INTRODUCTION

The past two and a half decades have seen increasing international recognition by governments, international agencies and academics of the importance of the early childhood years (Rodd & Savage, 1997; Ashby, 1996). The consequent growth in the provision of programs for young children during this period has presented many opportunities and challenges, including the need to enhance the professional development of early childhood teachers (Rodd & Savage, 1997; Goffin, 1996; Stonehouse & Woodrow, 1992; Saracho, 1992; Kagan, 1991; Katz & Goffin, 1990). There is a general consensus that the quality of early childhood programs is highly dependent on the quality of the professionals working within them (Spodek, 1995; Wangmann, 1995; Saracho, 1992). It is argued that this, in turn, is influenced by the quality of professional preparation (Ott, Zeichner & Price, 1990). Surprisingly little is known, however, about the impact of early childhood teacher education programs on student teachers' professional development (Day & Goffin, 1994; Fleer & Waniganayake, 1994; Tayler, 1992; Katz & Goffin, 1990; Ott et al., 1990).

Effective preparation, regardless of profession, is now widely assumed to involve more than equipping future practitioners with a specific knowledge base and skills (Carr, 1997; Tom, 1992; Schon, 1987; 1983). In addition, it is argued, future practitioners must be assisted to the develop the willingness and capacity to deal with the complexities, uncertainties and ambiguities characterising professional roles and responsibilities (Ecclestone, 1996; Copeland, Birmingham, de la Cruz & Lewin, 1993). This realisation, and the accompanying recognition of the impossibility of preservice programs adequately preparing graduates for their entire careers, has created considerable interest in reflection as a basis for professional preparation and ongoing development (Cole, 1997; Munby & Russell, 1993).

Proponents of a reflective orientation to professional preparation claim that an emphasis on reflection encourages and enables developing professionals to take greater responsibility for their professional growth by facilitating their understanding of their practice (Smith, 1997). In particular, they contend that reflection enhances awareness of consistencies or inconsistencies between beliefs and actions and alertness to factors influencing decision making, implications of those decisions and possible alternative courses of future

A case can be made that an emphasis on reflection is particularly relevant in early childhood teacher education programs given the complex decision making expected of graduates, the traditional emphasis on inquiry-based learning in early childhood programs, and the responsibility early childhood teachers are required to assume for their own and, frequently, others' professional development (Goffin, 1996; Lubeck, 1996; Rodd, 1996; Stott & Bowman, 1996; Yonemura, 1994; McLean, 1991; Bowman, 1989). The absence of prescriptive syllabus requirements for children aged under five years and the expectation that early childhood teachers identify and use individual children's interests and developmental levels as a starting point for curriculum planning (David, 1996; Goffin, 1989), for example, mean that early childhood teachers must rely heavily on their professional decisions. To make effective decisions, they require a sound understanding of the influences affecting the children and families with whom they work (Curtis, 1996) and the context in which they work (McLean, 1991). Moreover, they must be aware of how these factors interact with the "personal, social and cultural context in which they are embedded as persons" (McLean, 1991, p.6).

Similarly, the traditional emphasis on inquiry-based learning for young children means that a primary role of early childhood teachers is to assist children "clarify and identify the problem, generate alternatives and find possible solutions" (McLean, 1991, p.13). This highlights the need for early childhood student teachers, themselves, to experience learning through inquiry (Hine & Newman, 1996). Indeed, to paraphrase Smith (1996), how can those who do not inquire into and reflect on their own learning, hope to provide an environment which supports children's inquiries and reflection?

Furthermore, the leadership role of many early childhood teachers employed in preschools and long day care centres requires that they take responsibility not only for children's learning and their own professional development, but also for supporting the professional development of their staff (Rodd, 1996). Those employed in school settings require a similar commitment to
professionalism. In particular, they frequently need a strong sense of professional identity and the ability to articulate the basis for their decision making if they are to retain their commitment to early childhood principles in the face of the institutional constraints and different philosophical approaches characterising many school systems (Siraj-Blatchford, 1993). Proponents of a reflective orientation to professional development (e.g., Perry, 1995; Yonemura, 1994; Bowman, 1989) contend that learning to reflect on their professional development and practice assists in preparing early childhood student teachers for such challenges.

Yet despite widespread interest in reflection as a basis for professional preparation, many argue that it remains a problematic notion. Concerns expressed by Ecclestone (1996), Hatton & Smith (1995) and Korthagen & Wubbels (1995) are typical. These writers contend that reflection is accorded such a variety of meanings that it risks becoming a meaningless term. As well, they refer to the difficulties of identifying evidence of reflection and to the paucity of convincing evidence that it can be promoted. Moreover, they point out that there is little evidence to suggest that reflective teachers are necessarily more effective teachers than their less reflective colleagues. These concerns must be addressed if teacher educators are to defend their current emphasis on reflection. Otherwise, as Tom (1992) warns, reflection is in danger of being seen as merely "another teacher education fad" (p.viii).

