the ways we develop affect and values through socialization. The game was used in lesson nineteen to simulate the experience of living in two different cultures. It generated much affect and lengthy discussion of affect and of values issues related to groups interacting. In the de-briefing afterwards children switched between descriptions of the affect, beliefs, attitudes and values of their own group, of the other group, and of real groups such as migrants and Aborigines. Jean repeatedly asked the students to reflect on their feelings and thoughts while they had been participating. Through that discussion many children started to develop the metacognitive insight that they had been more comfortable in the culture to which they had been allocated because they had been socialized to it, they could communicate in it, and they did not understand the other culture.

During the last fifteen minutes of the de-briefing, Jean attempted to focus the children more metacognitively, saying: "I want you to think about what you could learn from playing that game... [ ] What have you made links with? What could you apply it to?" I thought that some children might have made connections to their socialization to their affect or values in their own real-world groups. While that did not happen, a small number of students made comments showing their understanding that being socialized at the start of the game to their 'culture' had caused them to be emotionally attached to its values: a powerful metacognitive-affective insight relevant to the research. One child reported that the game "helped me to understand what it would feel like to be someone coming from another country, and also... [ ] like... how I react to people." Another student said: "I don't know how to write this but... it kind of helped me... part of my problem-solving kind of... like it kind of helped me try ... I didn't get how they were communicating."

Jean also asked: "Did you discover anything about yourself when you were... playing that game?... [ ] or... what was reaffirmed that you already knew about yourself but it certainly proved it?" One child said she discovered that: "I was sort of racist because I thought they were weird and being... nasty." This is another important metacognitive-affective insight. It is also possible that this student could move on to want to change her perspective. Throughout the latter part of that discussion Jean encouraged the students to make what she called "bigger picture statements," and at times the children did so, although many found it difficult to move beyond their own vivid experience much of the time. Jean was disappointed at the end of the long discussion to find that a child still felt different to the children from the other group, so she asked them to shake hands before they left. They did so and moved on happily. It had been a lengthy but effective de-briefing from the point of
view of my research. When Jean asked the students in term four to recall the highlights of the unit, the first thing mentioned was this game. Perhaps this was due to the high affective impact during the game more than the de-briefing, however, the children had also been highly involved in that discussion.

In lesson twenty, Jean tied the experience of the game more directly into the post-war era of immigration. She created lists on the whiteboard under the headings: 1. How might migrants feel when they came? 2. What difficulties might migrants have? 3. How might migrants behave when they came? Once again there was obvious focus on feelings, but also discussion of facts, beliefs, attitudes and values, sometimes relating back to the game but also linking back to earlier eras. For example, there was lengthy discussion about the White Australia Policy and racism. Jean did not wait for these points to come up incidentally, but nor did she point out the link: rather she invited the children to make their own links between their experience, their behaviour and their feelings during the game and those of migrants in other periods as well as this post-war period. When a child made a comment that did not appear relevant, Jean invited her to search for the link and tell the class when she found it. During the discussion Jean highlighted the word 'might' in the three headings and asked the children why she was calling it a key word. This was explicit teaching of tentative decision-making. Jean modelled her own uncertainty throughout. This fits well with the tentativeness built into the model of metacognition discussed in chapter three.

There were three lessons where the metacognitive potential of what Jean had planned did not appear to be fully achieved. However, they still provide valuable insights into how the approach might be implemented. In lesson nine, Jean introduced her worksheet, Thinking about my learning (Appendix Twelve) that had potential to focus the students' attention on their learning. The sheets contained the following statements: 1. All Australians were keen to support the war effort. 2. A series of errors caused problems at Anzac Cove. 3. The events of WW1 affected Australia and Australians for a long time. Students were to put a cross on a continuum indicating where they stood on the three issues. Jean said: "really get stuck into your cognitive material, see what you've learnt, try and make some connections." They were to read the statement "and then think: 'Where do I stand? What do I think about this statement? Do I agree? Do I really strongly agree and say YES that's exactly how I feel? or do I strongly disagree? ... or I'm not sure.'" Here Jean used the word 'feel' when perhaps 'believe' would have been more appropriate as she explicitly enjoined the students to give their reasons for their stand - "why you believe this... the reason you think this" - but she did not discuss it from an affective viewpoint.
Despite this worksheet being headed *Thinking about my Learning*, the students were asked to focus on *knowledge - what* they had learned rather than *how* they learned it. Perhaps Jean intended its metacognitive significance to be developed over a sequence of lessons. However, the metacognitive potential was further limited as Jean did not have time to look at the completed sheets. Unfortunately our brief interview was not taped and my cryptic notes do not shed any further light on this matter.

The second occasion where Jean's planned metacognitive focus was not as fruitful as she hoped was in lesson twenty. Jean had added a metacognitive dimension - attempting to have the children identify where their feelings and beliefs had come from - to a task, "Putting Oneself in the Picture", that she had used previously. The students were to use drawings and symbols on A3 paper to express how they felt about migration and migrants in one half of the sheet and next to that they were to write about why they might feel the way they did: "I want you to record your feelings and attitudes and thoughts about migrants... OK... and why you might feel and think... and act towards them." Unfortunately many of the children interpreted the task as indicating how migrants themselves felt, and of those who interpreted the task correctly, many then elaborated on those feelings rather than the sources of their feelings. A couple mentioned the simulation game as having influenced them, a couple mentioned Pauline Hanson from the television, and one child mentioned the fact that she feels "comfortable because I'm used to being around other people from different countries." This is one time when Jean's instructions were not explicit enough and the activity did not achieve her purpose. However, it did have the children exploring their feelings, and I believe that it showed potential to help children explore the sources of their feelings, attitudes and beliefs.

A third occasion that the metacognitive potential was not fully achieved was in lessons twenty two and twenty three. Before class Jean showed me photocopies of a newspaper article headlined, "There's no Asian flood", that she intended to use. She also showed me the section of her work program relevant to the lesson:

Stage: Reflection
Discuss: Where does racism come from? What causes it? Has it changed? How can we change it? etc.

All of these questions fit into a metacognitive-affective approach, and certainly some metacognitive development did occur. At the start of the class discussion, a child indicated the article writer's name, and suggested: "People could think that this lady is telling you this because she's Asian, but really she's the Chairwoman of the Multicultural Commission." Jean responded: "Good, you really looked into that really closely because the author - there's a picture here - is that what you were thinking?.. but then to check where she came
from... what her beliefs and what her stand might be... you look down here." Both the student and Jean were noting what might influence interpretations and beliefs. Jean used a strategy of 'talking to the author' throughout this reading: the students were to ask questions of or make comments to the author. Again Jean was modelling learning strategies. Also she reminded them "to draw on what you know about Asian immigration out of the unit we have done... See if you can make connections with what I'm going to read here and what you know about our history." The discussion touched on issues from the Tiananmen Square massacre through to suspicion, jealousy, and fears about Asians. Again Jean emphasized the 'big picture' and making connections.

During this discussion Jean also focused on the sources of the students' beliefs. Several children spoke against the majority supporting migration, and Jean said to the most vocal of the minority: "you've just expressed quite honestly your beliefs and your attitudes towards something... Where do you reckon you got those from?" The child replied: "My dad", and she and others laughed as he had migrated to Australia. She reported that she talked often with her father about racism, migration and unemployment. Jean asked another student the same question, and she replied: "oh.. well.. I don't know if I get them from my parents.. because my parents are at.. work [unclear], but I think I probably get them off the news.. too.. like.. from my.. like.. politics and all." And Jean asked how that helps her, and she replied: "Well some things that politicians say.. I kind of agree with them and some things I don't," and Jean asked: "So you sort out what you agree with?" The next child took the discussion back to the issue rather than the metacognitive focus on the influences on their beliefs. However several children indicated that they had taken notice of and disagreed with Pauline Hanson's statements from the television. Surprisingly, a significant minority of these twelve year olds appear to have a high engagement with news and current affairs programs on television and radio.

Jean then had them write about their beliefs and attitudes towards migration, "and then I want you to think about where did you get your attitudes from... how did you get attitudes?.... Who influenced them?... Have your attitudes changed along the way?" Most importantly - and unfortunately - one child asked if Jean wanted to know "why we think that?" and Jean replied: "Yes.. why you think it.. it might be something that you've learnt during the unit." Although one child suggested that the child (mentioned above) could say that her father had influenced her, most children took the word 'why' to mean 'justifying' or 'elaborating', whereas Jean had meant them to consider the 'influences' on their beliefs. This turned out to be crucial because Jean found after about three minutes that children were only writing their beliefs and attitudes, not where they come from. So she repeated the instructions, but again the emphasis was somewhat ambiguous. While the children worked, she told me that she would not have thought of that activity if she were not doing the
dimension. This activity had the potential to be a most sustained metacognitive focusing on the development of values, however, its potential was not achieved.

At the start of the next lesson Jean asked what the students had written the day before: "share one profound thought, one profound feeling." Whether it was this wording, or whether the children had not focused on the source of their beliefs, I do not know, but most of their comments did not do so. Only one child did so, indicating that she had moved houses which is like migrating and it may have influenced her beliefs. Unfortunately in her questioning Jean did not mention the sources of or influences on beliefs, so the focus remained on the beliefs and justifications for them.

After the lesson, Jean said that it had not worked and that she didn't know where she was going or what questions to ask. This reflective evaluation was part of her metacognitive stance to her teaching. My notes record: "This is another case of the teacher knowing that she could do it even better and being frustrated about that." At the time I was unclear about the details of her dissatisfaction, but now, with hindsight - and careful listening to the tape and re-reading of the transcripts - I realize she was probably referring to the ambiguity in her instructions and questions. Also, during that discussion, Jean made the comment "I honestly don't know" - again modelling her metacognitive uncertainty.

While the above examples show Jean pursuing a metacognitive line for an extended period, there were other brief and more isolated occasions during the unit that may also have contributed to the development of her students' metacognitive knowledge and skills. I believe Jean saw most of these examples as part of her overall metacognitive development program, but some she may not have identified in that way. I look at these brief examples now.

**Brief, isolated examples of the teacher’s work involving metacognition**

After lesson six, because Jean asked for more help about metacognition, I suggested that she might plan a metacognitive activity that might take only five minutes, but that she should let it happen rather than try to force it. She then explained how she was already doing this when she would ask the students:

> Well what did you learn from that? or how / what did you learn in that?.... Maybe that's how eventually with our teaching with values and attitudes and... when you just naturally you just talk / have something: 'Well where do you think you got that?' or 'What makes you feel like that?'

This an example that sometimes Jean simply needed a prompt to remember her teaching strategies that were metacognitive, or part of her longer term metacognitive development
program. Like her own metacognition, much of Jean's use of metacognitive strategies in her teaching had become automatized and taken-for-granted.

In almost every lesson Jean focused her students' attention on their thinking or their learning with questions such as: "What was I trying to get you to think about?" In many teaching situations she would explain or ask students to consider what she was trying to teach, how they might go about their learning, what things they had to keep in mind, what things they must do, what they had a choice about, what they had to decide, what difficulties they could anticipate, what goals they would set. Jean provided a large range of teaching / learning situations in which students had to make choices and decisions, had to plan, and set goals, but she also used many structured activities that provided models of how to plan, make decisions and set goals.

Often Jean asked metacognitive questions such as the following in lesson twenty four. A child came up with the simile: "Australia is like a baby because when it needs help it always cries to America." Laughing, Jean asked: "What made you say that?" The child replied: "I just thought of it... when we've been learning about .. like America and Australia how they help each other." Though unsuccessful, Jean's question could have prompted the child to reflect upon what may have influenced her thinking.

Sometimes Jean asked questions that had the potential to promote metacognitive development, although I was not sure that she intended them to do so. In lesson fourteen, Jean asked the children to consider why an author chose not to include the bombing of Hiroshima and Nagasaki in her book. A number of reasons were discussed, including that she may not have seen that information as suitable for young children. They discussed what authors and illustrators need to know to produce a book and how they make decisions about what to include and exclude. This critical thinking discussion may be seen as part of the overall development of the children's metacognitive knowledge about how knowledge is constructed. I do not know whether Jean identified it in this way.

At the start of each new topic Jean would stimulate discussion to draw from the children their existing knowledge: a strategy with metacognitive potential to have the children reflect upon the sources of that knowledge or their feelings associated with it. In lesson ten Jean had them think about the feelings of people during the Depression, and briefly about their own feelings. After eight minutes of discussion Jean said: "Gee you know a heap about it already," and then a child suggested that "the well-off treated the unemployed as though they were the problem." They then briefly discussed where their knowledge had come from, and some said it was from stories they had read about the period. In that lesson Jean also made several explicit points about learning and knowledge. One book said that one in three
were unemployed and another, one in nine, and, as she did often, Jean pointed to the need to question sources, and asked how they could confirm or refute the information. Acknowledging big gaps in her own knowledge about the Depression, she listed her own and students’ questions on the whiteboard. They discussed how they might answer the questions. In this way Jean modelled her awareness of her own ignorance and how she might improve it. I now look at other examples of the many occasions where Jean was obviously pursuing a metacognitive agenda through her modelling.

The teacher’s modelling of metacognition for her students

While Jean did not explicitly use the word 'metacognition' with her students, she often modelled metacognitive reflection for them, as in the following: "Sorry, I have made an absolute disaster... You know when you think and you do something and you think 'oh no this isn't going to work the way I want it?'" Jean commonly indicated to her students her own lack of knowledge, or that she was feeling her way in her teaching. At times she suggested she might be wrong. This was modelling the uncertainty and tentativeness of a reflective thinker, a metacognitive learner. However, I am not sure that she always realized the metacognitive element of these statements, as on one occasion when I asked her about an example, she told me that she had always used this teaching strategy but was using it more now because she was aware of the tape recorder and of her own uncertainty about many facts.

Often Jean focused the students' attention on teaching and / or learning. For example, in lesson five she reflected with the children on her teaching:

if all of you have totally mucked up, that's not your problem... it could mean that I didn't explain it properly... I can say: 'Oh dear.... I have done something badly here'... There could be two reasons though: it could be that there was a problem in the way that I phrased them, and it could be that there are other possible answers.

In lesson twenty one, Jean modelled her awareness of the difficulty of the task and of the need to persist and think creatively. As one group was struggling with a task, Jean stopped the class and said: "What I gave you was really, really hard because I know if I was in the same situation as you trying to think about it... it would be really hard, but I do know... that most times..." and then she provided examples of what she wanted.

Jean also sought student feedback and suggestions on her teaching. For example, about her Mapping My Feelings worksheet and activity in lessons eleven and twelve. When introducing the worksheets, she pointed out that that it was a new activity and they were guinea pigs "because I don't even know if this actually works." She asked the students for feedback as to its setting out. She repeated these ideas twice during the lesson. She was
modelling metacognitive reflection on and evaluation of her teaching. This was incidental and brief, but because it was done in many lessons, its potential cumulative effect needs to be noted. I am not able to evaluate that effect, but I suspect it was significant as the children responded thoughtfully to such requests.

Jean sometimes modelled metacognition about how her own values or beliefs had arisen. In lesson eleven Jean suggested to the students that her own thinking about the war and the Depression was based very much on what her parents had told her. She reported that her parents, and the grandparent who had visited the day before, thought that the war "helped stop the depression." She modelled her own uncertainty: "I don't know, I'm not an economist... and I'm not a historian." This was not just the strategy teachers use even when they do know, it was also part of her metacognitive strategy. She also warned about accepting hearsay:

*Gee, it's so complex ... I'm not even sure because.. we've got to be careful when you listen to people talking.. that may not be exactly.. that's how someone might see it.. how they perceive it ... I don't know whether that's actually true... so how will I actually find out whether it really is or whether it's just what people thought?*

She then suggested that the children ask their parents about what they knew about the war and the end of the Depression, and that she was setting herself the homework task of finding out more about the connection between the two. The children babbled with ideas about who they could ask and how they would research it. Jean concluded by saying that the next day "perhaps we can pool all the information and get a pattern and find out." Again in this activity there were a number of metacognitive elements. Jean was encouraging her students to address where their own ideas and knowledge came from. She was also helping them to see that such knowledge is likely to be questionable, but she did it in a way that the children might recognize that uncertainty without feeling threatened by it. As they became aware that the variety of knowledge and viewpoints in the class derived from different family backgrounds, it is possible that the children would start to see their own existing knowledge as contingent.

Throughout that lesson, as she did so often, Jean was also modelling the generation of questions, and she was stimulating questions in the students. The ferment in the classroom was palpable, with children sharing thoughts amongst themselves but also contributing to the class discussion and questioning. Twice Jean mentioned that the children had asked "some fantastic big questions." After an animated discussion about the feelings they would be writing on their Mapping My Feelings sheets, Jean slowed the pace and modelled how to proceed:
T.: OK. a little think time because we’ve really had to talk a lot about this and I’m
going to want you to work flat out for fifteen minutes. you’ve got a few tasks... I
want you to count up in your head how many tasks you think you’ve actually got
to do here... [Tasks are listed]... So you’ve got to get out of the character after a
while and get down to what you think and feel...
C.: then... how you feel about the bigger picture..
T.: the bigger picture. Let’s see how it works... to try and find out how it works.
You are my guinea pigs... you’re not to talk to anyone about this... get inside your
own head... get inside your characters’ heads... get into the video... Goodbye...

Not surprisingly, the children worked well. This was an example of Jean training her
students in metacognitive learning procedures and in how to focus on their own and others’
feelings.

At the end of the Startling Similes lesson, Jean asked the students what they thought about
the activity, and their responses were unequivocally positive: for example, ‘good’, ‘fun’. She
asked could she use it for other purposes and what recommendations they could make.
Then she asked: "Why do you think I would find time to be doing it?.. What would be a
purpose for me?... What would I be trying to do?" The children responded vaguely to this
last line of questioning, and Jean explained that she was trying to get them to make
connections. The responses to the question were not as interesting as the question itself:
another demonstration of Jean opening up her teaching for scrutiny, attempting to involve
the children in reflecting metacognitively about her teaching and their learning. Not
surprisingly, Jean herself was metacognitive about her metacognitive teaching.

The teacher’s reflective evaluations on her metacognitive development of the students
In later sections I look at how effective that teaching may have been overall in promoting
her students’ metacognitive development, but now I look briefly at some of Jean’s comments
on this question.

Jean evaluated her own work on metacognition in her journal and with me. While the
children were working in lesson twenty one, Jean and I talked. She reflected on her recent
journal entry, volunteering that she had not done enough on metacognition. She said: "I
couldn’t work it out at all because I’m not really valuing that," adding that she was valuing
the acquisition of facts and understandings more than the development of metacognition.
This was not surprising as she felt very accountable to the school and the parents for the
students' academic development, and she did not appear to see a spin-off from
metacognitive-affective development to academic development. I had not talked much with
her about that possibility. Also, she was attempting to implement a general idea about using
metacognition that I had only briefly outlined for her: I had not provided many practical
teaching suggestions about it. However, as this chapter's analysis has I believe shown, Jean
had done remarkably well in operationalizing my general idea and implementing strategies on a daily basis. As she noted in her journal, she had many ideas but found it difficult to decide on them as she was missing not being able to talk through such teaching ideas with her colleague or with a mentor. Hers had been a lonely journey, despite my changed role and me providing more assistance than originally planned.

To complete the analysis of the data from Jean's metacognitive work, it is important to look at the self-evaluation activity that Jean had her students complete in the last lesson of the term. In this I look for information about the children's affective, values and metacognitive development over the unit.

Self-evaluation Activity

In lesson twenty five Jean conducted an important culminating metacognitive activity to have the students evaluate their development over the whole unit. She used a sheet titled 'Thinking about the Topic', a self-evaluation proforma she had developed and used in the past, that has four headings, each with a question:

Knowledge • What are the most interesting things you have learnt about this topic?
Skills • What skills have you learnt or improved on during the study of this topic?
Values / attitudes • Think about how you feel about the topic. Have your thoughts and feelings changed since studying this topic? How? Why?
Action • As a result of studying this topic is there something you now need or want to do?

It is interesting that under Values / attitudes, both thoughts and feelings are mentioned. In introducing that section, Jean focused her students' attention on a number of metacognitive aspects:

this is talking about... .. your values.. and talking about your attitudes... and it says... Think about how you feel about the topic... about any issues that have come up... any things that have really made you start thinking.. or starting to alter your views about how you view the world or think about the world.. Have your thoughts and feelings changed about anything?.. If they have, how?.. or why?... If they haven't ... why?... .... .. Any questions there?... .... .... That's the one really where you are getting right inside your own brain and it's not just thinking about facts.. you're thinking how is it.. what does this mean to me? .. Did I learn something that made me feel a bit uncomfortable because I don't agree with it?.. Or did I learn something that made me feel really cosy and.. yes that's what I think... and that's how I feel....

Jean then moved on to introduce the Action section, first indicating that it was a difficult one. She used the visit the day before of another grandparent talking about his war and post-war experiences as an illustration. She had students report his story to me. All, including Jean, had been strongly moved by his experiences. In that lengthy discussion
Jean reported that, listening to the old man's difficulties, she had started "feeling a bit weepy," but then he had "said something that I thought was quite deep and quite profound and... [ ]... it gave me sort of a message." Many children responded to this prompt, reporting his comments that there would be no more wars, that he would not fight in a world war again, that there was no real winner in war, and that if peoples knew each other better they would not go to war. Jean then set her students to work.

In highlighting the old man's comments about his values, how they had changed, and how he would act differently I believe that Jean was intending to help her students think about how their experience might influence their values that, in turn, might influence their actions. However, she did not make that point explicitly, perhaps because she had become more emotionally involved in reporting the old man's story than she would normally. Despite that, I believe that because the discussion was so involving, many of the students may have picked up Jean's purpose. Equally there may have been students who missed that purpose, who may have benefitted from more brief discussion and more explicit instructions.

Given that emphasis in her introduction to the proforma task, it was not surprising that of the twenty two children who completed the sheets (Appendix Fourteen has a typed copy of their responses), most mentioned aspects of wars, although only two mentioned the grandfather. At first reading, the responses to the Values/attitudes section appeared limited especially in terms of explicit mentions of feelings. However, on deeper reading and, especially in conjunction with the Action section, I noted that in seventeen children's responses there were concerns about aspects of the Depression, of war, or of migration and the White Australia Policy. While few expressed sadness explicitly, this and other emotions can be read into their statements about Hiroshima and about honouring soldiers' memories and preventing future wars. In those seventeen students' comments it appears that the unit may have had some impact related to affect and values. We do not know what impact it has had on the remaining five: perhaps they had less ability to express feelings and values in writing. Nor do we know whether the children's responses would have been more - or less - related to the dimension if Jean's introduction had been more brief. On their own, these sheets do not provide strong evidence about the impact of the dimension. However, they need to be 'read' in conjunction with all the other work discussed previously, and with Jean's evaluation of the dimension that I look at later.

I now focus explicitly on the eight themes and issues listed on page 139. The first five were covered in some detail in the final two interviews in November and January after the unit.
Finding Time for the Metacognitive-Affective Approach in a Busy Teaching Schedule

Fitting this new dimension into what was an already overcrowded curriculum and teaching day was a major issue for Jean throughout the unit. The reality of the crowded curriculum and of the school day filled with constant interruptions, at times overwhelmed Jean and her plans, and was a surprise to me, even though I had spent many days over many years in primary school classrooms. Students were constantly coming and going, alone, in small groups, sometimes half the class. In the staffroom, teachers frequently complained about the constant interruptions to their teaching. There was always a major extra-curricular activity to prepare for, for example, two concerts in this term. In each lesson there were two or three parents or teachers knocking on the door, and more children. In frustration during lesson seventeen, Jean asked me how many interruptions had occurred: there had already been six in thirty minutes.

In interview ten, during planning for the unit, Jean indicated she would have to be careful about the time the dimension might take up in the unit. After lesson twelve, she said she felt that the dimension was taking up too much teaching time: "it invaded my other purposes of my unit... I've got to remember that is one part of my unit." However, then she added: "it doesn't really matter because when I'm doing.. like introducing maths task centre.. that takes over.. instead of being a short sharp thing, because we're learning it, it takes a long time.. anything new.. it just takes a while." She recognized that she would take less time on the dimension when she repeated the unit or did it in another unit. She returned to this theme on other occasions. It was noticeable that from lesson nine onwards Jean spent more time on the dimension than previously. After lesson twenty, she was pleased about the quantity and quality of the work the children were producing. She commented that normally she would not talk with the students for forty minutes as she had done, but as she was learning how to incorporate the dimension, it was taking her longer. In the future she would still ask the same questions but would not take so many responses, and would be confident enough of where she was going to use more group work.

By lesson twenty one, in the last week of term, Jean was very tired, and reported that to me and the students. She had worked hard over the term, and the children had produced so much written work that she had no time or energy to process it in depth. And more was being produced, for example, data charts about family life in each of the eras, and high-quality display posters summarizing their era. Jean reported that she assessed children's written work as it was being produced and did not take home corrections. "Any evaluation I do of the kids is always done on the run with them there." I saw this in many classes: she commented on their written work while they were doing it, and occasionally collected it to make notes on it or about it, and returned it that day.
In lesson twenty five, Jean told me that the unit was definitely a ten week long one, whereas we had only had eight interrupted weeks. If we add the four sessions in term four devoted to rehearsals for the presentations, the unit actually took ten weeks. Interestingly in session twenty six in term 4, Jean suggested that eight or nine weeks would be enough as she would be more confident about the dimension and not take so long over it. Here I have presented further examples of the time pressures on Jean, and I analyse this issue of finding time for the dimension in the last chapter, but now I look at the second of the themes: issues to do with language.

The Extent to which Language needs to be Explicit and Precise

Earlier I indicated that both Jean and I generally became more flexible about the issues of explicitness and precision in language usage to do with the dimension. Here I explore the data from the unit and its associated and follow-up interviews in relation to those issues. In the interview with lesson fourteen, I asked Jean about her use of words such as: value as a noun and as a verb; attitudes and beliefs; and her use of stems such as 'I believe...'. Jean only commented on the latter, pointing out that one of the children had reported difficulty putting her beliefs or values into a single word, and Jean thought then that the stem allowed students to develop their ideas without forcing them to encapsulate them in a single word.

Jean's emphasised vocabulary extension and precision of language with words not related to the dimension in most lessons: she noticed and always helped children when they did not understand words, e.g., society and exempted. However, consistent with her decision in the preliminary interviews she used the words feelings and emotions interchangeably in her teaching. Also, as I read the transcripts, I could see occasions where Jean might have distinguished other words related to the dimension - such as think and feel, and attitude, belief and value - more didactically, and made more links and explicit comparisons. However, given our lengthy discussions about this issue, I believe generally Jean had made a decision not to do so, and I doubt that it was necessary or desirable. Jean allowed discussions to flow naturally: her guidance through her questioning and comments seemed appropriate. In the interview before lesson seventeen we agreed that there was no need to push students to make explicit statements about what attitudes, beliefs, and values are, and I indicated that Jean had done excellent work getting the children to identify examples of their affect and values.

In the January interview, Jean reported that she had been right not to have the children define terms such as attitudes, emotion, feelings, beliefs, and values, as definitions are too abstract for this age group: "I think it's gotta be concrete examples with the kids." She
"found that just by talking to the kids they sort of understood what I meant anyway and so it didn't seem to be necessary and when you think about it, how many things, apart from grammatical terms and... you know we don't define everything we use." She cited the example of 'love'. Jean thought that next time she might be a little more careful about using some of the words like attitudes, values and beliefs as synonyms: "I would be more comfortable starting to use those... separately." She had swung back and forth on this over the year, and even in this interview. I put it to her that perhaps with constant use in the teaching situation, she would become more consistent in her use of the terms, and she agreed. I asked how precise and consistent in their language she thought teachers have to be with students. She replied that in maths you have to be precise but in social education she was not sure, because it was not her area of expertise.

I asked about her use of think, feel and believe interchangeably in questions like 'How do you feel / believe about that?' She thought that might have elicited "different responses," and it provided a "scaffold" for those who did not know what one or the other of the terms meant. Then she added that it may have elicited "the same sort of answer."

In January I asked again about her use of the word value more often as a verb than as a noun. [Interestingly, Simon (1986: 251) suggested that value should be used as a verb not as a noun, but Jean had not read Simon.] I also asked whether, because value is not used much as a noun in everyday life, the noun might be too narrow a version of the word to use with children. After lengthy discussion, Jean concluded: "But for the child you probably wouldn't say 'what are your values?' you'd probably say 'what do you value?'. Yeah. But then we would be able to classify them... under values."

As Jean had used the word opinion frequently with her students and we had not previously discussed it, in January I asked how she saw opinions relating to beliefs, attitudes and values. She commented that she was not sure of the question as she was on holidays, and she then gave what, at the time, I thought was a somewhat disjointed reply. However, as I have re-read the transcript, I can see it contains many important elements of what the literature sees as related to the concept of 'opinion'. I include it as Appendix Fifteen, as an example of how well Jean made sense of everyday terms, when challenged in this way. Whether other teachers would be able to do so well, I discuss later.

When I asked about her use of the question to her students, 'What drives you?' Jean explained that it was more understandable than using the word motivate. I asked if she sees that question as part of her metacognitive approach. She replied, yes, "they're having to explore first of all what their action was and how they acted and then maybe why they acted and what they might do differently in the same situation... So that's metacognitive thinking."
I now look at Jean's thoughts about how the dimension had influenced her teaching and the learning of her students, the third of the themes listed on page 139.

The Teacher's Thoughts on the Impact of the Approach on the Students

Jean reported how easily she had incorporated the dimension into lesson seven although she had not planned for it, and that she was very pleased with how much better the unit was proceeding this year in comparison to the previous year. She did not explicitly attribute this to the new dimension at this stage, but by the interview after lesson twelve she said "We've come a long way" in a short time, "I'm just doing my normal unit.. but I feel as though I've added another dimension." She added: "I think the unit is working better than my expectations." Then she said:

It would have been an effective unit if I hadn't had this dimension, but I think with this dimension - I really do think the kids.. will come away with .. remembering some feelings that came through.. and so I think that.. in that way.. yes it's a richer unit... and I feel as if I'm a richer.. that I'm teaching it more richly than I would have.

She then pointed out that the "halo" (meaning Hawthorne) effect could be operating, "because I am actually probably preparing more than I would probably do if you weren't in the room.. that I'm trying something new so I'm trying harder... So put a secret camera in for the next unit and then you'll be able to see and we'll do the control." This is not only an example of the sort of humour we enjoyed, but also of the depth of her awareness of her own teaching and of the complexities of research in education.

Before lesson seventeen, I indicated that Jean had done excellent work on having the students identify: i) examples of values, beliefs, attitudes, feelings and action, both in themselves and in others; and ii) how some of those influence each other. I then asked how much she had been able to treat where beliefs, attitudes, values, and feelings come from, who was involved, how much we are influenced by others, how much children have constructed their own values, and to what extent could they be involved in future changes. Here, I was reminding Jean of the links between the three major concepts. With the children lined up at the door noisily waiting to enter, Jean drew three circles representing the past, present and future and linked them with arrows: her short-hand to remind her of the points I had made.

In that discussion we had also explored Jean's plans for the culmination and evaluation of the unit. She indicated that she would write individual reports on each child based on their written work and on their work in preparation for the performances. Their written work was in many forms, both individual and group work: poetry; stories; sheets they had completed; art work; information lists and summary reports that demonstrated skills such as
researching, processing and recording. I asked if Jean intended further evaluation of the affective domain. She indicated that she was tired and had not been able to make up her mind about that: she needed someone to "bounce it around with." Normally it would be the other teacher but she was not doing the dimension. Jean indicated that she was considering proformas and open-ended activities. In the art work she was looking for solid content that shows what students had learned about an era. In the final group poster reports she expected that their generalizations would demonstrate the facts upon which they were based.

While the children were working in lesson eighteen, I pointed out to Jean that she had created a culture in which the children were now spontaneously coming up with aspects of the dimension, especially of affect. She wondered whether she might be overdoing it, but I said that it did not feel that way to me. Her question was interesting given that prior to lesson seventeen she was concerned that she was not covering enough material for the research purposes.

During lesson twenty one, Jean showed me her Unit Planner that among other things listed five 'Significant understandings to be developed.' Jean indicated that she had had "good to excellent results" on the first three understandings, but that she was not sure how successful she had been with the last two understandings that she had added related to the dimension: Australian society consists of many cultural groups which influence social structure and beliefs, and Immigration patterns influence change in society. The Planner also listed the following three Attitudes and values to be fostered: tolerance, national pride, empathy. This was the first time I had seen this document, and I was surprised that national pride was listed, as it had not been explicitly treated in the unit. Jean indicated that she had had success with empathy, but was less sure about tolerance, and had no idea whether she had had any impact with national pride. I asked how she might assess the children's learning on these and she pointed out that she was still unsure about that. She went on to say: "I can't get over the amount of work they have done," referring to this lesson. She was genuinely pleased, as I believe she had a right to be, given the quality of her input and of the children's work, not only in this lesson but throughout the unit.

While the children were working in lesson twenty three, Jean showed me prototypes of a Values Checklist and an Anecdotal Records List she was developing to record the development of the students' values. She thought that it was too late to use in this unit, but in future she could possibly complete it three or four times a year, or whenever she noted a change in a child's thinking. She indicated that she would be able to fill out this sheet now in relation to students' writing about some of the values it listed, but she did not have enough information to complete it in relation to what students had said. She believed that
after a couple more such units she would not need such checklists, but would be able to record the information on the Anecdotal Records for each child. This discussion indicated her thinking to the future, and her continuing concern to record the development that she was pursuing.

Towards the end of the interview after lesson twenty three, Jean spontaneously said: "it's been good.. I think I've been in tune a lot.. a lot more in tune... in this unit than I probably would have been." I asked whether previous integrated units with history as a focus had been as effective as this one. She replied: "No.. no.. and I think it could be that Hawthorne Effect though too... I mean... we have to be honest about that." She indicated again that she would not have done so much so assiduously had I not been there, that it had been new, interesting, and professional development for her. Once again she did not attribute the success of the unit to the dimension, but she was clearly excited about how successful the unit had been, and disappointed that the other teacher had not had the same success. She concluded: "I'm absolutely rapt in the work."

In lesson twenty six in term four, Jean and I talked again (without the tape recording), about the extent that the children might have learned because of the dimension. My notes record that she repeated earlier points here such as lack of hard evidence, but also: "T. subjectively feels that it was more successful." We then discussed the success of her teaching and I pointed out strongly and in detail how "fantastic" a job she had done: she had created an atmosphere of trust in the room in which the children felt free to express their beliefs and attitudes honestly.

In lesson twenty eight Jean showed me the final evaluation sheets based on the prototypes she had shown me weeks earlier, and wondered whether it was too late to use them. I said it was not, as the children were obviously still very much involved in the unit even though she was not introducing new material. However, she did not use them. Once again she reported how pleased she was with the unit. I now report Jean's thoughts from the November and January interviews about the impact of the dimension.

In November, Jean reported that the unit she was then doing about the federal level of government had provided surprising opportunities to explore values: "I could see it so easily when I was working with the kids the other day.. and it all fell into place." She now felt "better as a teacher" because she was incorporating the dimension. She had not planned for the dimension in this new unit, partly because of limited time, but also because she had not thought it would fit in. She was now wondering if any units would not similarly benefit from incorporating the dimension. In contrast, the other teacher had found the new unit very dry.
Jean said: "I'm incredibly more positive as I go along" because the children kept bringing up from the original unit things she was able to build on, for example, connections between the gun lobby and matters the class had discussed previously. She repeated these ideas several times, and said: "it's been successful because they've got knowledge," even though she did not have the statistics to demonstrate that knowledge. The experience had also provided her with "a better way I ask things and a better way of thinking about things." She added: "I know there's a lot still... that bit bubbling... I don't know... I guess it's very emotive isn't it.. when you make.. an evaluation." This was an interesting observation about emotion being involved in evaluation. In response to my questions, she indicated her confidence that the students had developed understandings related to the dimension, although she was still not sure about their metacognitive skills.

Jean had moved from wanting to quantify the results to now feeling that it had been a success. She felt that she had spent too much time looking for ways to measure her success on the dimension: "I was worried about assessment." She suggested that that emphasis came not because she felt accountable to others, but more because she was concerned that the research could demonstrate its value, and also it was "for me to be able to say I was successful." However, as noted earlier, Jean had reported feeling accountable to the people - parents, colleagues and principal - who she thought wanted measures of success. She now said: "I'm not worried about them" because

\[ I\ \text{believe I've done everything that would have been what those people would have expected curriculum-wise. And I think perhaps because I've had - our class has had public acknowledgement... that you know this was a worthwhile thing. So it's the parents acknowledging 'yeah.. this is good.' You know, they've seen all the different things the kids can do in different ways.} \]

The parents had powerfully affirmed what she had done. They had seen evidence of their children's learning in the performances, posters, charts, poetry etc.

The performances especially had been important in that change in Jean's thinking about what constituted evidence of success. She had pushed the children hard in preparation, and had despaired at times, even threatening to cancel the performances because she felt they did not have enough facts and content, and needed more "to involve the audience, to educate the audience, to get them to feel something." Then her student teacher had taken over for two days while she was absent, and the children added music and made props at home. The result: "was just wonderful.. and I sat up the back there and I was crying... but there were parents weepy.. [ ].. they loved the music .. because it gave that feel." In response to a later question about feelings, Jean talked about the music and dancing the fox-trot: "there was all the emotion." The performances obviously had a strong emotional impact. Jean said reports
about the performances went round the parents' "gossip network." The parents organized a
dinner where they spoke very positively: "They said they liked the things I was doing... [ ]
they liked the idea that their children were learning history."

Jean was also feeling positive now because she thought her students had:

*come a long way. and also I think I've been.. I've opened up the class a lot
more.. []. but I mean it impacts because I'm feeling positive about the unit we just
did.. and when I look .. because when I was in the middle it was like anything.. I
just looked at the negatives the whole time.*

She reported that recently, while taking down the displays from the research unit, she had
thought: "Gee that's good," whereas during the unit she had been critical. Now, in retrospect
she said that it was her nature to be self-critical, and also during a lesson she knows that she
is not quite achieving what she had planned. She had been trying to do something new, "so
I felt that on all levels that I wasn't doing anything... properly."