PURPOSE OF THE STUDY
The study reported in this thesis addresses three of the above concerns - the need to more fully understand what is meant by reflection; the need to find ways of identifying reflection; and the need to determine whether reflection can be promoted. Its specific purpose was to investigate the reflection demonstrated by a group of early childhood student teachers and to explore any changes or development in their reflection (and factors contributing to such changes) as they progressed through the Guided Practice sequence of their preservice program. This sequence of six semester-long units constitutes the practicum component of the program. It was selected as the focal point of the study because one of its main aims is to foster reflection. Further information about Guided Practice is provided below and in Appendices 1 and 2. Although there was no intention to claim any cause / effect relationship between the participants' enrolment in Guided Practice and
their reflection, the study nevertheless sought to identify possible implications for teacher educators seeking to promote reflection in student teachers.

CONTEXT OF THE STUDY
The study involved 18 student teachers from Macquarie University, Sydney. These student teachers were part of the first cohort to enrol in the three year Bachelor of Teaching (Early Childhood) and four year Bachelor of Education (Early Childhood) programs introduced in 1993. Both programs were identical in structure and content for the first three years. At the end of the third year, student teachers chose either to exit the program with the three year degree or to continue with an additional year of study leading to the four year degree. They graduated with a specialist teaching qualification equipping them to work with children aged from birth to eight years. Most intended to find employment in long day care centres, preschools, or the early years of school.

The first three years common to both programs consisted of four core professional study sequences or strands as well as a liberal study component in which student teachers selected from units offered throughout the university. The Guided Practice sequence, which consisted of six compulsory semester-long units incorporating the practicum and associated theoretical course work, was one of the professional strands. These units replaced "stand alone" practicums previously undertaken at the end of each semester. It was anticipated that embedding the practicum within the Guided Practice units and focusing lecture and tutorial content on issues arising from the practicum might assist student teachers to become more reflective about their practice and develop greater confidence and willingness to take responsibility for their professional development. An overview of the relationship between the Guided Practice sequence and the other professional and liberal study strands is provided in Appendix 1.

All professional strands of the three and four year preservice programs were based on a belief in constructivism as an appropriate basis for working with young children. Constructivists assume that learners construct meaning primarily by engaging in and attempting to make sense of experiences, rather than through explanation or imitation (Guba & Lincoln, 1994). Only the Guided Practice sequence, however, explicitly adopted constructivism as a model for working with student teachers. The teacher educators responsible
for the design and implementation of Guided Practice units, including myself, argued that to be effective teachers of young children, student teachers needed to develop confidence and expertise in constructing their own professional understandings. Like Elkind (1991), we argued the need for greater consistency between these tenets of early childhood education and the learning and teaching environments of early childhood teacher education programs.

The Guided Practice sequence sought to foster student teachers' appreciation of the importance of reflection and to encourage and assist them to develop the ability and willingness to reflect on their experiences as a means of constructing their professional understanding and improving their professional practice. Reflection was used as a generic term for processes involved in the exploration of experience as a means of enhancing understanding. Student teachers were encouraged and assisted to interpret the meanings they gave to these experiences in the light of their beliefs, values and developing professional knowledge. In doing so, they were expected to engage in a number of reflective processes which they were encouraged to incorporate into their professional practice. These processes included looking back on their experiences, decisions and actions; recognising the beliefs and values underpinning these decisions and actions; considering a range of possible consequences and implications of their actions and beliefs; and investigating alternatives and reconsidering former viewpoints. The specific focus of each Guided Practice unit is described in Appendix 2.

Several attempts have been made to categorise the diverse notions of reflection underpinning preservice teacher education programs (e.g., Zeichner, 1993; Sparks-Langer, 1992; Grimmett, Erickson, MacKinnon & Riecken, 1990; Tom, 1985), usually on the basis of underlying philosophical views about the nature and purpose of teaching and learning. Of these, the conceptualisation of reflection adopted by the Guided Practice sequence was most aligned to the personalistic (Valli, 1992), narrative (Sparks-Langer, 1992) or developmental (Zeichner, 1993) orientations which focus on student teachers' personal and professional growth. In other words, it differed from technical orientations which view teaching and reflection primarily as processes of technical decision making.
The orientation to reflection underpinning the Guided Practice sequence also differed from the critical, social reconstructionist tradition which emphasises the socio-political implications of schooling and how teachers might work towards overcoming social and political injustice (Valli, 1992). Although the need to consider the implications of professional decision making for issues associated with equity and the importance of political advocacy as a means of drawing attention to the needs of children and families was emphasised, the political nature of teaching and its potential impact on socio-cultural norms was not a particularly strong focus of attention.