I asked about the way the children had come to spontaneously explore their feelings. She
replied: "I'm not sure whether they were doing it before and I never took any notice. I
would suspect I'm more tuned into and so that if they say something I can now add another
question." Her "gut feeling" was that her students had talked about their feelings in the past
but that she might not have taken notice.

After the unit Jean explained how she would plan for the dimension in the future. She
marked on a weekly plan where she would now have a section for the dimension under the
heading 'Sequence of Activities'. She might change that heading to 'Sequence of Activities
and Relevant Focuses', perhaps with a separate column for Affect Focus. She read to me
eamples of her work program that made explicit reference to aspects of the dimension.
She said that it was easy to see what could be written in that unit, but she was not sure
whether she would be able to do that in her planning for a unit that she has not taught.

Her journal from immediately after the unit listed "guiding questions that could be used at
times to explore feelings" such as: "How do I feel about this? Why do I feel this way?
Have I always felt like this? How have my feelings changed? Will I feel like this in the
future? What could affect / influence how I feel?" These prompts could be on a chart "that
would be brought out when I wanted the kids to reflect on something." She also might have
tem on "a reflection dice, a gimmick," or a tin with the questions on slips of paper. She
could use them as sentence starters for written reflections, or for sharing activities with
partners. We also talked about these questions as a repertoire the children would develop. I
asked about structuring the questions, and she indicated she would rarely ask the questions
in sequence. Clearly, at the end of the unit Jean was thinking that the dimension had been successful, but that she could still develop it further.

I asked about teaching the children to be metacognitive about their feelings. She replied: "I think it's just giving them, first off, a scaffold to sort of help them, and then they might be able to work out other ways that they can explore their feelings." If she could find more time to think about it, she was sure there are more good ways of helping scaffold the children's thinking in this area. I also asked about the repeat activity on racism she had been going to do at the end of the unit. She had not done it, but said: "Well I could do that now because it comes up all the time still."

The January interview was conducted at Jean's home. I asked how effectively did she now feel she had treated the three areas of the dimension? It was her "subjective judgement" that she was "more comfortable phrasing questions and working out" activities in the area of feelings. The performances showed that "they were able to transfer feelings... they can step into another person's shoes." When I asked about metacognition, initially Jean made a surprisingly negative response, but then she realized that a lot of the students' reflection was part of a larger metacognitive process:

"I didn't do any real metacognitive work with the kids... we did a lot of reflective work... but I don't really think I did a lot that I would be able to say that 'yes the kids' metacognition skills developed'... but it depends how far with metacognition because they were reflecting and they were thinking 'now how did I come about this feeling or how may someone else have come about that feeling. So maybe there was. But I wouldn't be as confident about that because I don't even know whether I've got anything concrete to look at there."

She explained the latter comments by pointing out that she had nothing written that "could prove... that they were thinking metacognitively and that I had set them up for being able to do, through that unit."

I provocatively asked whether Jean felt she had perhaps done less well with metacognition because she was less sure or clear about the area than affect and values, or was it because it just could not be done with grade six children or with students at her school? It is pleasing to report that she said that neither of these were the case: it was because the unit was too short and she did not have enough time to allow the students to reflect more. More reflection time might have led to more metacognition. She added that she had been confident about metacognition, so she had concentrated on values and affect. She had "no doubts, given teacher knowledge and skills, that year six kids would be able to develop those three aspects... [ ]. I'm sure they can think metacognitively and they can explore their feelings and they can perhaps sort out or talk about their values."
Once again I asked about the difference between reflection and metacognition. Jean replied that if students think about how they or others felt that would be reflective, but if they thought about why they felt that way, that would be metacognitive. She admitted that some metacognition had occurred in that way in the unit: "some children might have asked: 'Why did I act that way?' .. umm... 'what have I learnt from it?'" She added:

I think often I mistake metacognition with reflection. because I know that metacognition is a higher level and it involves reflection. And I think sometimes the things that my kids produce is reflective but not metacognition... I don't know... I really don't know.

Most of us would have difficulty in trying to explain metacognition, especially in an interview, as this was, at the end of a long vacation. Here, as so often when Jean said she didn't know, I believe that she was having difficulty remembering and explaining it, although she actually had a good understanding of the relationship between reflection and metacognition, and that she had on many occasions had her students reflecting metacognitively. I have already cited examples from the transcripts that show this. In this case she added: "if I went through I probably could think of an example." She feels that she knows! This came out explicitly in the following. She thought her work on values "was fairly successful." In order: "the affect dimension and then values and attitudes and beliefs.. and then metacognition... it wasn't quite as strong, but it may be that it's not: I just can't, it just doesn't come to mind, an example." Then she added that she was not so sure that she did metacognition poorly or even significantly less well, it was that she was having difficulty remembering.

Which strategies or activities were more or less effective? She said the simulation game RaFa RaFa: "overwhelmingly helped with values, attitudes and affect... and it did have a reflective element... and it probably did have a metacognitive, because they had to, in that discussion afterwards they were really analysing how they behaved and why." She also mentioned the performances. Both these examples involved drama which she saw as "very powerful because you can explore so many" aspects of the dimension through it. She was also happy with an activity sheet "where the kids had to say how the character felt in a film.. after and then how they might have felt." She thought that the video about the boy soldier also was "very effective."

Would she do it differently next time? Jean would allow more time for formalized, written personal responses. They did art, drama and writing, "but it was not really exploring a lot of their own feelings." She would do a lot more writing to explore their feelings, and their questions. And, knowing the whole unit better, she would have more "frame of reference of when it would be a good time to stop and say: 'OK, make connections with how you're
feeling / how these people might have felt, how you feel now, how people in the future might feel." She would "work out a lot of thought prompts and hints or sentence-prompts or sentence beginnings or question starters." Would they be "metacognitive structures"? She replied that they "could be" and "that's where I reckon that dimension... I don't think I let the kids or let myself explore the kids' thinking in that field enough."

Did she ever find time to look at their 'Thinking about the topic' sheets? Jean joked that she spent the holidays doing that, but then she indicated that she had not had time even to glance at them, however, "the mere fact of doing and thinking" about those sheets raised the students' awareness. Ideally she would refer to the sheets when writing assessments.

At the end of that last interview Jean provided the following summary of what the teaching approach had been trying to achieve:

by exploring their feelings and others', and thinking about feelings, it would help them understand how other people may differ or be the same as them.. [ ] the goal is .. make the learning experience more personalized and more meaningful and ultimately, lasting... [ ] ... The kids eventually, ultimately will have some way of clarifying or discussing or exploring their values - their's and others. And so I guess that would be the biggest goal of the whole experience. and that through understanding their feelings and thinking about them metacognitively - how they behave and whatever.

Despite it being the end of her long vacation, this was a remarkably clear statement of what the approach was about.

I also asked how important the dimension would be in an ideal world if there was sufficient time and not unreasonable accountability demands on teachers. She replied: "I guess by exploring the students' feelings then it would actually help them sort out their values... so... very important." But immediately she added that, in reality, because of their accountability for Maths and English, teachers would make choices and the dimension "would slip down a bit."

I asked Jean why she might add that focus, given that she could go on teaching very effectively and ignore affect. She suggested it was important for developing students' confidence and self-esteem, and she would look for appropriate ways to bring it into every unit. Did she see affect, not values, coming into other curriculum areas? She saw it appropriate to explore their feelings about and attitudes towards maths: you find out "why a kid's having really blocking, why they're having troubles." Here Jean was seeing affect from the motivational aspect as I discussed in the literature review. Four months after the unit, she was not thinking of affect as part of the children's existing knowledge and values. She appeared not to be thinking of the dimension linking affect and values via metacognition.
She concluded: "if you wanted to go overboard, you could... probably every area in the curriculum. Values could, but I think it would be contrived."

The concept of trust had come up often in the unit, (although not the word), so I asked whether trust might be a key values concept. She saw it as confusing "because there's so many different aspects to trust" and contexts. Also she was not sure where it could be treated in the curriculum. Initially she saw it as a one-off focus, but then she started to think of it as a concept that might be revisited briefly but frequently, and incidentally when it arises. She became animated as she talked about teaching ideas and when and how trust might be treated through poetry and literature, but she kept running against the issue of time. Perhaps a 'menum' would help teachers find short appropriate ways of dealing with it when opportunities or incidents arise. They would not plan for it or do lessons about trust, except perhaps at the start of the year or if they had problems with children not working together.

In June, nine months after the unit, in a phone conversation, Jean provided positive feedback on a report about the research that I was preparing for a conference, but, to my surprise, she also reported that she had been disappointed in the unit on Aborigines she had just taught again, (she had taught it twelve months earlier, preceding the research unit). She said that at the end of the unit some children appeared to still hold intolerant attitudes. She had expected the dimension to be more effective and gave two possible reasons for the lack of success: i) she herself was tired, and also sick of the unit, but more importantly, ii) the children were a less thoughtful, responsive group than last year's children. I asked Jean to make some notes in her journal as it would be useful follow-up to my research. Later she passed on another page to me written that week (Appendix Sixteen) in which she indicated that her teaching of the Aboriginal unit seemed to have been overwhelmed by the saturation media coverage of the issues. Her spoken and written comments raise doubts about the value of the approach, but, as we have such limited data about that unit, we should see her comments as a caution about accepting too readily the value of the approach. On the other hand, this single negative report should not weigh too heavily in our judgements.

In the final chapter I look again at the successes and failures of the incorporation of the dimension in terms of its overall contribution to our judgement of the value of the original idea as expressed in the conceptual framework. Now I look at the fourth of the major themes that occurred during the research.

Professional Development of Other Teachers about the Metacognitive-Affective Approach

In the November interview, Jean indicated that she might share her insights about the dimension with the other teacher at the start of the next year when they both were fresh. She
could provide simple instructions about the questions to ask and have the teacher try an activity. For the next year the principal wanted a focus throughout the school on personal development and self esteem, based on that year's trial in grade five of a program, "Walking in another's shoes", that had focused on people with disabilities and the children's feelings about themselves. While that was similar to our work, Jean did not see it possible for her to push the dimension as complementary to that focus, nor more widely than with the other grade six teacher and possibly the grade five teachers.

In January I asked how the approach could be transmitted to teachers elsewhere. Jean suggested that teachers need to see what it offers them and their students: "will it make my teaching any better?" You would need to show that "it would perhaps help children to personalize through their exploration of their feelings and their values and their attitudes that they may become more involved in the learning." But for Jean's age group of teachers, she felt that it must not be "at the cost of the teacher's sanity, energy levels." So, "it wouldn't want to be much extra work." She thought it important not to explore a lot of values in one unit, perhaps only one, and provide questions that "would help explore that value or that feeling." Because she hadn't really known what values to explore, Jean had tended "to grab at anything and everything."

I asked whether the dimension might work as a broad educational approach guiding teachers' planning and teaching, and Jean said that once the teacher had the awareness, then she would recognize opportunities "to get the kids to explore their feelings, to clarify their values, to think about their actions and why they behave in certain ways'. "[ ] .. it would permeate your teaching... just become second nature." I analyse this question of teacher development in more depth in the final chapter where I link it to the following theme.

The Role of Theory in Teachers' Thinking about their Practice

In the January interview I asked about guidelines for teachers about terminology, questions, directions, and sequences, to help them add the dimension to their repertoire, perhaps with a brief introduction to the principles behind it. Jean replied that it would be possible, but emphasized that teachers would need some brief rationale and theory. She added: "I think that's why sometimes change doesn't come about: we don't understand what the actual theory is." Then resources, classroom activities, question starters and charts make sense. Initially teachers would use guidelines in a "lock-step" way, but as teachers became more confident, those guidelines would be more used with the children in a brainstorm: "'OK if we want to explore how we felt, what are some good questions?'.[ ] .. Or, 'What questions could you ask someone to find out how they feel in this situation?'"
At the end of the January interview at her home I showed Jean my figure about metacognition and affect (Figure 1, Appendix One), and she questioned me about the diagram. Despite the arrival of visitors, Jean insisted on continuing our theoretical discussion. She made suggestions about including affect more clearly. (I incorporated Jean's suggestions into figure 2, Appendix One.) We discussed the role of affect in motivation and more widely in learning. She said that teaching without taking affect into account is "sort of sterile... not warm... that's how I think about it now... I think that exploring feelings makes it richer... more fertile." Finally I persuaded her to go to her visitors. She had been extraordinarily generous of her time.

On page 184, I reported that Jean had not had time to develop an articulated 'theory' about the approach. She was developing her interpretation of my original idea and teaching ideas to implement it through the interviews, her reflections and her teaching. Had she had more time and / or scaffolding from me, I believe that Jean would have developed her own diagrams to articulate the theory for herself. I explore the implications of that in the next theme and again in the last chapter.

The Extent to which Students Need to be Trained in the Approach

In the final interview in January, Jean indicated that implicitly she had been operating on the Partial Support model (page 113), although I had not explicitly mentioned it to her. She said that it was better to allow the children to build their own theories about how affect, values, experiences, and knowledge are interconnected, and to sort out their own best ways of developing their values, rather than working through alternatives with them. However, Jean also often talked about providing scaffolding for students in these areas. It is apparent to me now that we needed more time to tease out these apparent contradictions in Jean's comments.

Had Jean developed a more articulated 'theory' about the approach, would she have then pursued a more didactic approach? I suspect she may have, despite her comments in the January interview. I believe that, being more highly organized in her own thinking about the theory, she would have translated that into an even more thoroughly planned, creative sequence of activities than what she implemented, and I believe that Jean would have explicitly shared with her students where she was taking them. That sharing would fit perfectly with her philosophy of treating her students as 'adults' and yet with respect for their independent learning potential. I have noted a number of times throughout her unit where she was prepared to draw their attention to what she was trying to do with her students. The fact that she did not do that in respect to her larger metacognitive development program, I believe was due to the fact that she had not had time to sort it out clearly in her own mind.
In fact, Jean used excellent strategies for a training approach, for example, displaying lists of questions that she referred her students to when appropriate. There was evidence of two reasons Jean did not embrace the full support model: one, a philosophical desire to avoid too much structuring of the children's learning; and two, a belief that her crowded curriculum did not allow time for more structured teaching.

**The Role of Existing Affect and Knowledge in a Metacognitive-Affective Approach**

An important aspect of my original idea was that existing affect plays a significant role in the development of values and persists as a component of values. I did not research that aspect in relation to the students' values, and nor did I set out to gather data about Jean's affect or values: as the focus questions from page 121 show, I was concentrating on Jean's knowledge. But as we gathered information about how Jean developed the metacognitive-affective approach to her teaching, that data showed the importance of both her existing and her continuing affect in her learning and in her values. Gradually during the research, I came to realise how useful those data were. Here I look briefly at the data about Jean's starting affect and knowledge, and in the next section at the continuing role of affect in her learning.

First I make some points about Jean's knowledge. The purpose of the preliminary interviews had been to establish Jean's initial understandings about the original idea and its major concepts, and about teaching in those areas. It was hoped then to note how her understandings developed and how they influenced the way Jean implemented the idea. However, those interviews turned out to be a methodological enigma: their length and depth provided both advantages and disadvantages. The deeper the interviews probed, the longer they took and the more they contributed to the development of Jean's thinking about the concepts, but also, the longer the interviews went, the more Jean remembered things buried in her memory, often that she was doing habitually: as time went on we were uncovering more existing knowledge, especially about metacognition. Thus, the interviews provided a somewhat confused picture of Jean's existing and developing knowledge about metacognition. On the other hand, I believe that chapter 5.1 showed that the interviews provided a reasonably clear picture of the limitations of Jean's starting formal knowledge in relation to affect, values, and values education.

Similar to the way she brought positive attitudes to her learning during the interviews, Jean also brought to the unit a very positive attitude toward her own learning about her teaching. That long-term positive attitude about developing her teaching also involved her self-concept as a competent teacher. Understanding those starting attitudes and related affects enables us to see how Jean was able to persist with the research in the face of the
difficulties, and enables us to understand the pressure she placed upon herself to improve her knowledge in the areas in which she identified a need. I now look briefly at how that affect was involved in those learning processes.

The Teacher's Metacognitive-Affective Approach to her own Learning about, and her Teaching of, the Approach

Jean's positive attitude towards improving her teaching was constant throughout the research: she put much time and effort into her learning, seeing it as the 'pay-off' to her from the research. However, as has been discussed, her confidence waned and rose several times. Her self-concept was threatened when she lost confidence and the ability to teach 'naturally'. She reported that feeling 'like a student-teacher' was good as it would help her to be more empathic towards student-teachers, but, otherwise, it was subjectively bad: it was not a feeling she liked or would accept for long. That dissatisfaction caused her to take action to resolve her difficulties. She reminded herself of her teaching skills and competence; she recognized that her knowledge was greater than the interviews had shown; she reflected upon her affect. She was metacognitive about how her affect was influencing her learning.

Chapter 5.1 provided a reasonably clear picture of the developments Jean made in her understanding about affect, values, and values education through her reading, reflection and discussion, and of the processes of Jean's learning that became clear through her open, articulate reflection. Her common-sense knowledge and her reflective capacity to build formal knowledge during the interview period was formidable. That knowledge may have been developed more quickly through a more didactic approach, but Jean would not have 'owned' the knowledge as much as she came to through the metacognitive-affective approach that she applied throughout the whole research period. As she applied the approach first to her own learning about it and then to her teaching implementing it, she came to understand it better. The interviews challenged her and helped her reflect upon her own knowledge, affect, and values, and how they had developed in the past and how she was now developing them. The interviews were difficult and unsettling, and probably contributed to her difficulties at the start of the unit. But they may also have assisted her to handle those and other difficulties by preparing her to be more metacognitive about her feelings and learning.

I am not advocating that we create subjective discomfort for learners such as Jean experienced. It was my mistake to allow that to develop as much as it did. Jean did not need the negative stimulus to improve her teaching as she already had a metacognitive attitude to learning to teach. I do not believe other teachers would cope as well as she did with such
difficulties because they may not already have the strong metacognitive attitude Jean had. They may need to develop metacognitive attitudes involving confidence, questioning, and tentativeness, as well as metacognitive-affective knowledge and skills. However, Jean's handling of the difficulties does provide evidence that the metacognitive-affective approach worked for her, and suggests that if teacher's had an understanding of the approach, and skills in applying it, they would be able to overcome many other difficulties that arise in learning situations.

Jean provided an excellent model of a metacognitive-affective approach for her students and for me. I also learned about the approach as I applied metacognitive-affective focus to my own learning, and to my difficulties while conducting this research, for example, the normal feelings of uncertainty and insecurity of most PhD candidates. For both Jean and I that focus helped us to solve learning problems and to learn more effectively.

In the final chapter I attempt to weave the eight themes together to comment upon the overall value of the original idea as it took shape in Jean's teaching practice. There I also make recommendations for future research.
Chapter Six: Conclusions, Questions and Unfinished Business

In this final chapter, I attempt to answer the main question of the research: the value of the original idea linking metacognition and affect in values education. I also look at how the metacognitive-affective approach can be developed further. I suggest that the approach worked for me and for the teacher, and that it showed significant potential for the students. In coming to those judgements I also discuss methodological issues and explore ideas for further research.