OVERVIEW OF THE STUDY
This thesis consists of eight chapters, the first of which explores the diversity of meanings attributed to reflection. Orientations to reflection cited most frequently in the teacher education literature are reviewed. In contrast to the concerns expressed by many commentators, this chapter posits that the diversity of these orientations need not necessarily be problematic. While none provides an all encompassing view and many appear limited by their attachment to what might be described as traditional Western analytical traditions, each is seen to contribute a potentially useful perspective. The one commonality underpinning these diverse orientations is the notion of reflection as a deliberate search for meaning. For this reason, this is the conceptualisation of reflection adopted in this thesis.

Chapter Two reviews a range of studies which attempt to identify student teacher reflection. These studies vary greatly in their recognition of the complexity of reflection. Some show little recognition. Others acknowledge this complexity but make little attempt to move beyond current conceptual and methodological constraints. A few, highly cognisant of the complexity of reflection, attempt to overcome these constraints, albeit unsuccessfully in most cases. Two key challenges confronting future research into reflection, therefore, are identified: the need to enhance understanding of its complexity and to develop methods to explore, identify and represent this complexity.

Chapter Three responds to the first of the above challenges by investigating how current conceptualisations of reflection might be enriched. Using gaps and inconsistencies in the existing literature as a starting point, it draws on literature about emotion, imagination, intuition, quantum theory and Eastern philosophy to construct a metaphorical kaleidoscope. As the lens of this
kaleidoscope is turned, new possibilities for enhancing understanding of reflection emerge.

Chapter Four considers how the notion of reflection as a search for meaning might be investigated and portrayed, given current methodological constraints. Because decisions concerning the selection of strategies for data collection and interpretation must be consistent with the researcher's ontological, epistemological and methodological beliefs, this chapter begins with a summary of the beliefs about universal interrelatedness which underpin the study. A discussion of the methodological challenges arising from these beliefs follow. The decisions made in response to these challenges and the rationale for these decisions are then explained.

Chapter Five is the first of three chapters which presents profiles of the participants' reflection as they progress through the Guided Practice sequence of their preservice program. It focuses on the eight student teachers whose reflection showed little consistent change and identifies factors which appeared to impede the development of their reflection. Chapter Six presents profiles of the four student teachers whose reflection showed some evidence of consistent development, while Chapter Seven profiles the six participants whose reflection showed considerable and consistent change as they progressed through the Guided Practice sequence. Throughout these chapters, the importance of a commitment to teaching and to reflection, an epistemological perspective of constructed knowing, and a perception of a supportive learning environment are emphasised.

The final chapter discusses some of the key issues arising from the study. It focuses on the individuality of student teachers; the emotional intensity of learning to teach; the complexity of reflection; the centrality of establishing connections; and the ongoing difficulties of identifying reflection, as well as those factors, highlighted in the participants' profiles, that were instrumental in influencing the development of reflection.
CHAPTER ONE

WHAT IS REFLECTION?

The exact meaning of the term "... reflection" is difficult to pin down. Most who use the term would probably agree that the opposite of reflective action is the mindless following of unexamined practices or principles. But within that agreement, there is quite a range of opinion regarding what reflection is and what it looks like in action.

(Sparks-Langer, 1992, p.147)

During the past fifteen years, reflection has become a term widely used by those involved in the preparation of professionals, and has proven especially popular amongst teacher educators (Cole, 1997; Wellington & Austin, 1996; Hatton & Smith, 1995; Korthagen & Wubbels, 1995; Calderhead & Gates, 1993; Gilroy, 1993; Zeichner, 1992). Many assume that willingness and ability to reflect on one's practice assist in developing the necessary qualities, skills and attitudes needed for dealing effectively with the complexities, uncertainties and ambiguities inherent in professional lives and responsibilities (Copeland et al., 1993). An emphasis on reflection, therefore, is commonly considered a sound basis for professional preparation (Munby & Russell, 1993). Interest in the role of reflection in professional development is evident in the emergence of a great deal of literature about reflection and how it might be fostered.