The Overall Value of the Metacognitive-Affective Approach

In chapter four I suggested that the teacher was the main 'judge' of the metacognitive-affective approach. Chapter five showed that, within her initial positivist perspective, Jean did not believe there was enough 'hard' evidence to 'prove' the success of the approach. However, she developed a more naturalistic perspective, and within that, the 'weight' of her qualitative comments indicate that she was very positive about the approach. Here I delve into that judgement more deeply.

I believe that Jean was correct about the Hawthorne Effect, that the academic success of the unit was in part due to her extra effort, but I believe that its success was also in part due to the emphasis on affect and values that enriched what Jean had expected to be a 'dry' unit. She expected that if she repeated the unit it would improve further: she would not have the stress of creating everything from scratch, or of an observer recording everything she did; and she expected that she would improve her instructions and be more disciplined in her discussions. Jean's reports about how easily and successfully she had incorporated the approach into her next unit provide further evidence for the value of the approach to her teaching, and for the possibility of incorporating it efficiently in the future.

In Chapter five I provided qualitative data suggesting that the observed unit was successful academically, and also that Jean developed and implemented excellent teaching strategies that must have led to development of the children's affect and values. However, I do not believe we have sufficient information about the role of metacognition in that affective and values development, nor about the extent of metacognitive development of the students. Many children focused on their learning and reflected upon the development of their affect and their values: the important metacognitive first step of looking at the past and present. However, as previously noted, there was less evidence of them evaluating their affect, their
values, or their learning, the second step of the conceptual framework. There was also little
evidence of them thinking about how they might change their affect, their values, or their
acting on their values: the third, regulative, and future oriented phase of metacognition.
Thus the research only partially trialed the original idea. This was mainly because of the
limited time available, but probably also because Jean reflected in her work my emphasis on
the past and present rather than the future. With hindsight I can say that I should not have
expected that in one short unit Jean would have time to cover all phases of the framework. I
now recognize that we needed a longer-term developmental approach to this.

My Current Position on a Number of Issues Discussed in this Thesis

Having read and re-read the transcripts, I believe that I needed to take more notice when
Jean said that teachers need more theoretical understanding as a basis for their teaching.
However, although Jean said she wanted "a telling" and no more inquiry, I believe that she
was speaking from frustration and tiredness. In fact, on many occasions Jean had indicated
that she would have preferred that the two of us had worked together, rather than me 'telling'
her. Also, at the preliminary interview stage I did not have a clear enough idea to provide a
'telling', and nor did that fit with my methodology. With hindsight it is clear that Jean would
have progressed more quickly if I had played more of a collaborative role than I did, both
about the theory and about ideas for implementing it. I did not need to tell her how to teach,
and nor did I need to be a participating teacher, but I could have scaffolded more discussion
about the theory, about the links between the concepts, and about implementing the
approach. Together we could have developed lists of metacognitive goals and foci such as
those I have developed in Appendix Seventeen. Such lists would have enabled Jean more
systematically and perhaps even more extensively to have generated the many questions
and strategies she did devise.

To be more clear on Jean's position on the issue of how much to train students I needed
further discussion with her. My own position is that there would be value in training
students - both didactically and using inquiry techniques - in the Full Support model (page
113), because I believe that through modelling, repetition, and training to work through the
full sequence, students would gain deeper and more lasting metacognitive learning
outcomes. However, I see that only as a stage leading to much more self-regulated learning
by the students.

I also believe that by taking extra time to train students' metacognitive knowledge, skills and
attitudes, we may 'buy' much more time, by making students more independent in their
learning. If our first teaching efforts have more impact, we may not have to repeat our
inputs. There is some evidence from Jean's work that teaching may be more efficient and
effective if we take more account of students' affect. If we can show teachers that they can incorporate this metacognitive-affective approach without spending more time than they presently spend, we might be more likely to convince them of the value of doing so. They might then come to incorporate this focus into their 'theory of teaching'. I envisage that we could introduce a cognitive-affective values education from the start of primary schooling, and that we would introduce a metacognitive-affective approach into the upper primary school.

Although Jean thought that reflection was the more teacher-friendly term, I suggest we use the word metacognition, not reflection, to describe the overall approach, when working with primary teachers in the future. Jean showed that teachers currently view reflection as an informal process, a mulling over of experience. I believe that by emphasizing a relatively new term to primary teachers we could promote features related to Mezirow's formal processes: metacognition as a systematic approach involving both formal and informal reflection that can assist teachers to improve their teaching, and students to improve their learning. Because of its added focus on affect, I suggest that the metacognitive-affective approach will provide a richer and more productive way of thinking about and using metacognition than many primary teachers have previously had.

Throughout this report I have mentioned new questions and emphases that arose for me. Perhaps the most important was that I moved from an initial emphasis on how to loosen the affective component of existing values from its self-protecting position, to include a focus on ways learners integrate new values into their core self, so that there is a consistency, an integrity between their self, their values, their affect, and their action.

**Modifications to the Framework for the Metacognitive-Affective Approach**

In several interviews Jean provided insights as to why changes in teaching may not appear to last: after the initial excitement of the change period, useful and efficient aspects of the change were in the past incorporated into her teaching repertoire and became habitual. Her January and June reports indicated that the affective and values foci may have become habitualized through this research work, but as we have noted, she had possibly not had enough time to work on the metacognitive parts of the approach for them to become habitualized. She also pointed out that the very habitualization of a practice carries with it a danger: when new innovations are taken up, they can overwhelm and 'bury' previous changes. This is where metacognition may be a valuable tool if it has a long-term focus on habitualization built in. I suggest that this could be done by building regular reviews into the metacognition process.
I presented in Table 1 (page 110), a version of a framework for the approach that I developed after the final January interview with Jean. In figure 3 below I make suggestions to modify it further. First, I have incorporated 'metacognitive attitudes' into the framework. I see them as part of metacognitive knowledge, to be developed in the first phase, but they are also needed throughout all three phases. Second, I have incorporated the long-term perspective involving regular reviews of learning, especially of those habitual and automatized procedures. I have also incorporated explicit mention of values. (The term values, should be read to include attitudes and preferential beliefs. The latter are omitted for the sake of brevity.) The framework also incorporates further ideas from my analysis of literature published since the data collection, and from discussions with my supervisor and colleagues.

**Figure 3: Metacognition Applied to Affect and Cognition in Values Education**

While I retain the overall sequence of developing metacognitive knowledge, evaluating it and then regulating it, the new figure shows that, in practice, it is a recursive, weakly
sequenced system, not always unfolding in that order (Winne & Hadwin, 1998). The teacher could introduce activities in any order, and learners could move back and forth between stages.

Teachers could use this updated version of the framework in future research and professional development about the approach. They could also work on modifying it further, for example, the concept of memory could be built into it.

**Future Research and Professional Development**

The quality of the students' work in the research unit suggests some success with the first stage of the conceptual framework, but I believe that there is still need for further research on the whole framework, and especially on the second and third stages. Research on the third stage would build on the widespread research that my Literature Review noted has already been done on the role of affect in volition, an important part of this regulative phase of metacognition. Research on all stages could investigate many of the theoretical and practical ideas that the Literature Review reported have been published since I designed and conducted the original research.

Ideally future research on the approach would involve teachers working in groups collaboratively engaged in action research trialing a modified conceptual framework. That action research could also be the basis of professional development for teachers about the approach. Jean provided many insights into how she developed her own teaching and into teacher change in general. Her emphasis on working with a colleague to 'bounce off' has convinced me that future research and professional development should be with more than one teacher. Jean also convinced me of teachers' potential to grasp theory and develop it through their teaching. Thus with future teacher-researchers I would suggest more input from the outset about the concepts and the conceptual framework than I provided for Jean. But, like her, future teacher-researchers should have responsibility to develop their own understandings of the concepts and responsibility to develop the approach through implementing it in practice, thus developing more understanding and ownership of it.

There would be many issues in addition to the eight major ones I have highlighted, that teachers could research in their work on the approach, for example: what terminology to introduce; whether to define terms; what recent scientific insights to share with children; whether metacognition should be focused more on feelings than emotions; how explicitly to focus on links between beliefs, desires, affect, and action; how explicitly to focus on lay and formal theories of mind and of learning; how explicit to be about processes to regulate values.
Carr and Kemmis (1986: 130) point out that action researching teachers need to look at "aspects of the existing social order which frustrate the pursuit of rational goals." Future research and professional development on the metacognitive-affective approach would need to address the structures of education that appeared to have inhibited Jean's implementation of the approach. Jean found that economic rationalism in education had caused pressures on time, pressures to teach a limited 'basic' curriculum, and to be 'objectively' accountable. To her list I would add the hegemony of the timetable, of the subject curriculum, and of institutional practices of schools. Teachers see those matters as part of the 'reality' within which they work, almost as substantial as the physical buildings. Our research was not about those practices or changing them, although our discussions occasionally caused Jean to discuss those impediments to the changes we were considering. Future teacher-researchers would choose the extent to which they addressed and attempted to change such factors. A number of features of the metacognitive-affective approach could help teachers to work around or within those societal and institutional factors, or to work to change them.

Future teachers using the approach would need to have or to develop not only basic affective and values knowledge, and metacognitive knowledge and skills, but also metacognitive attitudes of openness, questioning, tentativeness, and confidence. Like Jean they would be encouraged to reflect on their own metacognitive-affective development, as well as that of their students. They have to know that the brain will work to resolve problems if the conditions are right. They have to provide those conditions, including developing enough self-belief to persist through difficulties. That self-belief can come from the development of emotional literacy, intelligence, and competence. Fortunately, today, in contrast to five years ago, there are many texts for teachers on these topics.

We could show all teachers - not only values education teachers - that metacognition about affect may help students enjoy their learning more, and be more aware of and in control of their own learning. The teacher's role would become not just the provider of a subject curriculum, but a catalyst for students learning to improve their own learning. Thus teachers would teach subject content with the intention of also developing their students' metacognitive-affective knowledge and skills. Such a focus might help those teachers who are still curriculum- and outcomes-focused to become more individually-focused. It might help such teachers share responsibility for students' learning with their students. Teachers would be helping students describe their knowledge and ignorance, and understand how they have developed affectively and cognitively. They would then help the students build that knowledge and explore its behavioural implications. Perhaps teachers could even expect greater content learning through more student involvement in and commitment to their own learning.
In conclusion

Lincoln and Guba (2000: 180) ask: "How do we know when we have specific social inquiries that are faithful enough to some human construction that we may feel safe in acting on them, or, more important, that members of the community in which the research is conducted may act on them?" That the experienced teacher in this research was keen to incorporate the metacognitive-affective pedagogy into her future teaching, was an endorsement of the potential of the approach. Its potential was neither achieved nor proven in this research, but it gave sufficient promise to warrant further development. I believe that because the research was so thoroughly grounded in practice, teachers, with some mentoring, could use its findings and the framework to explore their own ways of developing and implementing the approach. It is my hope that Jean and I will collaborate on the writing of a book translating this thesis for teachers.

My research has treated existential questions about the mind, memory, consciousness, affect, values, etc., and it has shown children excitedly grasping the opportunity to explore many of those areas with the teacher. Most parents and teachers tend to ignore this need in children to explore existential questions. A metacognitive-affective approach to values education that would have children thinking and talking about these issues would enrich teachers' teaching and children's school learning. It would not have children obsessive about their affect and their selves, but rather have them more in control of their affective-, values-, and self-development.

Perhaps the research also has broader implications. Perhaps as we gain more understanding of the brain and the mind, of cognition, affect and conation, of the interactions between internal experiences and social and cultural experiences, and of our capacity to construct ourselves, we will also gain more understanding of how our human nature is still so close to that of animals. Perhaps this may help us appreciate the things that differentiate us from other animals and enable us to develop those things more fully and limit the influence of the 'base instincts'. Thus equipped, we may act more humanely as individuals and as societies, by limiting the fear of difference at the base of so much human perversity and cruelty, and by prizing the diversity of humanity. And thus we might prevent future Inquisitions, Holocausts, Killing Fields, and Talibans, and limit the arrogance of certainty. The job is complex, but it can start in schools.

Lincoln and Guba talk about critical reflexivity as "a conscious experiencing of the self as both inquirer and respondent, as teacher and learner, as the one coming to know the self" (2000: 183). Both Jean and I came to know our selves better through this research. I
suggest that metacognitive-affective approach to values education would also be likely to help other teachers, and their students become more critically reflexive, and hence know themselves better. The approach would also have students take a hermeneutic stance towards their own knowledge and affect: exploring how their existing affect, understandings and values have arisen and how they might be influencing their present decision-making and acting. That is not claiming they can reconstruct a perfect picture of the past, rather it is helping them to recognize that their present perspectives are largely a result of what has gone before, that they have changed and may change further. If we can create in students an uncertainty, a tentativeness, without them becoming insecure, cynical, nihilistic, and without them developing an extreme relativist position, then we have created the 'open mind' that most teachers are seeking in their students. This hermeneutic metacognitive stance may be a key to preventing premature closure and even to unlock closed minds.

Early in a new millenium, it is appropriate to consider the rapid changes that have occurred in human living and in cultures in the last five millenia (compared to the previous thousand millenia), and the dramatic changes of the last two centuries. Affects and their associated behaviours met the needs of humanity for thousands of millenia before these recent changes: They still drive humanity. Our education systems have undervalued affect, but, if we are to understand ourselves and influence the ways our selves and our civilization are to develop, our education systems need to take much more account of the role affect plays inside ourselves, and in our social, cultural, technological and political lives.

The metacognitive-affective approach would have children reflecting upon how their values, desires, beliefs, emotions, actions, thoughts, and imagination interact, and upon their theories of mind, of action, of culture and society. Thus it requires teachers to have a deeper knowledge of affect, values, and of the mind than many of them presently have. Teacher education (in Australia at least), has been focused too much on cognition and on the cognitive development of children, and too little on emotional, social, and values development. I suggest that a more balanced approach may lead to more effective teaching, even to more cognitive development, and certainly to better balanced children emotionally, morally and socially. And eventually a better society.
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Appendix One: Early Versions of the Conceptual Framework

(Figure 1 below is the version of the conceptual framework that I showed to Jean at the end of interview thirteen in the January after the unit had been completed. In this early version there was only brief mention of affect and no explicit mention of values. Jean suggested that in the top box and the bottom box there needed to be mention of both affect and cognition. I incorporated those suggestions into the framework, and other changes based on my own reflections, to develop the version in figure 2. It is revised again on page 217 in chapter 6.)

**Figure 1**

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**Figure 2**

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Appendix Two: Preliminary information about the PhD research provided to the teacher in the year before the research

[A year prior to the PhD research I had conducted interviews about racial attitudes with students from the teacher's previous class. In the October of that year, at the end of my report to the teacher about those interviews I made the following comments about how the PhD might proceed.]

Now a few thoughts on what we might do next year with a different group of kids...

Basically I am trying to find ways of helping children to take much more ownership of their own ideas and feelings, and of how those ideas and feelings develop in the future. We are exploring ways of having children become more metacognitive both about how their values have arisen and, within that, particularly how their feelings affect their values. This aims to have the children become more able to monitor and direct the role that affect plays in their values thinking and acting in the future. If we can help children understand that their values have arisen in affect-laden social contexts (often through non-verbal socialization), they may become more independent of their past socialization. In the race relations context, this means having children reflect upon their current beliefs and feelings about other groups, and having them think about when and how those beliefs and feelings have arisen, so that they may be able to take more control of them in the future.

This has been done in values-clarification approaches before, but with insufficient emphasis on the role of emotion. Philosophy for Children sometimes focus on emotions in their programs. However their approach tends to treat the emotions very much using their philosophical tools and within their philosophical framework. I also want children to be able to think about their emotions rationally, but I think that that requires much more explicit attention to learning about, and exploring feelings, before children can engage in the Community of Inquiry-type discussions that PIC utilize so well.

Another part of the task will involve helping the children develop their vocabulary relating to values and feelings. It is also important that they can distinguish between the values themselves and the valuing process: the act of using values. It may be that when we state a particular value we have one emotional response or one level of emotional response, but that when we are actually acting out that value we may have a different emotion or a different level of emotional response.

I believe that if we can help children to be aware of the way in which ignorance and misinformation about other groups cause people to develop negative ideas and feelings, they are less likely to succumb to those old factors which 'feed' racism. I find that primary school children are very open to ideas and to thinking about all of the things that I am talking about here. They are also surprisingly open to other groups. However, in the interviews they have indicated the potential for closing off, for becoming more negative. I think that this does happen in secondary schools often where tensions over so many aspects of adolescents' lives become so powerful. Primary school is an opportune time for us to capitalize on this openness. I feel optimistic about the potential of this work.
<table>
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<tr>
<th>Research Stage</th>
<th>Foci of researchers</th>
<th>Tasks</th>
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</table>
| **Jean**<br>1. *Before data collection - prior to Feb '97* | *nil*<br>*overview*<br>*Clarify understanding of concepts<br>* Clarify understanding of, and perhaps modifying original idea<br>* Think about how to apply original idea to a teaching approach<br>* Reflecting on how the interviews proceeded and were contributing to the overall goals<br>* Reflecting on the adequacy of original idea in light of teacher's thoughts | *Agreement to participate<br>* Initial clarification of original research idea, methodology and design<br>* Securing agreement of co-researcher and authorities<br>* Ethics clearance<br>* Responding at interviews<br>* Keeping journals<br>* Reading and keeping notes from articles books |<br>**Phil**<br>2. *Preliminary interviews; journal writing; readings - Feb - July '97*<br>3. *Planning of Intervention - July '97 (actually started earlier)*<br>4. *Teaching Unit - journal continues - July - Sept '97*<br>5. *Follow-up to unit - two interviews - Nov '97 - Jan '98*<br>For both researchers: 1. Overall review of the incorporation of the dimension into the unit<br>2. Overall review of the concepts, issues and of the value of the original idea, by now elaborated in figure 1. | **Jean**<br>*Translating the theoretical idea into a practical teaching approach and program*<br>*How the teacher's ideas fitted my vague pre-conceptions*<br>*Daily consideration of how to incorporate the dimension into the unit*<br>*Daily consideration of how teacher was incorporating the dimension and of how she was coping* | *exploring teaching activities, strategies to incorporate the teaching approach into the unit<br>* encouragement... and ultimately contributing some ideas<br>* multitude of decisions about the dimension while teaching the unit<br>* reflecting in journal<br>* taping and observing lessons<br>* interviews<br>* transcribing of tapes<br>* reading teacher's journal<br>* interviews<br>* journal entries<br>* overview reading and reflection on transcripts to plan interviews.
<table>
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<tr>
<th>Research Stage</th>
<th>Research Questions from page 121</th>
<th>Themes from page 139</th>
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<tbody>
<tr>
<td>Jean</td>
<td></td>
<td>1, 2, 4, 5, 6, 8</td>
</tr>
<tr>
<td>Phil</td>
<td></td>
<td>All</td>
</tr>
</tbody>
</table>
| 2. Preliminary interviews; journal keeping; readings - Feb - July '97 [4, 5, 6, 9, 10, 11] | - What were her existing understandings about the concepts and their links?  
- How did she interpret and understand issues raised in the literature review?  
- What understanding, questions or concerns did she have about the original idea linking the three concepts? | |
| Jean          |                                 | 1, 2, 5, 6, 7, 8    |
| Phil          |                                 | All except 3        |
| 3. Planning of Intervention July '97?? [5] | - How did she adapt the original idea to the practicalities of teaching?  
- What strategies did she envisage? | |
| Jean          |                                 | All                 |
| Phil          |                                 | All                 |
| 4. Teaching of Unit - journal continues - interviews continue - July - Sept '97 [1, 7, 8, 12, 13, 14] | - What difficulties would she experience in implementing the idea?  
- How successful would be her teaching strategies related to each of the three main areas: metacognition, affect, and values development?  
- In what ways did the teacher see the students:  
i) reflecting upon how their values, beliefs and attitudes, and the associated affect, had arisen and were likely to develop in the future.  
ii) are likely to be able to influence those changes in the future.  
iii) responding to teaching activities designed to develop their metacognitive knowledge and skills in relation to their values and to the affect associated with those values.  
iv) changing their values and / or their valuing in response to the teaching program. | |
| Jean          |                                 | All                 |
| Phil          |                                 | All                 |
| 5. Follow-up to unit - interviews - Nov '97 - Jan '98 [15, 16] | i) how did the teacher see her own learning and teaching developing throughout the above?  
ii) how did she envisage other teachers learning about and developing the approach in their teaching? | |

Note: The above tables include things that were planned and also some that were not. Unplanned things included: reading of articles and books; development of framework; teacher’s planning for the unit took place more in her journal and in the interviews than as a separate stage in July, although most did take place in July.
Appendix Four: Planning Notes for the Preliminary Interviews

(The eleven preliminary interviews followed the sequence of topics and questions below.)

Preliminary Interviews with the Teacher
(prior to her planning the teaching unit)

Below are headings and questions that I can use in my discussions with the teacher in the period before she starts planning the unit. Those discussions will lead to the planning, but they can continue throughout the planning, implementing and evaluating of the unit. There should be no sense of closure about the discussion or about the concepts that are discussed. It is highly likely that while the teacher is planning, implementing and evaluating the unit, the understandings of the concepts will evolve quite significantly.

The highest level headings will be metacognition, affect and values education. Under each of these will be sub-headings or questions. (A note on the general sequence of questioning: The initial questions will be worded in a general way to allow the teacher to comment on the aspects of the matter that are known to her, that are important to her, that occur first to her. These will then be followed up by more specific questions.)

As the work is partly exploring a teacher's change and development, one line of questioning will be about her reason for involving herself in the project, her expectations for herself and the teaching, and her general beliefs about teacher and teaching change.

Introductory Comments to the Teacher

Before you start to plan the unit I want to talk with you first about why you want to be involved in the whole project, and second about aspects of the concepts that we are going to be dealing with. So, I want to develop an understanding between us as to what we mean by the terms, (either our joint understandings or our different understandings).

But, even before that, it is very important that you have the opportunity to say what you understand about the concepts, because that will give us a practitioner's perspective. So, in these early 'discussions' I would like to get your ideas and understandings as clear as possible without any interference from my thinking.

Then - at the next stage - as we discuss our understandings and perhaps even debate the meanings of concepts, it is to be expected that we will both change or at least broaden our understandings and perspectives. I may come to see it more from the practitioners' perspective and you may see it more from a theoretical perspective. On the other hand I do want you to keep strong your practitioner's perspective. Also, I know how busy you are, so I do not want to encroach too much on your time.

We should note that there is much dispute amongst the theorists over the concepts: there is no generally recognized definition of any of those concepts. The philosophers are critical of the way the psychologists, sociologists and educators use terms, and the philosophers have not been able to agree amongst themselves for over two thousand years. So I think that we can learn from each other throughout all stages of this research as much as from the theory.

I want to thank you very much for agreeing to participate in the project. I hope that it will be interesting, enjoyable and productive for you. In fact, that is the area I want to start our discussions on...
A. Your involvement in and expectations about the project

*I would like you to think about why you have agreed to work on this project.* (Here I would like T to reflect upon her own motivation, her own hopes, her own expectations, her own values in relation to the whole project. Does she see the project as about her own development as much as of the development of the children or of teaching or of curriculum, or... all of these? Does she see herself becoming more metacognitive about her teaching? We may talk about the idea of teacher- and teaching- change in general and specifically about her own change.)

B. Metacognition

*In general, what do you understand by the term 'metacognition'?' (Here I would want eventually to cover questions such as: What is the difference between metacognition and cognition? between thinking and learning? the relationships between socialization, learning and teaching? I would also want her to discuss issues related to metacognitive awareness, metacognitive knowledge and metacognitive control; the relationship between metacognition and reflection; and what skills are involved in metacognition)

*What do you think metacognition means in teaching in the primary school?*

*How useful do you think metacognition is (has been, can be) for teaching in the primary school?*

*What do you see as the focus of metacognition?* (Here I would want to eventually find out what T thinks about the idea of metacognition being applied to affect.)

C. Affect

*What does the term 'affect' mean to you? What does it embrace?* (Here I would eventually want to make sure we discussed her ideas about:

- emotions, feelings, moods, attitudes, beliefs, conation, volition, and motivation;
- the different ways that affect is seen in the literature, (and in life): as a bodily experience, as a mental experience, and as body language;
- the relationship of affect to cognition and so to metacognition;
- the role of affect in decision-making
- a possible biological basis of affect and possible cultural variations in affect
- the language and grammars of affect (à la Denzin)
- how children learn affect in their socialization
- the relationship between affect and the self, and thence to learning...

*To what extent do you think it is involved in learning? How?*

*To what extent do you think it is involved in teaching? How?
D. Values Education

* What do you think values are? How are they related to beliefs, attitudes?
* What do you think it means to have values?

(Here I would want to get into questions like:
  * What is the difference between saying I have a value and enacting it? and
  * What do you think the term 'valuing' means?
  * How do you think children learn values?
  * How do you think teachers teach values?

(Here I would want to get into questions about:
  • socialization, socialization agents, the child's role in constructing its values,
  • what she understands by the term 'values development';
  • what she sees as the differences between socialization and education;
  • to what extent she sees the child/learner as actively involved in those processes - in a
    constructivist sense)
  • her ideas about 'teaching values', and values clarification, as opposed to inculcation,
    and indoctrination

* What does the term 'values teacher' mean to you?
* What do you think about the relativity of values issue? Do you believe that there are
  some values so important they need to be taught/inculcated / ....?
* How do you think affect is involved in our values and our valuing?
* What is multicultural education all about? What are its purposes? What are
  different ways that is has been taught?
* What is racism? prejudice? discrimination? bigotry?
* Has she heard the term 'modern' racism? (Here I want to discuss the term with her
  and her thoughts about whether it applies in Australia and in middle-class settings.
* How extensive are these different forms of prejudice? Where do they come from?
* What are her ideas about what education should try to achieve in the area of
  combatting racism?

(Here we could explore the issue of whether tolerance is sufficient as a goal.)

My role as Facilitator

While I have suggested the general idea of applying metacognition to affect in values
education, and while I wish to facilitate your interpretation of that general idea into detail and
then into a teaching unit, my facilitation role will be very much as a stimulator of greater clarity,
of more details, of purposes, and of alternative possibilities, and as a challenger of proposals, a
devil's advocate, perhaps, but certainly my role is not as decision-maker or judge. I will be
wanting to know why. That role will leave the decisions about what is finally done entirely in
your hands. Again, once you make decisions I will be seeking to understand those decisions
and your reasons for them. My role will be to understand and document your deliberations and
decisions - with you - in a way that accurately represents your ideas.
Appendix Five: Examples of the Teacher's Journal

(The following are Jean’s complete journal entries for five dates over the February to June period. They are provided as examples of her entries throughout that period.)

Feb 10th

I think I have to address a few aspects before I go any further.
For example:

- Ensure the students have a language to talk about their feelings, values, thought processes etc. I guess this is a meta-language. I could do this through vocab activities, spelling activities, literature discussions. It could be done incidentally when we are reflecting on our work/day etc. I could ask them to describe how they feel, how they think others may feel, why they may feel this way. We could build up lists of feelings and categorise these.

- Provide explicit explanations, demonstrations of appropriate ways to participate in discussions.

Last year I forgot some of the strategies I adopted after reading Cazden’s work and having her in my classroom at E.E. Funny how sometimes we teachers drop strategies for no real reason. I wonder if this happens because the group of students in front of us at the time has other pressing needs and so we focus on those rather than remembering to provide a broad range of activities etc for all students. I suspect that we drop some things because we, as teachers, get bored doing the same things – even though the students in front of us may never have experienced the dropped strategies.

Any way I will focus on classroom discourse and provide more opportunities for small group discussions (I mean Cazden style) as I always utilise small group discussion) and build up to whole class discussion.

- Provide opportunities for students to discuss issues (any issues or topics) and practise their discussion skills.

Heaps of opportunities for this in unit work, literature groups etc.
Think about the way I frame questions so that I allow students to explore their feelings, reactions to and values. I believe a lot of what I will need to do is under the umbrella of critical literacy.

How do you feel about that? Why do you think this?
How do you think --- might feel? Why do you think this?
Whose feelings are being overlooked/omitted?
What were the writer's feelings/values/attitude? What makes you think this? Why might the writer have these feelings?
What do you think the writer thinks about _____? Why?

- Clarify what I think Phil and I are about.
  I think I will read some books on teaching philosophy as I want ways of questioning, guiding discussion so that higher levels of thinking are developed.

- Assist students to reveal their feelings.
  Use de Bono's red hat. Use perspectives glasses. Use deBono's slippers. role play. Dice throw

What sort of concerns do I have?
Well, I can't change the unit to third term. It fits there as the units in term three build on this. Team planning could be difficult because there will be some aspects that will not be negotiable with my colleague if we are to do this research justice.
March 11

Met with Phil after school. Among many other questions Phil asked what I saw as differences b/n metacognition, thinking, reflection. He asked what relationship I saw between all three.

It was uncanny that on Sunday I had tried to get out of the fog and had sorted out what I thought to be reflective and metacognitive. However explaining on the hop was hard. My thinking processes was/were working overtime. Nothing is ever clearly defined. I now question that the student outcomes I had so readily embraced (from Flee, Value Act) are what I will finally be working towards.

One thing I have decided about my own thinking is that I do think metacognitively (well sometimes) because I mulled over several statements I had made to Phil. I took a particular stance and then through lots of thinking aloud and doodling I modified my statement - I had made an informed decision, I used several strategies to arrive at it and I acted on the decision by changing my point of view. (for example when I was trying to work out whether thinking or metacognition had a stronger relationship to learning.

I know that must happen lots of times with me because when I am team planning, or making major decisions(professional and personal) I prefer to mull over actions, thoughts, decisions and then alter or affirm these after this thinking time. My colleague in Grade Six now knows that what we plan together one day may be altered by me the next day because I think about it when I have time away from immediate demands. I like to use PMI, diagrams (or doodles) to clarify my thinking. I like to think what if? for what purpose? how can this be done? what's it going to cost me (time, work, stress)? is this the best way? can I do it better? what has worked/nor worked before? why? Janine says I ma always trying to make connections. But may be I am just reflecting.

I think(well tonight) that thinking is the umbrella term or broad classification and the others are types of thinking. Some of these types more complex than others. May be metacognitive thinking is a complex combination of reflective, analytical, critical thinking etc.

Metacognition - the origin in 1975 (Phil told me)
metateaching
metalanguage
metaphor
metamorphosis
meta physics

dictionary says meta= prefix denoting change of position or condition.(Greek with, after)
cognition =knowing (no emotions)

change of knowing or perception as a result of thinking about knowing.

Mentalanguage- language change - more precise about the field.
March 28th

I have just read an advertisement for a program produced by Winters Flat primary school. The section about thoughts, feelings and behaviour caught my eyes. I think it caught my attention because I am in the learning mode and want to find out all I can about the terms Phil and I have discussed. Like all new things I try with teaching I like to find out all I can and I seem to develop an in tune attitude. Which means I grasp at to anything that can help me make sense of what I am doing or am about to do. I try to make connections with what I think and what others think.

Anyway this advertisement claims to help students:

- understand the term emotions
- understand that people feel differently because they think differently about situations, actions, feelings.
- understand that thoughts cause their emotions.
- distinguish between thoughts, feelings and behaviours
- understand that feelings and behaviours can change because thoughts change.

They then go on to list H & PE learning outcomes (CSF) associated with the above. I thought the learning outcomes were what can be easily measured. Can thoughts, feelings, emotions be measured? I know behaviours can but can we be sure that the behaviours exhibited are as a direct result of the thoughts, feelings, emotions? How can we assess the change in feelings? Can we sure that students don’t give us what they think we want? That is the students exhibit what the teacher values.

I also read Genre in Perspective (by Clare Bradford, Ashton, 1990) (for another purpose) and found a section on Knowing about Values (page 44). Once again attitudes and values were mentioned together and then the term values was used throughout the passage, Attitudes were no longer mentioned.

Do values drive attitudes? Could it be that attitudes can change but values stay the same? Do values change completely? If they do what conditions assist this change? I am thinking that people experience life altering situations and than say their values changed. Do their attitudes also change? Is change in attitudes/values permanent?

I think it is important for teachers to help students understand that writers, teachers, parents-in fact all people- bring to situations their own values and attitudes. Students also need to know that sometimes these values are explicitly exhibited and sometimes they are implicit. (especially in visual and written texts).

READING AND DISCUSSING LITERATURE and EVERYDAY TEXTS would assist in the development of the above.

BUT WHAT IS THE DIFFERENCE BETWEEN VALUES AND ATTITUDES? WHY DO WE PUT BOTH TOGETHER?

The choice of texts for use in integrated units could assist in developing above. Need to provide different perspectives and also help students to read between the lines and identify the values held by author.

MY DEFINITIONS
Values - a concept a broad belief. Life message. More
Attitudes - the demonstrated behaviours chosen because of underlying value.
May 15th
I have just bought the latest book Joan Dalton *Among Friends-classrooms where Caring and learning prevail*. This is co written with Marilyn Watson and published by Eleanor Curtain, 1997.

They have a section on teaching *Humane Values*. They mention that all the time in school students experience values in many ways. eg behaviours and activities emphasised, the ways we respond to others, the ways we treat others.

They say we must be explicit about what values are and which ones are recognised as worthwhile.

They use the terms *social* and *ethical values*. They list fairness, respect, helpfulness, responsibility, kindness, consideration.

They say

How do you do this? I do some parts of this already. How do you teach students to apply values (which values?) widely?

What if the listed values aren't values held by families?

Bring children's conscious attention to values they hold early in the year.

This is just making up class rules. They call them norms but they are rules. Who really decided on the values?

I liked the idea of classifying rules: caring, helping, friendship, respect

The scenario outlined would occur in many Australian classrooms. This has to be American based.

Joan's work in the 1980s in Australia covered the type of practices described here

I can see potential for this way of organising thoughts etc. I could use similar when I plan the unit in which I will include details about values.
June 2nd

This is written as a result of a discussion with Jeni and my rereading of my journal. Some parts I’ve copied from previous entries. I'm just mulling things over.

In this Values are taken to mean those guiding principles or standards which an individual holds as important in life. Actions may be determined by the values we hold.

Values may not be static, they may change as the individual further experiences life and relationships and explores the application and implications of their values.

The formation of values may originate from, among other sources, the person’s family, friends, significant relationships, life experiences, membership of groups and institutions (churches, clubs, schools and so on).

I think it is important for teachers to help students understand that writers, teachers, parents-in fact all people-bring to situations their own values and attitudes. Students also need to know that sometimes these values are explicitly exhibited and sometimes they are implicit. (especially in visual and written texts).

Students need to have opportunities to recognise what values are, how they affect behaviour and how and why people’s values may differ. Through this they may better be able to view issues from a range of perspectives, respect others’ points of view and understand why they and others behave as they do both within and beyond the classroom.

Students already experience values clarification within the classroom whenever the teacher reinforces desirable behaviours and attempts to inhibit undesirable behaviours. For example a child who is praised for placing litter in the bin learns that tidiness is valued in the school. A child who is reprimanded for name calling and bullying recognises that intolerance and disrespect are not valued but rather tolerance and fairness are valued.

Values that mirror society and facilitate effective participation in society are accepted as those to be fostered, practised and monitored in classrooms.

It is important to expose students to a range of people who will present different perspectives and viewpoints so that the students may explore the origin of their values and clarify and justify these values.
Appendix Six: Summary of Jean’s Comments about the Concepts

(The following is the five page draft I prepared summarizing what Jean had said in the interviews about the concepts and related issues. We discussed it briefly in interview ten when I gave it to her, and in a little more detail in interview eleven as is documented on page 133.)

Summary of J’s comments about the concepts discussed in interviews, written as a draft by I. for discussion with J.

J., please read the following with these points in mind:

i) It is a draft based mainly on your comments from the interviews. As usual feel free to reject or modify any parts you wish. Generally I say: “J. seems to see...” but you should read ‘seems’ in there even when I have omitted it. The tentativeness is meant to signal my not wanting to tie you to the wording that I am providing. It should not be read as a put-down, although sometimes it can give that impression.

ii) Occasionally I use the first person plural, ‘we’, to indicate that this is something that we are both very clear about... or both still unclear about. However you should not read into that comment, any sense that I agree or disagree with what you might have said. In most cases you will know that I agree with you!

iii) As you read things that you agree with indicate with a tick. If you want to expand or question something you could do so on the back if there isn’t room. If something is completely new to you indicate that please. ‘N’ for new will do! If I have asked you a question and you feel inclined to respond, you could do so on the back or in your journal.

In stage 1 we explored J.’s initial understandings of the concepts of metacognition, reflection, values, attitudes, beliefs, affect, emotions and feelings. During that stage J. clarified her understandings of many of those terms but still felt uncertain about some of them. In stage 2, J. read articles and books passed on by I. and then discussed her understandings of the concepts. What follows is a summary by I. of J.’s statements about her understandings of the concepts at the end of stage 2. Further change and refinements in her understandings are possible in stage 3 and stage 4. J. will look at this summary on Wed 23 July and decide whether she finds it an accurate representation of her position.

The extent to which a teacher needs to clarify the terminology both for herself and for the students has been discussed a number of times in stages 1 and 2. J. has indicated frustration with the inadequacy of the definitions or even explanation of terms such as values and attitudes in the teachers’ literature. On the other hand, as an extremely busy practitioner, she has limited time to devote to the development of her own thinking in this area. Now she wants to find definitions that suit her rather than having to go on developing her own. The following is a compromise on that: the immediate needs of her teaching demand some working definitions with which she can proceed both to plan and teach the unit. She may well modify them as she proceeds.

We have also discussed the extent to which J. will give the children reasonably precise definitions of some of those terms. J. believes that it is possible and desirable with children of this age and certainly with this group of children to introduce most of the terms explicitly. She would also like to develop diagrams showing the relationships between concepts that she can use as graphic organizers with the students.