As this chapter will illustrate, this literature is characterised by great diversity, particularly in relation to the range of meanings attributed to reflection. Issues arising from this diversity have caused considerable concern. Commentators refer, for example, to the failure of some writers to make explicit the meaning they give to reflection and to the unfortunate tendency in much of the literature to use different terminology interchangeably with little understanding of underpinning epistemological differences (Bengtsson, 1995; Brookfield; 1995; Hatton & Smith, 1995; LaBoskey, 1994; Copeland et al., 1993; Tom, 1992; Houston & Clift, 1990; Calderhead, 1989). They point out that terms such as reflection-in-action (Schon, 1983; 1987), critical reflection (Zeichner & Liston, 1987) and reflective teaching (Cruickshank, 1987) are embedded in different epistemological perspectives and, therefore, have different meanings. Hence, they argue, it is misleading and inappropriate to use these terms interchangeably or indiscriminately (Hatton & Smith, 1995).
Many commentators also emphasise that unless teacher educators are alert to the distinctive epistemologies underlying the different orientations to reflection, they will be unable to position their perspective on reflection within a theoretical framework (Copeland et al., 1993; Munby & Russell, 1993; Tom, 1992; Grimmett et al., 1990). As such, they will remain vulnerable to accusations that reflection is an appealing but essentially meaningless term (Calderhead, 1992; Bullough, 1989). This thesis refutes arguments that reflection is a meaningless term, but acknowledges that frequently it is not well understood.

The aim of this chapter, therefore, is to clarify confusion arising from different meanings given to reflection and from the indiscriminate use of terminology associated with different orientations to reflection. With this purpose in mind, it overviews the orientations to reflection most frequently cited in the teacher education literature. In particular, it focuses on the differing epistemological assumptions underpinning these orientations. Key terms associated with these perspectives are indicated by the use of italics.

Two key recurring themes underpinning this thesis are also introduced. The first is that the diversity of these orientations must be appreciated if understanding of reflection is to be enhanced because each provides a useful but incomplete perspective. Only through an appreciation of this diversity, this thesis argues, can we develop a more holistic and complete understanding of reflection. The second theme is that most orientations to reflection, as commonly interpreted, are overly reliant on what many writers (e.g., Michelson, 1996; Smith, 1996; Shepherd, 1993) refer to as traditional Western analytical perspectives. Moreover, the consequent overemphasis on the role of analytical thought in reflection has impeded our understanding of reflection as a holistic process. Both trends are evident in much of the commentary on Dewey’s notion of reflective thinking, the first orientation to be overviewed.

**REFLECTIVE THINKING: DEWEY**

Many who write about reflection, particularly in relation to education, see its roots in the work of John Dewey (Hatton & Smith, 1995; Calderhead & Gates, 1993; Mackinnon & Erickson, 1992; Grimmett, 1988). Dewey, in turn, drew on the work of earlier philosophers including Plato, Aristotle and Socrates (Houston, 1988). Given the seminal nature of Dewey’s writing, it seems fitting
to begin this overview of orientations to reflection by describing his conceptualisation of reflective thinking. All references are to the expanded 1933 revision of the 1910 original edition of Dewey’s *How We Think*.

To Dewey, reflective thinking differed from routine thinking, rooted in tradition and authority, and random or unregulated, "stream of consciousness" thinking (Farra, 1988). Reflective thinking is deliberate and purposeful, involving "active, persistent and careful consideration of any belief or supposed form of knowledge" (p.12) and "searching, hunting, inquiring, to find material that will resolve the doubt, settle and dispose of the perplexity" (p.13). It has a clear goal, usually the "solution of a perplexity" (p.14) or the appreciation "of the full and adequate significance" of an event or situation (p.139). This may involve looking back to prior experiences for guidance in solving problems, enhancing understanding of the present or suggesting courses of action for the future. Reflective thinking aims to arrive at a conclusion and, as such, is a precursor to action. Hence, in many respects, Dewey’s notion of reflective thinking as essentially purposeful problem solving represents a traditional Western analytical perspective (Yinger, 1990).

Yet Dewey’s references to inevitably incomplete understanding - such as his claim that "every extension of knowledge makes us aware of blind and opaque spots, where with less knowledge all had seemed obvious and natural" (p.139) - suggest some awareness of a greater meaning beyond that which can be achieved through rational thought. This awareness is evident in his description of what he considered to be the five phases or aspects of the reflective thinking sequence. To Dewey, this sequence began with intuitive and inferential leaps towards possible suggestions and concluded with the testing of hypotheses. He appeared uncertain, though, about the nature of this sequence. At times he referred to a linear sequence proceeding step by step with each step resembling a link in a chain which leads eventually to a conclusion. He noted, for example, that "the successive portions of a reflective thought grow out of one another and support one another" (p.4). Elsewhere, however, he wrote that these aspects or phases "do not follow one another in a set order" (p.115). Rather, he suggested that "each step ... does something to perfect the formation of a suggestion and promote its change into a leading idea or ... hypothesis" (p.115). Here, Dewey seemed to be referring to transformation, rather than linear development. His apparently
interchangeable use of the terms *steps*, *phases* and *aspects* adds to the confusion about the nature, and even the existence, of this sequence.

Likewise, Dewey's seemingly contradictory references to the need for "a firm basis of evidence and rationality" (p.9) and the importance of intuitive leaps which "go beyond what is given and already established" and proceed by "anticipation, supposition, conjecture, imagination" (p.104) highlight the difficulties of conceptualising and articulating the problematic and complex phenomena of reflection. He seemed to have some appreciation of the role of intuitive processes in reflection, but difficulty in resolving the relationship between the analytical and the intuitive. Although he did not appear to reach a resolution in his 1933 volume, it might be argued that he was developing some understanding of reflection as a holistic process.

Moreover, Dewey's assertion that reflective thinking originates from a "state of doubt, hesitation, perplexity, mental confusion" (p.12) suggests that he may have been aware that reflection might also involve emotional aspects. His analogy of a traveller coming to a fork in an unknown and unsign-posted road being "brought to a standstill of hesitation and suspense" (p.13), for example, could indicate that he saw discomfort or inner turmoil playing a role in prompting reflective thinking. His emphasis on the importance of openmindedness; willingness to throw oneself wholeheartedly into the situation; capacity to withstand further uncertainty and ambiguity; and desire and enthusiasm for new points of view and ideas could further suggest some awareness of the affective aspects of reflection.

Dewey's apparent awareness of affective aspects is at odds with what might be considered traditional Western perspectives which tend to see emotions as unwelcome interference in the analytical process (White, 1993). Again, this suggests that Dewey was not so tied to Western views that his orientation to reflection was simply one of rational thought. He did not, however, appear to consider the possibility, more typically associated with Eastern perspectives (Chung-Ying Cheng, 1991), that harmony rather than turmoil might be a foundation for reflection.

Aspects of Dewey's conceptualisation of reflection have been adopted widely but selectively in the contemporary teacher education literature. His notion of reflective thought as purposeful, sequential ongoing inquiry involving looking
back to prior experiences for guidance in enhancing understanding and solving problems of the present, for example, is cited frequently. In contrast, what this thesis interprets as his tentative references to the role of emotion and intuition in reflection (examples of which are outlined above), are mostly ignored. Indeed, as Valli (1990) points out, emotion and intuition are missing dimensions in many contemporary discussions about reflection.

Generally, the selective nature of their adoption of Dewey's work is not acknowledged by those who have incorporated his ideas (see, for example, Loughran, 1996). Possible explanations include a lack of familiarity with Dewey's volume as a whole as opposed to familiarity with widely quoted sections; a failure to recognise his struggle to integrate analytical, intuitive and emotional aspects of reflection; or if this struggle is recognised, a disinclination to explore the implications of acknowledging the contribution to reflection of aspects such as emotion and intuition. In other circumstances, the most feasible explanation for this selective adoption of Dewey's ideas might be that judicious selection had followed extensive critique of his work. This explanation seems unconvincing, though, given the surprising lack of critique of Dewey's conceptualisation of reflective thinking in the literature about reflection. Perhaps Dewey's well deserved reputation as an outstanding educational philosopher has discouraged critical comment. This is unfortunate for, to some extent, it seems to have led to ill informed appropriation of his ideas.

The few criticisms of Dewey's notion of reflective thinking include concerns that he ignored the interactive and social nature of reflection (Cinnamonod & Zimpher, 1990) and overemphasised its problem solving (Hatton & Smith, 1995) and analytical (LaBoskey, 1993; Yinger, 1990) aspects. While the first two concerns are difficult to dispute, in some cases the last might indicate a misinterpretation, rather than a weakness, of Dewey's work. It is possible, for example, that Yinger, like most commentators, overlooks Dewey's struggle to understand reflective thinking as more than rational thought (Goodman, 1991). Given Dewey's somewhat ambiguous description of reflective thought, however, such misinterpretations are understandable. Indeed, Farra (1988) suggests reflective / intuitive thinking is a more illuminating and appropriate term for Dewey's notion of reflective thinking.
Farra's (1988) suggestion is interesting but problematic in that it appears to overlook what many writers (e.g., Holman, 1994; Fuller, 1990) claim is the unmediated nature of intuition. They contend that intuition involves direct understanding unfiltered through the processes of the conscious mind. From this perspective, the term *intuitive thinking* would be an oxymoron. At best, it could be argued, the manner in which Farra links intuition and thinking suggests a narrow view of intuitive understanding. Overall, though, Farra makes a valuable contribution to the literature because, by highlighting Dewey's attempts to acknowledge and understand the role of intuition in reflection, he helps to counter misinterpretations of Dewey's work.

Similarly, MacKinnon & Erickson (1992) are concerned about possible misinterpretation of Dewey's work, especially his assertion that reflective thinking involves looking back. His notion of *deliberation* about experience and practice, they claim, is often misconstrued to mean *reconstruction* of experience and practice. They argue that while Dewey advocated "broadening one's range of attention to a particular detail" in a situation (MacKinnon & Erickson, p.198), this is quite different from reconstructing a situation which may involve significant change in one's perception of the nature of that situation. Like Schon (1992), they contend that Dewey was not a constructivist because he saw reflective thought as deliberating among pre-existing alternatives. Thus, they assert that it is misleading to impose constructivist interpretations on his work. Although this argument is debatable (Miller, 1990), it further emphasises the potential for misinterpretation of Dewey's work.