We are trying to develop ways of incorporating a metacognitive approach towards the emotion that we believe is associated with children’s current ‘knowledge’ about other groups. By ‘metacognitive’ here we mean that, if the children are able to become more aware of and gain more understanding about their feelings about other groups, they may
be more able to influence their subsequent feelings and attitudes about, and thus their ‘knowledge’ about other groups in the future. For example, when they are in a situation involving other groups, they may set themselves the task of reflecting upon what their feelings are about those groups, and they may set themselves the goal of directing or controlling those feelings more. They may decide to relate those feelings to their values.

We do not expect that we can introduce these dimensions to the children fully in this one unit. This will be an introduction... an exploration of some ways of incorporating these two dimensions into the normal teaching of a Social Education unit.

When we talk about the children’s 'knowledge' about other groups are we referring to their factual knowledge, their beliefs, their attitudes and their values??? We have concentrated our discussions on the last three and on the role of emotion in those. Perhaps we need to look at what we distinguish as factual knowledge???

J. has been concerned about the question of the observability of these concepts: how the teacher can know what the children’s attitudes or beliefs or values are. What ways are there to make visible or objective such internal and subjective experiences of children? However, the prior need is to get a reasonably clear idea of what each concept means.

J. seems to see the affective and the cognitive as intertwined. In most situations the person has elements of both involved in their decision-making. Affect is seen as all the less obviously rational processes as distinct from thinking: feelings, emotions, moods, sensations, aesthetic responses, creativity, sentiments, passions. (We have not discussed the conative area: drives, needs, urges, wishes, motives, motivations, interests, biases, tendencies....) She sees a number of forms of thinking: the chaotic 'normal' form, and others such as creative, analytic, metacognitive, philosophical.

J. seems to have moved to a position of seeing emotions as involving the following elements:

(a) internal bodily experiences or feelings or sensations;
(b) an external manifestation on the person’s body which may show up in uncontrolled ways that the person is unaware of, or in ways under the control of the person. These (both???) are part of what we call ‘body language’. Facial expressions are important.
(c) a cognitive or thinking element: the person thinks about the situation and about their body’s reaction to it, (and perhaps about the response of others to the situation and to their response???). That thinking may minimize the emotion, or exaggerate it or prolong it... even change it?? Perhaps thinking may even stimulate or cause the emotion in the first place???
(Their thinking would be developed in the metacognitive approach we are exploring. We would want the children to consider how their feelings - or emotions - towards other groups may affect their beliefs, attitudes, values and actions towards those groups.)
(d) a situational element: the experience of an emotion is likely to be influenced by the situation itself. (What elements of the situation are likely to influence the emotional experience?... the social, the survival, needs, wants???) Also the situation may have an emotion of its own, eg. crowd emotion is beyond the individual.
(e) a cultural element. People from different cultures may express their emotions in different ways.

A note on the use of the words ‘feelings’ and ‘emotions’. The above appears to make a clear distinction: ‘feelings’ are what happens inside the body, whereas ‘emotion’ is the collection of bodily, cognitive, communicative, situational and cultural elements that make up a particular experience. However, in her work with the children, will J. make that distinction? Is there a need for her to limit the use of the word ‘feelings’ to the internal bodily experiences. Perhaps to help her organize her own thinking about the various elements, she needs to have the five elements clearly differentiated, but perhaps in her work with the children she will be satisfied - or even find it essential - to stick more
closely to the more vague uses of the terms in everyday life where the terms are often - but not always - used interchangeably. Similarly when she is talking about the cognitive element with the kids she may use words like 'knowing' or 'thinking'.

J. sees beliefs, attitudes and values as having both affective and cognitive elements, but one might predominate in particular instances of beliefs, attitudes or values. (Perhaps you could give examples here.) She is not sure whether her work will be more with children’s beliefs, or their attitudes, or their values... However, she believes that it is important for her to be focussing their attention on the affective elements of whichever of those she is working on with the students.

J. now seems to see beliefs as the building blocks of attitudes and values. Attitudes and values may in fact be beliefs themselves, but simply higher order beliefs. She sees beliefs as truth statements: statements that the individual thinks are true or correct. She sees beliefs as based on knowledge (facts?) and possibly faith?? Can feelings contribute to the development of values??

Sometimes she has used the ‘right / wrong’ dichotomy ... in a factual sense: ‘correct / incorrect’, rather than in the moral - ‘good / bad’ - sense.

[She has been unclear about morality. Would she consider it as a belief system about right / wrong behaviour? Would she see morality as consisting of moral beliefs, moral attitudes and moral values or only as a sub-set of values: morality as moral terminal and instrumental values: moral life goals and moral ways of behaving??]

She sees attitudes as collections of beliefs about an object or situation or even about another belief, that cause the individual to have a positive or negative evaluation, or response, or judgement, or preference, or tendency towards the object etc.

She sees values are abstract or higher order judgements or evaluations or beliefs about the right way to behave or about desirable long-term or life goals. Or: "values are abstract concepts that provide standards for judgement of actions." J. seems happy with the (Rokeach’s) distinction between terminal and instrumental values, and with the idea that there are relatively fewer values than attitudes and fewer attitudes than beliefs. J. is developing her own list of both terminal and instrumental values. It will use many (or all??) of Rokeach’s. It will be a full list of values that she thinks people in our society have, not just those she agrees with. (What about 'Caring for the Environment'???) At 12 July the following were R’s terminal values:

Justice; uniqueness - of self?? and others; independence; interdependence; life - all living things; tolerance (to what degree?); freedom; responsibility; honesty; equality; respect for self and others; courtesy; cooperation; compassion; open-mindedness; wisdom; happiness; sense of accomplishment; peace (inner and world); national security; family security; friendship.

J. seems to have come to the opinion that beliefs can be formed independently of attitudes and values, (presumably on the basis of experiences and facts??), but that attitudes and values have beliefs as their basis and can, in turn, influence beliefs. She believes that attitudes influence values and that values influence attitudes. She is uncertain whether one of these sequences is more common than the other. She has also talked about attitudes as being derived from cognition and/or affect and/or action. Perhaps she might provide some examples of this if she see it as an important point for her work with children??

J. sees the situation or context as important for values (and attitudes??). She believes that most values (because they are abstract i.e. at a high level of generality) have to be interpreted in a situation. You need to know the situation before you can decide on how a particular value relates to another one. There is a dilemma to work that relationship out. In different situations the same two values might be placed higher or lower.
J. is still unsure about whether attitudes and values are enduring or somewhat subject to change, and if so, which is more likely to change and under what circumstances. She sees both as likely to be more enduring than beliefs. Does she see some beliefs as also likely to endure? She sees children’s beliefs, attitudes and values as more likely to change than those of adults. She wonders whether it is even possible to ‘teach values’ in the sense of deliberately setting out to bring about change in the students’ values. Perhaps the Values Clarification approach did not believe that was possible and was content to allow children to have the opportunity to explore their own values and hear about others in a non-confrontational situation. Perhaps what we are doing is adding the dimensions of metacognition and emotion to Values Clarification... we are not intending to ‘teach’ values but rather providing the children with the opportunity to learn values. We are providing structured situations and knowledge and skills in which children can develop their own values systems.

We can only know what beliefs, attitudes and values people have when they demonstrate them to us in some way. That might be verbally, (orally or in writing), in body language, in artistic expression, in action or behaviour. As they construct all of those, they can sometimes choose to hide their true beliefs, attitudes and behaviour or even mislead us.

There are at least three ways of thinking about what a ‘values system’ is:
(i) the collection of beliefs, attitudes and values that an individual holds on a particular issue... eg. racism
(ii) the organization of one’s values into a hierarchy similar to the way Rokeach asked people to rank their 18 instrumental and 18 terminal values.
(iii) the total organization of one’s evaluations - beliefs, attitudes and values - into a coherent unified whole {Perhaps the term ‘belief system’ should be used for this?}
{Only (i) and (ii) have been discussed with J.}
When J. is working with the students she will need to have decided whether to talk about values, beliefs and attitudes separately, or about values as including the other two... or perhaps beliefs as including the other two...???

Relationship of values and action. J. does not think that most people think much about their values and that even in values situations they may not consciously refer to their values. However she does believe that their values may influence their decision-making and their acting in less conscious ways.

The Relativity of Values Issue... and whether or not to 'teach' Values

There are some terminal and some instrumental values that we value more than others. J. expects that some of her values (meaning beliefs, attitudes and values???) may change through her work with me and with the children and in future life situations. However she does not think her ‘core’ set of values is likely to change.

It needs to be remembered in our work with children that there will be some values that we are likely to promote through our teaching and our socialization and some that we will want children to explore and develop for themselves. On the other hand, a key belief underlying this research is that too much promotion may be counter-productive, that children may simply reflect back what we want them to, without real change in their values occurring.

We believe that there is a balance required between promoting and modelling on the one hand, and clarifying and exploring values on the other. We believe that children need to know and have demonstrated that the teacher has values and acts upon them, and that she wants them to develop and act upon theirs. However, the children need to feel genuinely that she respects their right to different values and to act upon them.

The problem arises when the children’s values and actions clearly go beyond the values that the teacher, the school or the society deem as acceptable. However, perhaps the
'solution' to this problem may be to make clear the behaviours that are acceptable and those that are not. Perhaps she can then keep most values as at least theoretically contestable. An example: it may be attractive to place 'tolerance' out on the table as uncontestable - the value behind the behaviour that we do not do or say anything to hurt others. However, even the concept of 'tolerance' is contestable. As J. points out does it mean we are tolerant of things we find repugnant? Does it mean we accept all other beliefs as equally acceptable as ours?... or just as 'tolerable'?... or perhaps only under certain conditions?... or within certain limits? A lesbian argues that she does not want her homosexuality to be tolerated, or an Aborigine may say she does not want her identity or culture just to be tolerated. They want to be accepted as equals. Someone else may argue that in a multicultural society 'tolerance' is as good as you can expect. Then someone else may want to debate what a multicultural society really means. Perhaps it is better not to promote any particular values??? Is that possible if we are insisting on certain behaviours???

Understandings that underlie a teacher’s work with children in these areas:
1. There are many different perceptions about the world and its events.
2. How people perceive may be a result of their values.
3. The values people hold may affect behaviour.
4. There are many reasons that people’s values differ.
5. Writers, teachers, parents - in fact all people - bring to situations their own values and attitudes.
6. Values are explicitly exhibited and sometimes they are implicit, (especially in visual and written texts).
7. We need to view issues from a range of perspectives.
8. If we can identify the origin of our values and these values affect our behaviour, we may be better equipped to affect the further development of our values and so be more in control of our behaviour.
9. If we understand and can control our own values and behaviour better, we may be better equipped to participate effectively in the community and society.
10. Many of our values reflect the culture of the society we live in, and the culture of the family, ethnic group, religion, and other groups that we belong to, and the friends we choose. The media may also affect our values.
11. We have played a role in the development of our selves: our knowledge, our feelings, our values. We will continue to play a role in the future development of those things.

Understandings a teacher may want the children to develop in these areas:
(i) through this unit
(ii) over the seven years of primary schooling
Stereotypes, prejudices, discrimination and racism (not much clarification of this yet)

A word about the way the Slices of Time unit may allow J. to focus on children’s feelings and values directly... J. has a strong belief that these issues and related ones such as multiculturalism should be treated in an integrated unit rather than as a separate topic of study. She has pointed out that the current unit on Aborigines would have allowed her to focus more on the areas of the children’s emotions and values than will the Slices of Time unit. However, we believe that as an introduction to the metacognitive approach to emotion and values, the Slices of Time unit may allow a low-key exploration by the children of the values and emotions of the people at the various stages in history. During that exploration J. can provide opportunities for the children to compare and contrast their own emotions and values about other groups with those of the people from the past. This somewhat indirect approach to their own emotions and values may allow a more dispassionate exploration of their own emotions and values than would the unit on Aborigines as the latter issue is highly controversial and emotional one in Australia, especially now in the Mabo / Wik / Reconciliation / Hanson environment. We may not just be making a virtue out of the necessity to focus our study on the less emotive topic.
Appendix Seven: Summary of the Unit and Associated Interviews

(Here I provide a summary of the data generated during and after the teaching unit. I report the content, the teaching and learning activities in the unit, and examples of how the class operated. Examples of key incidents provide an overall impression of the life of this class during this unit, and a feel for the way this teacher interacted with her students and her content. Examples of the teacher's, children's, and some of my own statements are included to provide a realistic 'feel' for the data. It can be seen that this teacher's teaching was rich and varied. It utilized a large range of teaching and learning activities; it challenged and extended the children intellectually and affectively.)

The First Session

In the first class Jean introduced me and asked the students if they could remember what I was doing there. One said that I was "assessing" her; another suggested I was "working with" her, and another, that I was "trying to make her teaching more interesting." I replied that we were working together trying to understand teaching and learning, to learn how to teach better, and I was definitely not assessing the teacher. As part of her strategy to focus on affect, the teacher then asked whether they could imagine how she might be feeling at that time.

She then introduced the new unit, 'Slices of Time'. They developed a time-line of significant events in Australia's history over the century starting with the lead up to Federation. Children mentioned events such as wars, the Depression, the Olympics, the invention of TV and computers, the Beatles, Man on the Moon. They then watched a 20 minute videotape of Australia in the twentieth century. It covered the rich and poor, orphaned children, unemployment, malnutrition in the Depression, migration, gender, Aborigines, fashion, etc. Jean directed their attention to things happening in families and everyday life, and in the whole society. She asked about the impact of events at each of these levels may have had on the other levels for example, the effect of increased family breakdown on the society. Three points may be made about this lesson.

One, the teacher used language that she had used before with the class and would use again: "You're going to pool your cognitive material... all the brain matter in there... go through your filing cabinet... think about..." These are unusual phrases for a primary teacher, although she also uses more common language, such as 'brainstorm' as a verb. Two, while the teacher focussed on historical events, she also had the students think about affect: theirs, hers, and also that of people in the various events, for example, of migrants, and of 'old' Australians about the migrants. Three, many values issues arose, for example, social class, poverty, gender, and prejudice. Some the teacher pursued in some depth, and others, not at all: she was making decisions according to the time available and the significance of the particular issue.
After the lesson Jean breathed a sigh of relief, saying that the session had been a disaster and that it had been nerve-wracking having me observing and taking notes. She joked that she would not have me watch any more sessions. I told her that the lesson had been interesting for the students, enormously valuable from the research point of view, and most successful pedagogically. These were not just reassuring platitudes. Clearly the teacher needed reassurance as the lesson had been emotionally draining for her, but as an assessor of student teaching, as a teacher educator, and a researcher of teaching, I had seen the teaching as effective. Jean’s comments reveal how important her own affect is in her assessment of her teaching. She was stressed by my presence and by her own high expectations about her performance, and probably also by her own uncertainty about the new ideas she was exploring. It should be noted here that she was an experienced and very competent teacher used to knowing exactly what she was doing.

**Key Aspects of the Remaining Lessons**

In subsequent lessons Jean used other videotapes, an excursion to an old mansion, and a simulation game, RaFa RaFa, to give the children more direct experience of life in an earlier era or of life in other cultures. Four times visitors came to share their experiences of migration, the Depression, the war and of being a prisoner-of-war. (I did not attend those sessions as we thought that the elderly visitors might prefer not to have an outsider there.)

In the third lesson the class discussed features of life in the late 20th century that were more positive than in earlier periods, for example, improved medicine, greater equality of opportunity, more material goods, environmental awareness, freedom. This switching the focus between the past and the present, and allowing the children to compare the unknown with the better known, was a feature of Jean’s teaching throughout the unit. Also, she used different audio-visual inputs, such as videotapes and the tachistoscope. In the third lesson children started cooperative group projects related to a particular era of the century, but they continued individual work and whole class activities throughout the unit.

Jean’s incidental teaching was most sophisticated, as is evidenced in a historiographical discussion that prompted students to question why earlier historians wrote that there was no slavery in Australia when, in fact, the Kanakas had been treated like slaves. She also made links back to the previous unit on Aboriginal Australia. Mathematics arose incidentally quite often, e.g., one source says that one third of people were unemployed in the Depression while another source says one in nine.

Throughout the unit the children often reported orally, and presented visual records of what they had been doing. Sometimes this was done informally and quickly, while on other occasions it was rehearsed and the children were given a time limit in which to report, sometimes in pairs and other times in threes or fours. Sometimes they had a choice of the group size, but in other lessons the teacher stipulated the size of groups.
In lesson fifteen the children reported in pairs on their findings from their reading. The teacher had emphasised two aspects of this work: i) research skills, skim reading and note-taking; and ii) providing information about the war to the class. She had shown a Cine-sound news report from the war years and set this up in two ways: i) reminding them to focus on aspects of style of presentation as well as the facts, and ii) having them imagine they are dressed up as ladies were in those days to go to the movies. She did this quickly and the children moved into role easily, although many children smiled at each other when the most patriotic aspects of the film were screened. There was strong reaction by both teacher and students to sexist comments in the film about blond haired women. The teacher worked hard to focus the children's attention on the style of language used in the voice over, sometimes replaying sections of the video. At the end of the video the children were sent back to their seats but told to imagine they were walking out into the streets of war-time Melbourne: what do they see and hear? This whole lesson was an excellent example of the way the teacher contexts the gathering of factual information in an affective way. This was history come alive for these children.

Jean encouraged a range of research skills, from using statistics, CD Roms and texts, through to writing letters to grandparents and others seeking their memories, thoughts and feelings on particular matters. She also used a great variety of ways of processing information, experiences and feelings: prose writing, poetry writing, art, and drama. Generally, she emphasised content in their 'artistic responses', rather than self-expression or even exploration of affect. However there were many occasions where she had them explore affect: for example, she has them put themselves into the shoes of a migrant and write what that person might think, feel and do.

Towards the end of the unit, the groups studying each era contributed information to a whole class data chart that enabled each child to have access to the important information discovered by other groups. Each group also developed a large, informative and artistically presented chart about their era. These were hung from wire across the room. The unit ended with the children putting on a thoroughly rehearsed dramatic performance that they designed and scripted to present their group's ideas about a particular era of the century. These performances involved poetry, music and drama. Many parents came to this presentation, and the teacher reported that she and many parents were moved to tears by aspects of the presentations.

The teacher often talked explicitly, on the one hand, about 'little bits' of information, facts like dates, and, on the other hand, about the 'big picture', the 'big issues', and 'the big umbrella sorts of statements' that summarize the smaller pieces of information. She did not use the word 'concept', but in the second half of the unit she used the word 'generalization' on several occasions. She was careful about the wording of generalizations, for example, repeatedly using the stem, "They appeared...", and emphasizing the use of 'might'. She often challenged the children to make their 'big
picture' statements more precise. She was also critical of the voice-over on the videos making sweeping generalizations.

In preparing the students for an excursion, Jean focussed their attention on the master-servant relationship as well as more mundane and lower level points such as clothing styles and food. She had prepared a grid to focus their observations on such things as clothing and food, but she also asked the students to list their own questions and to develop questions and ideas about the big picture of the society at that time. These were the sorts of thinking skills that she pursued throughout the unit. Lesson thirteen provided a good example of the way Jean moved between factual information-giving and focussing on issues. She read them the facts of the second world war: nations involved, dates, geography, numbers of Australians involved, how the war ended in Europe and the Pacific. They looked at maps and the correct spelling of 'Hiroshima'. But she also made links back to the conscription issue of world war one, and extended this with a discussion of pacifism in world war two. She discussed the problems of people of German background in Australia during the war.

Jean structured many aspects of the students' work, for example, a data chart directing their attention and requiring them to fill in a proforma table. She often structured the form of written and oral reports, but left students to make decisions about content and how their report would unfold. In many lessons Jean organized short reading / writing activities that enabled her to monitor or evaluate the children's developing knowledge and understandings. Some of those activities were 'closed', e.g., sentence matching activities, or True/False worksheets, while others were open-ended, e.g., listing of causes and effects.

Jean often listed their ideas or questions on the whiteboard. Sometimes information was written on pieces of paper and then categorized into groups. In lesson eighteen a concept map was developed on the whiteboard, and the children did individual concept maps on the Post War Years. In lesson twenty, in the 'Put yourself in the Picture' task, using drawings and symbols in prepared picture frames on A3 paper, they visually represented their thoughts about migration stemming from the RaFa RaFa simulation game. In another section of the page they were to write about why they felt the way they did. In this activity Jean provided a stimulus and structure, but also the freedom to explore their "feelings and attitudes and thoughts about migrants."

At the end of the unit Jean sent home a photocopied letter to the parents summarizing what the unit had covered. The letter also contained a personal comment about that student's work on the unit.
Appendix Eight: Practical Suggestions after Lesson Two

(In an attempt to assist Jean with her difficulties at the start of the unit, I provided these suggestions after lesson two for her to consider.)

Some thoughts about how we could plan for values, attitudes, and beliefs, and emotions or feelings in the unit

1 Identify the key issues which would allow the exploration of values, feelings etc.
   eg: Vital Statistics issue; or the “Life is happier today” statement; or ‘children having to work”; or ‘people working long hours’; or ‘bad working conditions’;
This can be done for each of the main topics (WW1, the Depression, etc.) before we get to them, and also once we are into the topic... So ‘conscription’ was a hot issue in WW1.

2 Plan to use some (or all) of the following key questions with those issues:

A  • Who? (identify groups: rich/poor; strong/weak; religions; ethnicity; race; age
   • Who had power?
   • What did they want, need, value, believe?... {The metacognitive question here is: WHY? - where did those values etc come from?}
   • What did they do about any of those things? (their wants, needs, values, beliefs)
   • What were the relationships between the groups?
   • What were their attitudes and feeling towards and beliefs about themselves and others?
   • How have these things changed over time?

B  How would you have felt had you been in their shoes (situation) then?
   How is it similar /different today?
   In what ways do we believe / feel / act similarly or differently today?

C  What are your feelings / beliefs / attitudes / values about this?
   Where have they come from? What has influenced their development?
   How have they changed?
   Do you expect they might continue to change in the future?
   What things might influence those changes?
   Do you think you can influence those changes?
   Would you want to influence those changes?
   How can you influence those changes?

I’m sure there are other questions that could be asked. Some of them may occur to you as you are actually teaching.
Understandings re the ‘Slices of Time’ Unit

1. Many things in Australia have changed greatly since 1901 while some things have not changed much.

- children of today would understand most of a child’s life in 1901 but it would be much more difficult for a 1901 child time travelling to the present...
- Everything today is much faster and more complex than then...
- Australia has experienced much growth: population, cities, industry, culturally
- Anglo-Celtic Australia has become multicultural Australia and Aborigines are acknowledged, (if not totally accepted by some).
- The White Australia Policy has been replaced by a non-racial immigration policy, but many people still want the A-C Australia and the White Australia policy, they want assimilation
- Since 1945 peace and prosperity for most people, but not all

A metaphor: Australia as a person. This is the century of Australia’s birth in 1901, of its childhood until perhaps 1941? or the 1960’s... and of its adolescence and adulthood??
How is the Australia of 1997 different to the Australia of 1947 or 1901?

2. People change in their life-times. physically, but also in their minds, their spirits: i.e. their beliefs, attitudes, values and feelings about things...

3. "Slices of Time" or ‘Eras in the Life of 20th century Australia’

Eras are periods of years when one main thing seemed to dominate public and even private life eg Federation perhaps; but certainly, the world wars and the depression...
We talk of the Baby-Boomers Era: in what way is it an era? Has it dominated Australian life since 1945?... Certainly family life was very important in the 1950’s after the dislocation of the 1930’s and 1940’s. Certainly as the baby boomer generation reached adolescence many things changed in our society... Many beliefs, attitudes, values and feelings changed.


J. set up some excellent issues through her questioning and through her responses to kids' comments. The following are just one off additional questions she could use to focus attention on possible conflicts, possible differences in beliefs, attitudes, values, feelings. They do not need to be pursued at the time although they could be returned to later.

When discussing people having to work harder and longer hours one more question might be: "Would people have been unhappy about that?" Some would be because they were tired sick not paid enough, while others might be happy to have work, to get some money etc... I wonder whether we could simply say that (make the input) if the responses did not come from the kids?

When discussing the fact that some families did not need their children to go out to work another question might be whether the working children would see the other children playing, and if so how would they feel about having to go to work.
Appendix Nine: Articles and books provided to the teacher during the preliminary interview period

(The teacher kept notes on those marked with an asterisk. She did not look at the remaining articles and books.)

* Encyclopedia of Sociology 1992: sections on Values and Attitudes

* Encyclopedia of Social Sciences 1968: section on Values

* Social Science Encyclopedia 1985: section on Attitudes


Appendix Ten: Extract from Interview Ten

(The following is a verbatim extract from pages 9-11 of interview ten. Throughout the transcripts I put in brackets [] brief comments by the listener. Clarifications and reflections that occurred to me at the time of transcribing the tape I put in the following brackets: [ ]).

I.: Now my next question was: 'How do we actually explore the metacognitive side of it?'... How do we get... how do we add in this metacognitive dimension?...

R.: ... Mmm... that... I can only see that as the... and that's where I put that big book of sentences or questions sort of thing... would come in... come in there... and I think that would... probably have to be some sort of... learning log... but I st / I honestly don't know... [right]. I should because I mean it's just part of... like when you're doing maths, I say: 'what... why do you feel like that? What makes you think / feel like that? How do you think it changed... that way?'... So I think it's just in questioning...

I.: Right... I have talked in that other document - the summary* - about the metacognitive focus, suggesting that it's going to be getting the children to reflect upon, become more aware of, and to think about the processes involved in... their... how their feelings, beliefs, attitudes and values, have arisen in the past... what they are at the present... and what... whether they are likely to change in the future... How they are likely to change in the future. And, most importantly, their role in changing those in the future... so... there's always going to be... it seems to me... we've got to get the kids to start to think about two aspects and three periods... the two aspects if you like are, all the influences on... those things... and my role [the individual's]... so all the external influences on the one hand, and my role on the other... That's the two aspects... and the three periods are: in the past [mm], at the present time, and likely to be in the future... Now that's the way I'm starting to conceptualize the metacognitive task in front of you... [yeah]. So that, at some stage you've got to get the kids to think back about themselves in the past...{make another part of the model: children thinking about the societal past and their own personal past)** It probably isn't going to be too difficult to get them to think about where they stand in the present, but the really difficult one is where they are likely to be into the future... and if we remember that the big difference between metacognition and reflection is the idea of [goals]... taking some control, of setting yourself a goal [goal... yeah...] of deciding that you want to improve this thing we're focussing on... in our case we're focussing on our feelings, beliefs, attitudes and values [I forgot the one that was here - I couldn't think of the fourth one... Is there a name for that package... already?] Well... there's not... but you can come up with your own... name... you could call it the affective / values package or whatever... [yeah] who knows... but yeah... now...

R.: That's a... but that again, is a link... like in the unit we've just finished... we're doing that just before... we're still finishing off this week... that's one of the things that they've done: we've explored all these on... I know this is influences on there... but in the unit
they... explored history... they talked about... how their own feelings... and then I got them... the futures bit... you know, how they now... it's slightly different, it's not about that, but how they can now take control and make perhaps... the way the Aboriginal and non-Aboriginal community have been working together... how they... what's their way of doing... of controlling that...

I.: Now you're... what you're sure getting them to do there, is at a cognitive and action level... [yeah and it's] rather than a metacognitive level [yeah] Am I right in my [No, no, because they have to set goals... ] yeah [they have to set their] What were the goals? [their own goals... they had behavioural ones... ] yes

R.:... like... so... that... and it... yeah I... because the goal is like: 'reading a newspaper from now on'... 'when I read the newspaper or when mum calls out reading this article about whatever... I will say... and... you know... that's not nice or they shouldn't talk like that...' Or 'if I hear someone using a...' because Che Cockato-Collins came in last week and talked about things... 'And if I hear someone saying a derogatory term, I will say or I will do this...' [yeah] So they are setting a goal [yeah], but it's still on that action level... [it's at the behavioural or the action level] yeah

I.: and what I think we've got to think about... is whether we can... and I'm not... we might not be able to do this... [mm] You know more about children than I do... so... it may not be possible to get them to think at a more metacognitive level about their feelings and beliefs and that... but it may be possible in the sense of... you can add another level... to their thinking... to the one you've already given them... prior to their action... they stop and work through... a couple of other steps... 'What's my feelings reaction here? 'What's my belief response? What do I believe about this situation?' So we might be teaching them to just put in a couple of other thought processes before they decide that... we will, if you like... before they decide to act, [mm] that will inform their action [yeah] better... Now it's not that we will expect them always to do this... [no] but we will be explo... one of the things you might be able to do with the kids... whether those sorts of... stopping and thinking... are possible... The oldest trick in the book is to talk to kids about and to people about controlling their emotions: 'Stop and count to ten.' What we're saying is instead of stopping and counting to ten: 'Stop and reflect upon... think about... your feelings, and your beliefs, and how they might cause you to act in a way that you might regret later... or whatever'... It's a training of the emotions... it's a...

R.:... would it... I can see so much of this... I think I wrote in one of the things, it's not going to be a lot of that concrete stuff... [yeah] like a lot of the work that we do, there will be concrete, there'll be products every now and then but it's... the work going through all the time... Will it be things like... if you... something... we've explored an issue... something from a video: 'how do I feel about this?' [yeah] So they describe: 'I feel... whatever'. But actually before that... when I use the word 'feelings' I want the... here we go... when I use the word 'feelings'... what do I want with feelings...? that's the one that I want all the... the bodily... all the things inside and outside... [you might]. and then... I could use... but I need / before that the emotions... so... do I say... 'how do I feel about this?'... to me that's the emotional when you say that to the kids [that's enough]...
that'll do? [that may be enough] yeah.. so, if they said: 'anger'.. say if they're watched something and they don't like what happened: 'I feel anger'.. 'Why do I feel like this?'

I: Yeah... see you've then got a trigger for yourself.. that's your first question.. but you then may have a series of other questions [questions that come in.. yeah] that will relate to your definition or your.. idea of the five components [components.. yeah] of emotion.. Now you may get the kids to explore their bodily feelings [yeah].. You may get the kids to explore their communications from their body - their body language [yeah].. You may get the kids to focus on what is happening on what is happening inside their head [mm] when they've realized they've got the feeling [mm... so really you can't say that] You may get them to focus on the social situation [yeah].. You may at some stage even get them to think on .. 'OK the feelings that you've got there.. and the thoughts that you have probably been created more by your family.. or by your ethnic group.. or by your religious group.. or whatever?'... So there you are getting them to think about the cultural dimension of this feeling that they've identified.. 'Oh yes, everyone in our family, we always get upset about unfairness to animals like that' [yeah] Or: 'Oh yeah but we, all Greeks hate Turks, so if we see a Turk we..'

R.: And so would it be.. I mean I know I won't know until I actually get into it, so you could say, similar to that: likewise: 'Now how do I feel about this?' .. So they could express something - I know you can't lock-step it because it's all .. going to be under context - would it be things like: 'Why do I feel like this?' And that could be exploring a whole lot of reasons why they feel like this. 'Have I always felt like this?' 'Have you always felt that way?'.. And then sort of thing.. would it be.. that I was just trying to clarify these are leading towards that metacognitive aspect, then 'how can I change my feelings?' or 'how can I..?'.. ahh.. They may not want to change them.. 'How can I change?' or...

I: I think probably you've got to think about it in terms of / this question of the future [yeah] umm... you've got to help the kids to be aware of the fact that they have developed and they will continue to develop.. and so change.. is not just something that.. will happen for the sake of it.. it's.. where things.. are difficult or a new situation arises, you've got to sort out.. it's more complex situations that happens to us.. in the future.. and in that circumstance you might find that .. like you've told me.. that the situation helps you to sort out and fit in a new and more complex way.. and that complexity.. of life.. is going to happen to you more as you grow up.. will be, is the development that occurs in your thinking and feeling and all the rest of it.. So I think that you've got to have that sense of.. development and complexity of life causing me as an individual, as a student, as a child.. [mmm] to see myself learning to cope with ever more complex and interesting situations.. And one of the ways of doing that is to just help the kids to think about what they were like when they were born and what they were like when they were one and two and five and all the rest.. [mmm] Now to go back to your point then before.. yeah there is a sequence of questions, but the sequence of questions may not all unfold in one lesson

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R.: Oh no.. that’s what I mean.. oh yes.. but what I’m more thinking, is that the type of lea/ that’s the sort of direction that I’d be looking at when I’m questioning the kids and that would be there.. and then [I think a lot of that’ll be in your head very soon] in my head, but I mean I don’t know how to [you’re not comfortable or confident at the moment] mm [but you will be] And also I can see, these sorts of things, because of the constraints, I’m not going to spend enormous amounts of time sorting out, [no] because this is one aspect of the whole unit..

I.: I’ve actually asked you that question: how can you find the time that I want you to do.. [yeah] I will want you to do more than you will be able to give.. [yeah and definitely because I don’t have just my constraints, I have a bigger constraint] So basically what you will be doing is saying: ‘OK these are the, the ideal would be that.. that’s over seven years.. what can I do in one unit?’ [yeah.. yeah].. umm.. I’m very confident that you will be able to get there... and your comment in the staffroom before .. you know about you being frightened about me coming into your room [yeah] Look I do appreciate that.. I do appreciate.. [uhmm {a laugh}] how in a sense threatening that is [yeah].. but you’ve got to / I want you to think about it in these terms: that I will be there as a learner.. along with you.. because basically my ideas are on trial here [mm] and I value your skill and experience and expertise at being able to take them and put them into practice.. So I’m going to be excited and fascinated to see how it works.. And there will be times where I’ll think ‘Oh I wish she had said such and such’ [yeah.. yeah].. but.. I mean my.. role there will be very very low key.. I’ve got to .. and you and I need to talk about how you will explain me and what I will be doing.. But I will not in any way be judging what you do.. [no] but more trying to judge.. the.. [the model isn’t it?] potential of what we’re doing.. [we’re trying to build a model].. yeah.. so .. where you .. you know there will be mistakes that you make, but they will be mistakes that, you know, only the one or two mistakes, whereas I would have made a hundred because of my lack of experience and lack of expertise.. So I won’t be judging.. and we will be learning as we go along [mmm] and I hope we’ll be able to get some time after most lessons to talk..

R.: Well I was looking at the time-table.. a lot of the times there’s time after school... Mondays probably I’ve got to fly straight to a staff meeting, but there’ll be some, usually...... The other .. you know I could sort of see.. and I think it was something we said last week or the week before.. that the kids will still be going about doing the same activities they would have done in the unit anyway.. but it may be at the end when it’s the share time.. or it may be at the beginning where I give them a focus: ‘As you’re doing this I want you to think about or whatever.’ And so it may be something in that line that comes in...

(* Appendix Six

** This comment I wrote at the time of transcribing the tape. It refers to the figure shown in Appendix One that I was starting to develop at that time.)

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Appendix Eleven: My reflections and planning for part of interview ten

(The following were additional questions to explore with Jean at interview ten. These questions and my reflections arose partly in response to the summary of Jean's ideas referred to in point 1 below and reported here in Appendix Six. Those reflections would have influenced the way I assisted Jean in her thinking in interviews ten and eleven about implementation of the dimension. They show how by this time I was thinking about practical teaching ideas.)

Points for discussion Wednesday 23 July '97

1. Quickly run through the "Summary of J's Comments about the Concepts" sheets and point out that we will discuss them on the week-end.

2. How does J. think the Slices of Time unit can be adapted to enable us to explore and gather data on the children’s feelings, beliefs, attitudes and values, and on their metacognitive development in relation to those things?

J. is right that the Aboriginal unit would be more useful from the point of view of directly focussing on the children’s own emotions and possible control of them. However, in the Slices of Time unit it will be possible to ask the children to focus on the feelings and beliefs, attitudes, and values of the different groups of people involved in the particular period. So issues like Federation, the Suffragettes, White Australia, and Conscription, and situations like the wars and the depression and the arrival of large numbers of foreigners in the 50’s should provoke lots of discussion, writing and role plays etc about the feelings and values of the different groups involved. We can ask the children to put themselves into the position of different people - empathy and role playing will be developed. We can ask the children to consider what they would have done had they been there at the time.

And we can put them into a similar situation today to make it more realistic for them to consider their own feelings, beliefs etc. So while looking at Federation, we could have them considering their own feelings, beliefs, etc. about the monarchy and the republic. In looking at the Suffragettes we could look at Equal Opportunity issues e.g. Rights of People with Disabilities or Children's Rights. We could get them to consider what have been the main influences on their feelings, beliefs etc... And we could ask them to think about their own role in the development of their feelings etc. Finally we could get them thinking about what changes might occur in their own thinking on such an issue, how those changes might occur, and whether they want to play a role in those changes and whether they think they can, and if so how...

3. The latter part of that appears to be an add-on to the unit as it is designed. How can J. make the time for that? How does she explain the add-on to the children? How does she justify it to herself?

Taking the latter point first: Academic education alone is limited, whereas, as Dunlop suggests: “affective education is largely a matter of development as a human being, or as a person, and... this process cannot take place automatically but requires the help and guidance of others” (1984, p 3, but see Ch 4 for an elaboration of this). We know that
education of the heart, of the emotions is almost totally neglected in schools across the world. While we know we are under pressure to be accountable for the academic progress of our students, we also know that if we achieve academic success but limited emotional maturity in our students, we will have failed them, their parents, ourselves, our profession and the community. Perhaps the issue of the schools helping emotional growth has taken on more importance than ever in the modern era when so many families do not appear to be successful in the task, and when churches, clubs and organizations are not so popular. Children are left to Neighbours and other soaps, to videos, to magazines, to sporting heroes, and to their peer groups to learn about the need for emotional control and expression. As teachers we have the goal of producing well rounded people. Finally, our research is based on the premise that education of the emotions will assist learning in all curriculum areas. So academic results may be enhanced by spending some time on affective education.

How to explain this additional focus to the children?
Perhaps it could be linked back to their previous unit... *In our last unit we found that we had strong feelings and beliefs being expressed and explored, and so I thought that we should look at that side in this unit, to see whether feelings and beliefs might be important in other topics, not just controversial ones.*

4. How do we explore the metacognitive side of it?
Perhaps we could add the following to the last sentence: *and also to see whether we can learn about our feelings and beliefs and develop them while we are developing our knowledge.*

Then at various stages throughout the unit we need to build in activities that have the children focussing on the past, present and future of the feelings and their beliefs etc. [The chapter by McCoy & Masters “Children’s strategies for the control of emotion in themselves and others” may be useful here.]