Indeed, given the extent of the literature about reflection and the numerous references to Dewey, it is disappointing to find so few writers attempting to critique or extend his work. Rather, there appears an overwhelming tendency to overlook what this thesis would contend was his apparent confusion about the interplay of analytical, intuitive and emotional processes in reflective thinking and to accept the commonly held assumption that he equated reflective thought with rational thought (Goodman, 1991). It could be argued that this typically narrow interpretation of Dewey's work has contributed to unnecessarily limited conceptualisations of reflection.

Despite substantial shifts in epistemological and ontological perspectives since Dewey, his notion of reflective thinking remains influential. Schon
(1983; 1987; 1992), for example, acknowledges that his work owes a great deal to Dewey, although his orientation to reflection differs significantly in several respects.

**REFLECTION-IN-ACTION: SCHON**

Like Dewey, Schon (1983; 1987; 1992) sees reflection primarily as an ongoing problem solving process. To Schon, however, problem solving is a process of constructing personal meaning rather than a process of deciding upon which of the uncontestable facts are most relevant to a particular problem. He contends that problem solving begins by framing the problem, or selecting what will be attended to and organising those elements coherently. Moreover, he asserts that individuals recognise and frame problems differently according to their personal perspectives. Because problems are frequently complex, unique and uncertain and often involve conflicting elements and values, they may be insolvable solely through the application of rules. For this reason, he argues, problem solving typically requires improvisation.

Improvisation involves responding spontaneously to a situation as it unfolds. As Schon explains, "the situation talks back, the practitioner listens, and as he appreciates what he hears, he reframes the situation once again (1983, pp.131-132). He uses the analogy of musicians to elaborate this notion of improvisation, noting that:

> When good jazz musicians improvise together they also manifest 'a feel for' their material and they make on-the-spot-adjustments to the sounds they hear. Listening to one another, they feel where the music is going and adjust their playing accordingly. (1983,p.55)


First, reflection-in-action occurs during the problem solving event or experience, rather than after. As such, it differs from Dewey's concept of reflective action which Schon (1992, p.125) describes as "a stop-and-think" or "a pause during which we think back on what we have done, reasoning about it verbally" which "momentarily interrupts action". In this sense, Dewey's reflective action can be seen as a precursor to Schon's reflection-on-action. In contrast, reflection-in-action is embedded within the action itself. Second, reflection-in-action may involve intuitive, rather than systematic response. This intuitive response is part of what Schon calls professional artistry, or the
ability to construct coherence from incoherency "through a web of moves, discovered consequences, implications, appreciations, and further moves" (Schon, 1983, p.131). Artistry entails new ways of seeing, hearing and responding which cannot necessarily be verbalised and, as Goodfellow (1995) highlights, underpins much of the work of early childhood educators.

Schon's orientation to reflection is important because it extends beyond the confines of the analytical tradition (Tremmel, 1993). In particular, it can be argued that he goes considerably further than Dewey in breaking down what many regard as the traditional Western dichotomy between thought and action (Smith, 1996; Wonder & Blake, 1992). He also introduces a language for discussing the non-logical aspects of reflection (Munby & Russell, 1989; Erickson, 1988). Furthermore, by highlighting the interaction of individual and situation, he provides an alternative to the subject-object dichotomy also commonly seen to underpin traditional Western thought (Heshusius, 1994).

Claims that Schon's work has not really advanced the work of Dewey (Smyth, 1992; Munby & Russell, 1989), therefore, appear unfounded. Indeed, in Munby & Russell's case, such claims seem inconsistent in light of their acknowledgment of Schon's contribution to the language of reflection. Their claim is even more surprising given that their work on metaphorical understanding (Russell & Munby, 1991; 1992) is based on (and extends) Schon's notion of framing.

Nevertheless, it can be argued that Schon's conceptualisation of reflection, requires refinement. Like Eraut (1995) and Bengtsson (1995), many contend that the dimension of time during which different types of reflection takes place needs clarification. It has been claimed that the apparent inconsistencies in his use of terminology viz a viz reflection-in-action and reflection-on-action suggest some confusion concerning the time variable (see Eraut [1995] for a more extensive discussion). Indeed, Eraut asserts that much of Schon's work is marred by inconsistencies in his arguments and the limited range of his examples.

Eraut argues convincingly, from an analytical perspective. Like many of Schon's critics, however, he seems resistant to Schon's invitation to distance himself from that perspective and unprepared to consider an alternative perspective (Tremmel, 1993). As Tremmel points out, "it does no disservice to
Schon to simply admit that he does, in fact, fail the tests of the technical rational paradigm” (p.436). Interestingly, Eraut uses his critique to present his own theory of time in professional practice and his criticisms of Schon’s work strengthen the case for his own theory. While well argued, in many respects they appear unduly harsh.

Indeed Schon’s work, unlike Dewey’s, has been criticised extensively. Other criticisms include: his lack of attention to the content of reflection (Gore & Zeichner, 1991) and the socio-political context in which reflection takes place (Martinez, 1990); his equating reflection with problem solving only (Smith & Hatton, 1992); the perpetuation of unhelpful dichotomies, namely the technical rationality / professional artistry dichotomy (Eraut, 1995; Shulman, 1988); the questionable relevance of his work for teachers (Eraut, 1995; Court, 1988; Gilliss, 1988); the lack of empirical evidence to support his claims concerning reflection-in-action (Eraut, 1995; Munby & Russell, 1989; Erickson, 1988); and his failure to resolve Meno’s epistemological paradox (Gilroy, 1993).

It is beyond the scope of this chapter to explore these criticisms in depth. In Schon’s defence, however, it seems reasonable to argue (in response to Gore & Zeichner, 1991; Martinez, 1990; and Smith & Hatton, 1992), that although Schon’s orientation to reflection is not all encompassing, neither are any of the other orientations overviewed in this chapter. Each orientation merely highlights a facet of reflection. Indeed, the complexity of reflection may be beyond the ability of any one orientation to fully portray its nature. As noted previously, the failure of much of the literature about reflection to fully appreciate this complexity is an underlying theme of this thesis.

Similarly, Schon might respond to Eraut (1995), Shulman (1988), Court (1988), and Gilliss (1988) by pointing out that philosophical beliefs about the nature of teaching, learning and knowledge shape responses to conceptualisations of reflection. Differences in conceptualisations of teaching may explain disagreement about conceptualisations of reflection, but do not in themselves constitute valid criticism. Furthermore, the lack of empirical evidence (Eraut, 1995; Munby & Russell, 1989) may say more about the inadequacies of current research methodology than about Schon’s notion of reflection-in-action. Finally, Gilroy’s (1993) implication that Schon’s work lacks credibility because it fails to solve Meno’s paradox supports Tremmel’s
(1993) comment concerning unwillingness to consider alternative epistemologies.

Despite its flaws, which as the preceding discussion indicates, seem overly magnified by many of his critics, Schon's work appears to make a significant contribution to the literature. In particular, it offers an alternative to primarily analytical conceptualisations of reflection. Yet it seems an alternative which requires further development and refinement. Possible directions for future development are discussed in Chapter Three. Meanwhile, the discussion returns to conceptualisations of reflection based on analytical thought.

LEVELS OF REFLECTION: VAN MANEN

Van Manen (1977) draws on Habermas' (1973) work to identify three different epistemologies - the positivist, the hermeneutic-phenomenological and the critical - which he links to what he suggests are three levels of reflection. He refers to these levels as technical, practical and critical, with technical being the lowest level, and critical the highest level. His use of the term "levels of reflectivity of deliberative rationality" (p.226) suggests that he assumes that all reflection is, primarily, a process of analytical thought. As such, the levels are differentiated by the focus, rather than the process, of reflection.

Technical reflection is based on the belief that for any given problematic situation there is a clearly defined solution and that this solution will be generic to all contexts (Schon, 1983; 1987; Louden, 1992). Its goal is the application of knowledge to achieve the expected solution. In other words, "the concern is with the efficiency and effectiveness of the means used to attain the ends, which themselves remain unexamined" (Gore & Zeichner, 1991, p.122). Cuickshank's reflective teaching, outlined later in this chapter, graphically illustrates a technical approach to reflection (Wellington & Austin, 1996; Smith & Hatton, 1992) Richardson, 1988).

In contrast, practical reflection is grounded in the interpretation of personal circumstances and specific contexts. It involves "analysing and clarifying individual and cultural experiences, meanings, perceptions, assumptions, prejudgments and suppositions, for the purpose of orientating practical actions" (Van Manen, p.226). The particular needs of each situation must be interpreted when setting goals and deciding upon alternative courses of action. It could be argued that Boud, Keogh & Walker's (1985)
conceptualisation of reflection, discussed later in the chapter, constitutes a form of practical reflection.

Critical reflection differs from technical and practical reflection in that it moves beyond the individual and the immediate context to consider the broader social, cultural, political, economic and historical contexts. Unlike the supposedly lower levels of reflection, it is concerned with moral and ethical issues such as justice, equality and freedom which it regards as the most appropriate foundation for educational decisions. Critical reflection, which provides the basis for the work of Smyth (1986;1989;1992) and Zeichner and his associates (1987;1991) is explored in more depth later in this chapter.