5. Can we do something at the start of the unit that may give us a base-line from which to monitor possible changes?
Perhaps there can be a written task following on from a class discussion that could have been introduced by the above couple of sentences. The discussion would be about feelings, beliefs, attitudes and values. Examples could be shared. They could discuss where their feelings, beliefs etc have come from and briefly what they are now and whether and if so, how they might control or direct their feelings, beliefs, etc. development in the future. The written task would give us individual responses to the same questions, although we would not ask them for their feelings, beliefs, etc. but rather their thoughts on what those are. However we would ask them to write about where they thought their feelings, beliefs etc. have come from and whether and how they might develop their feelings, beliefs, etc. in the future.

6. How to explain my presence in the classroom?
What will my role be? How can my note-taking be kept inconspicuous? Can we tape some or all of the sessions? What impact is the tape likely to make on the kids? How to explain the presence of the tape?
Thinking about my learning

Name: _______________________________ Date: __________________

Think about the following and make a mark on each continuum to indicate where you stand or what you think about each one.

1. Statement or issue: All Australians were keen to support the War effort.
   Strongly disagree Not Sure Strongly Agree
   I __________ I __________ I
   Why I think this __________________________________________________________

2. Statement or issue: A series of errors caused problems at Anzac Cove.
   Strongly disagree Not Sure Strongly Agree
   I __________ I __________ I
   Why I think this __________________________________________________________

3. Statement or issue: The events of WWI affected Australia and Australians for a long time.
   Strongly disagree Not Sure Strongly Agree
   I __________ I __________ I
   Why I think this __________________________________________________________

Appendix Twelve: Worksheet used in Lesson Nine
(John had co-designed his worksheet previously with a colleague)
Appendix Thirteen: Mapping My Feelings worksheet used in Lesson Eleven
(Jean designed this worksheet following our discussion after lesson nine.)

### Mapping My Feelings

<table>
<thead>
<tr>
<th>Issue/incident</th>
<th>NAME</th>
</tr>
</thead>
</table>

- **Choose three of the people**

#### Name

<table>
<thead>
<tr>
<th>How ________ might feel.</th>
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<table>
<thead>
<tr>
<th>Why ________ might feel this way.</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Evidence of their feeling.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>How I would feel if I were ________</th>
</tr>
</thead>
</table>

#### Name

<table>
<thead>
<tr>
<th>How ________ might feel.</th>
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<th>Why ________ might feel this way.</th>
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<table>
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<th>Evidence of their feeling.</th>
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<tr>
<th>How I would feel if I were ________</th>
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#### Name

<table>
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<tr>
<th>How ________ might feel.</th>
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<tr>
<th>Why ________ might feel this way.</th>
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</table>

<table>
<thead>
<tr>
<th>Evidence of their feeling.</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>How I would feel if I were ________</th>
</tr>
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</table>

- **What are my feelings about any of this?**

- **Why I feel this way.**

- **What I believe about**

- **Why I believe this**
Appendix Fourteen: 'Thinking About the Topic' worksheet used in Lesson 25

(Below is a copy of the worksheet and on the following pages are typed copies of the students' responses to the questions.)

Thinking About the Topic

Topic __________________________ Name _______________________

Knowledge
• What are the most interesting things you have learnt about this topic?

Skills
• What skills have you learnt or improved on during the study of this topic?

Values/attitudes
• Think about how you feel about the topic. Have your thoughts and feelings changed since studying this topic? How? Why?

Action
• As a result of studying this topic is there something you now need or want to do?
Child 1

**Most interesting things:** I found it really interesting to find out about how society has changed through the eras. I also thought it was really interesting to read and hear about peoples homelife and what they ate, wore and did.

**Skills:** By doing this unit it has really improved by CD Rom skills. It has also made me realized that there are many more research source than just books such as CD rom, Internet, Newspapers and Magazines.

**Values / attitudes:** By doing this unit it made me think if I had fought in a war would I have preferred to be killed or suffere in P.O.W. (Prisinors of War Camp) I think this because before I guess I have never really thought about how much I value my life.

**Action:** I will do anything in my power to prevent another war.

Child 2

**Most interesting things:** I think that the most interesting thing that I learnt was that in all of the eras, there has been big changes. No era was the same. But I am glad for most of these changes, because they have made Australia better.

**Skills:** I think that I have improved my research skills and also my presentation.

**Values / attitudes:** I now fee far mor greatful to all the soldiers that fought in the war. I value my freedom a lot because so many soldiers were forced to go and then captured or killed.

**Action:** I want to do everything I can to prevent another war and honour the soldiers that protected our country.

Child 3

**Most interesting things:** I thought it was interesting to find out about the changes in society through the eras. For example how the food, clothing and housing changed throughout Federation, World War 1, The Great Depression and so on.

I found it interesting that one main thing dominated each era. For example in World War 1 the dominator was the war.

**Skills:** I learnt how to take notes from videos and written text. I learnt how to use different pieces of information - not just the one book or CD ROM. I learnt how to write information briefly and not blab on. I learnt how to set my work out into paragraphs.

**Values / attitudes:** At the beginning of the unit I thought Japan was a bad country during World War 2. I still think that but I feel sad that Hiroshima and Nagasaki ((had to be bo) crossed out) were bombed to stop a war.

**Action:** I want to try to talk to people (relatives) and ill them my feelings on what should be done. I want to write a letter to someone important and tell them that there will not be another World War and Australia will never be involved in another one.

Child 4

**Most interesting things:** The Hiroshima bombing and how it ended the war. In 1901 all the soldiers joined. How WW2 ended the Depression

**Skills:** How to organise paragraphs. How to take quick notes. To work co-operatively in groups. How to do a bibliography. To find notes and then put them in my own words to create sentences and paragraphs.

**Values / attitudes:** My thought about the war have changed. I used to think that it was fun and not many people got killed but now I know how the war really was. I didn’t realize how bad the Depression was and am glad I am not in it.

**Action:** If I could vote about who goes to war I would vote against it. I believe in this because people should be able to do anything the want.

Child 5

**Most interesting things:** The Hiroshima Bombing and how it ended the war. About Federation. About The Depression was actually like and how The Depression ended.

How The Depression started.

**Skills:** Group work, I can work co-operatively. How to use the CD-rom. To plan my time. To write notes.

**Values / attitudes:** I never knew what The Depression was like so now I know how fortunate I am. I thought the war was not that bad, but now I realize it is horrible.

**Action:** I want to remember about the soldiers who went to war.
Child 6
Most interesting things: I found it interesting to learn about all the different era's, & how they changed. Another thing that I found interesting was that in a war, when countries have been fighting against each other and have killed so many of each other's men they can suddenly join sides & fight together.
Skills: I think that my research skills have improved. I also think that after doing this unit I have learnt to use different resource. I also think that doing this unit has helped me with group work.
Values / attitudes: I think that my thoughts on the Hiroshima bomb have changed. I think they have changed because before I didn't understand what the bomb was all about, and I didn't know how deadly it was. After reading about people who suffered from the bomb I learnt how bad it really was.
Action: I will think about how people have different views on things & try to understand where they're coming from.

Child 7
Most interesting things: That the menu was mostly meat. And for breakfast they would have porridge and toast. I learnt how to write a Bibliography.
Skills: I have learnt very easily to right information in my own words. And to right things in order.
Values / attitudes: No I don't think so because I didn't have any disagreements.
Action: No not really because it was such a long time ago and I suppose the Federation was good because now we run things all together.

Child 8
Most interesting things: I didn't know that an animal (a dog) first went into space before man. I think that was cruel because that dogs life has the same value as a humans life but we don't think of it like that because dog or animals can't talk.
Skills: I learnt how to make colomnes on a computer so I could write a newspaper artical.
Values / attitudes: Well I have mixed fellings about the Hiroshima bomb because if you were a solger fighting for your country I bet you would be glad you had stoped fighting so in the future you did not get killed.
Action: I would like to keep suding this topic so I can find out more.

Child 9
Most interesting things: I think that the most interesting thing that I have learnt is that in the wars no one is a winner because so many people are dead. And also that I have learnt how to do a Bibliography.
Skills: I have improved on making my work look a bit better than it used to.
I have also improved on doing more work, for example 10 lines comaired with 20-30 lines.
Values / attitudes: Well, before I felt that Federation, The Depression and the Baby Bomers never existed, but now I feel I know the most anyone would ever know its probably because of the teacher that I have.
Action: I would like to always support legacy day and anything like that.

Child 10
Most interesting things: I didn't know what Fedreation mean. I didn't know how they stored the Food. I learnt know that a dog when to spaces before a person. I think it was croll.
Skills: How to do a proper timeline. How to use the code on the computer. I think I'm improved on my writing and spelling because I am writing more and on which spelling mistake.
Values / attitudes: When I did this unit I don't know there was so much thin.
I feel sad about the people that had to go to war because I did really care about it.
Action: I write I leant about the topic.

Child 11
Most interesting things: I learnt how to remmber important dates. I learnt about the sort of employment and entertainment, Technology and clothing the people had.
Skills: I improved and learnt how to make Bibliography.
It was quite hard doing a project in a group, but I improved that skill and it was fun!
Values / attitudes: Before I did this unit I did not respect history as much as I do now. Now I understand what it was When because I know moor about it.
Action: I would actually like to know moor about this topic.
**Child 12**

**Most interesting things:** I think one of the most interesting things I learnt was some of the inventions and technology of each Era. Some things that stuck in my mind were how ice chests were used and Telivision being introduced to Australia in 1956.

**Skills:** I think I improved my skills a lot. Some of the things I improved most are: working in a group, taking notes, finding out things in books, being responsible in getting work in on time. I also improved getting on with my work.

**Values / attitudes:** I thin it is amazing how many things have happened in a hundred years. I didn’t know so much has happened.

**Action:** After learning about the past, I think it would be fun to each write what we think it would be like in the future. It would be fun to share them with each other.

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**Child 13**

**Most interesting things:** I found it interesting that “Federation” is still going on today. I found it interesting looking at the different changes Australia experienced in the 20th century when I was doing my timeline.

**Skills:** I’ve learnt to take notes while watching videos and from books. I’ve learnt to just write keynotes instead of sentences. This has helped me to become more organised in getting my work out of the way and not at the last moment.

**Values / attitudes:** I have changed my opinion about war. I used to think it was nessesary but really no-one ever wins wars. My opinion changed after we discussed Hiroshima and Nagisaki being bombed. I also changed by opinion when Emma’s great uncle discussed war with us.

**Action:** If Australia were to ever be involved in another war I would be totally against it. I hope to discuss with my grandparent what I’ve learnt.

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**Child 14**

**Most interesting things:** I thought it was interesting what Emmas uncle told us that tragic story, and how he suddenly changed. I learnt how Horoshima was bombed and how the people from war were not allowed to say where they are, the mail person would read it to make sure. (I would hate someone reading my letters.)

**Skills:** I improved on my research skills, how to write a bibliography. I also learnt to work in a group and I learnt a lot about WW 2.

**Values / attitudes:** I think it was dumb how they said that world war I was supposed to be the last war but then we had world war 2. I feel sad for Horoshima because their whole town was bombed. I feel the first world war should have been the last war!

**Action:** I want to know if WW2 was the war that is supposed to be the last war. I would want to have not bumbled Horoshima.

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**Child 15**

**Most interesting things:** How they lived. I think it is Interesting to know they Lived in histrey and some of the histrey is not Interesting

**Skills:** Organised * group * getting things handed in * creative  

**Values / attitudes:** New (1945 - 1960s)

**Action:** I would like to keep it all to say we did it with out fitting

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**Child 16**

**Most interesting things:** The most interesting thing I have learnt is that the war ended the depression. How people lived in the depression. When Hitler didn’t give a medal in the Monich Olympic Games.

**Skills:** I learnt and improved on is how to: * work with a group * get equal amount of work * relaying on each other to bring their work to school

**Values / attitudes:** I think about how people could live in the Depression because their wasn’t any jobs for people or homes for families to live in. Well I never knew their was a Depression until we started this topic.

**Action:** I would like not to forget how people lived in the depression and in the war.

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**Child 17**

**Most interesting things:** that it took the bombing of Hiroshima and NagasakI to End WW2.

**Skills:** * using key words  * finding information  * putting key words together to make sentences

**Values / attitudes:** before learning about all the different eras I didn’t really take any intrest into this topic but after learning about the eras and finding out about all different experiences I have found out alot of interesting facts and I am very interested and interested about learning more about this topic.

**Action:** To find out more information about these topics.
Child 18
Most interesting things: About how the World Wars ended. I learnt about how Australia was formed and how people lived during the turn of the century.
Skills: One of the most important skills I have learnt to use is Group work. Since we have used groupwork often during this unit I have learnt how to co-operate better and how to share work between people.
Values / attitudes: My thought about migrants and wars have changed because of the videos and books we have read during the unit. I didn’t know that some boys and men were totally against war and that migrants came in large groups from 1947 and onwards.
Action: I want to learn more about the 70s and 80s because we hadn’t done it is class. Even though I did my poster on it I still want to know more about the people of that time.

Child 19
Most interesting things: I have learnt about history and how people lived. I really enjoyed this topic because I learnt what average people used to do for fun and how they made money. I also learnt how world war 2 ended.
Skills: I have improved my skills of working with a group and being a group member who people can depend on. I have also learnt how to look things up on the cd rom.
Values / attitudes: My thoughts on war and other related topics have changed as I now know how to see both sides of an argument or war. Now that I know this information, I have a better understanding of my grandparents and I feel that I know more about them.
Action: As a result, I feel that there should be no wars at all and I would do anything to tell that to the world as I know that there are no winners in a war.

Child 20
Most interesting things: The bombing of Hiroshima and Nagasaki ended World War Two, Aborigines didn’t have the right to vote until 1967!! Those were the two most interesting facts I learned.
Skills: I have learned that searching through articles and picking out the most important key words is something that I have improved on.
Values / attitudes: I think that the White Australia’s Policy was a bad idea because if it wasn’t around, we could have built up our defences before the big wars instead of after. My feelings about this haven’t changed because I didn’t know about it before this topic.
Action: I think I want to find out more about the bombing of Hiroshima and Nagasaki. I was to stop wars from ever occurring, but I can’t really change peoples minds.

Child 21
Most interesting things: I have learnt that different eras are recognized by different events and people.
Skills: I have improved on my research skills by using CDrom, Encyclopedias and finding key words in an article.
Values / attitudes: Now I have studied this topic and understand all the different changes in History. I think this because I now know all the advantages and disadvantages in all the eras.
Action: I would like to explore each era a little more.

Child 22
Most interesting things: The most interesting thing I learnt was many things are different back then than they are now. I also learnt interesting things about Australia’s History.
Skills: The skills that I learnt were how to put information into short statements & how to write things in my own words. And how to make a newspaper article on the computer.
Values / attitudes: I feel that this topic has given me a lot of information about Australia’s History because of all the information people have give & read to me & all the things I have researched.
Action: Prevent people from going hungry & wars. I also think we should be nice to all migrants.
Appendix Fifteen: Jean's Thoughts about the Meaning of 'Opinion'

(As Jean had used the word 'opinion' frequently with her students and we had not previously discussed it, I asked in the final interview, how it relates to beliefs, attitudes and values. Jean commented that she was not sure of the question and was on holidays. She then gave a lengthy and somewhat disjointed reply. When I conducted the interview I did not appreciate how much she was able to put into this attempt to explain what an opinion was. I have only appreciated it as I have read and re-read it. The following is her reply.)

maybe.. opinions are a result of .. an exploration .. or a ... conflict.. or an uneasiness between your values and .. feelings... and your actions.. and your thinking about what you do... and somehow when they are all combined together somehow you come.. they all mull around together and you come out with a statement... that is... unique to you.. it's a personalized thing because you've thought about those things... one of those .. there's somewhere there, there'd have to be the content too. [ ] So your opinion is the result of your thinking of a content or a subject or a topic or the issue.. and how you feel.. and how you.. what values you hold... and your exploration of how you act and where you've got your values from.
Appendix Sixteen: Jean's final journal entry

(Jean made this entry after I asked her in our phone conversation of 11 June 1998 to reflect upon the unit that she had just completed some nine months after the research unit.)

June 12 1998

We have just finished a SOSE unit about the effect of non-Aboriginal settlement on the local indigenous people. We called the Unit Different Perspectives because we wanted the students to understand that there are many different viewpoints on and interpretations of events. We tried to locate resources that presented both Aboriginal and non-Aboriginal perspectives on both historical and current events. We were conscious of trying to provide a balance of perspectives.

I have taught this unit for the three previous years and this is the first time I have found generally the students' ability to walk in another's shoes to be less evident. Attitudes toward the stolen generation to be less positive. Spontaneous reactions to be less emotional. Free choice writing did not reflect in depth feelings or creative expression of or about the content.

I was amazed at the end of the unit that many of the children did not really view the events in any other way than that of that they were not there and that they didn't do these things.

Our unit was taught during the few weeks preceding Sorry Day. The unit concluded about ten days after National Sorry Day. The mass media carried many stories about National Sorry Day as well as coverage of the Fed Gov's action/non action on land rights. Opinion polls were held on what people thought about these issues. All sorts of people—well known and those not well known were interviewed about these issues.

I think the media must have an enormous impact on the formation of attitudes towards and understandings about issues because I can only see this as the common factor as to why the students' reactions were generally different from other years.

I also wonder if the students talked about this unit more with their parents this year because much of our unit content was reflected on TV. Perhaps this extra talk with the parents helped the students form opinions and react as they did.
Appendix Seventeen: Possible Metacognitive Goals and Foci

(As I read the questions that Jean used in the unit and her suggestions for questions that she would use in a metacognitive-affective approach in future, I started to list the range of metacognitive goals and foci that could help guide a teacher to generate such questions and to use such questions with her students. I developed the lists below.

It would have helped Jean if we had developed such lists together, in the preliminary planning period and early in the unit. It would have helped the research aims if we had then revised them after the unit. Jean treated many of these, but she would have benefitted from being able to use them as a checklist during the unit. By the end of the unit she had developed a formidable list of questions and strategies that she was using to explore most of these foci. In total they provide a picture of the whole metacognitive-affective approach to values education that complements the framework discussed on page 217.)

Goals of a Metacognitive-Affective Approach to Values Education:

An overall metacognitive development program about affect in values development would:

i) develop the students' knowledge about how beliefs, attitudes, values and affect have developed in the past; about how each of those have influenced each other and continue to do so; and about how they are ultimately involved in action.

ii) help students clarify and evaluate those affects, values, attitudes and beliefs, they see as positive, and help them develop a hierarchy amongst them.

iii) help students identify and evaluate their own most effective ways of thinking about the above.

iv) help students think about ways of regulating their affect, their values thinking, and their values actions in the future.

Metacognitive Foci:

how one has been socialized to one's affect and values, including one's own role in that
how one thinks and learns, and how one improves one's learning, (including for the teacher, how one learns to teach or improves one's teaching)
how one might evaluate one's affect and values
how one might change one's affect and values
how one's affect influences one's values
how one's affect and values might influence one's action

In most of these we can focus on both the influences and the processes.
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