To many commentators (e.g., Brooker & O'Donoghue, 1992; Goodman, 1991; Gore & Zeichner, 1991), Van Manen's strength is his focus on the content of reflection. Unlike Dewey (1933) and Schon (1983; 1987), Van Manen provides some guidance about issues on which teachers and student teachers might reflect (Gore & Zeichner, 1991). Without guidance, the impression can be given that reflection is inherently valuable and that any action arising from reflection is necessarily valid or worthwhile (LaBoskey, 1994; Gore & Zeichner, 1991). The assumption that reflection is valuable primarily as a precursor to action is rarely questioned. Again, this indicates the dominance of analytical perspectives in the literature about reflection.

Concerns about Van Manen's work focus on the hierarchical nature of the levels of reflection. To Gore & Zeichner (1991), the hierarchy mistakenly implies a developmental progression in which "technical and practical reflection are eventually transcended and critical reflection prevails" (p.122). Like Hatton and Smith (1995), Brookfield (1995), LaBoskey (1993) and others, they express concerns that undue emphasis on critical reflection might devalue technical reflection, which they see as also important for student teachers' development.

Not mentioned in the literature is the concern that Van Manen, by equating levels of reflection with epistemological perspectives and then ranking these levels, in effect, ranks the worth of epistemological perspectives. It could be argued that this is an inappropriately judgmental response to epistemological diversity. Indeed, as previously discussed, an underlying tenet of this thesis is
that greater appreciation of this diversity is likely to enhance understanding of reflection.

Van Manen's later work (1991; 1995) indicates a considerable movement away from his earlier conceptualisation of reflection as necessarily analytical thought. He emphasises, for example, the importance of *pedagogical tact* which involves a considerable measure of sensitivity and intuitiveness. Moreover, he comes close to conceding that pedagogical tact is a mode of reflection, albeit not one that involves "separate stages in a sequential process" which characterise analytical thought (1995, p.44). In this sense, pedagogical tact has much in common with Schon's notion of professional artistry. There is little reference in the literature to Van Manen's more recent work, though, which suggests that his apparent movement away from a conceptualisation of reflection as necessarily analytical thought may have gone largely unnoticed.

Consequently, the following discussion concentrates on his levels of reflection with each of the next three orientations illustrating one of these levels. The first, Cruickshank's reflective teaching, focuses on technical reflection.

**REFLECTIVE TEACHING: CRUICKSHANK**

Cruickshank (1987) uses the term *reflective teaching* to describe a specific approach to practice teaching based on controlled, content-free micro-teaching lessons. He claims that reflective teaching helps student teachers to "be made more thoughtful and wiser about their teaching" (p.13) by providing opportunities for analytical and objective consideration of their teaching. As reflective teaching focuses on assisting student teachers to develop specific skills and techniques, his definition of wisdom is presumably very narrow.

Many commentators criticise Cruickshank's notion of reflective teaching for its restricted focus (see LaBoskey, 1994; Adler, 1991; Smyth, 1989; Gore, 1987). Those who espouse the merits of critical reflection are among Cruickshank's harshest critics. As Gore (1987) argues, "Cruickshank essentially restricts the focus of reflection to ... methods for achieving prespecified goals, and in doing so risks these means becoming ends in themselves" (p.33). She describes his approach as one of technocratic rationality and claims that its
emphasis on questions of "How to do it?" rather than "Why do it?" or "Where are we going?" hinders, rather than promotes, reflection.

Some, though, suggest that such criticisms are unnecessarily harsh. As Killen (1989) points out, Cruickshank did not intend reflective teaching to be a vehicle for consideration of the political, social and cultural issues underlying teaching. Instead, he aimed to help student teachers develop an understanding of the complexities of classroom interactions. For this reason, Killen asserts, reflective teaching succeeds in what it sets out to do. Furthermore, he argues that while proponents of critical reflection adopt a different approach to reflection, there is no evidence to suggest that their approach produces better teachers. He concludes that "it seems more appropriate to simply acknowledge that each approach has merits and limitations" (p.50).

Although Killen’s contention that philosophical differences, alone, do not constitute valid grounds for criticism appears reasonable, it is weakened by the context in which he argues. His apparent support for Cruickshank’s claim that the complexity of teaching can be understood in isolation from the complexity arising from the particular context and cultural influences on that context seems, at best, naive. It could be argued that for philosophical positions to be taken seriously, they must demonstrate some understanding of the complexity of the issues with which they are concerned. From this perspective, Cruickshank’s notion of reflective teaching appears to have less to contribute to understanding of reflection than the other orientations overviewed in this chapter.

In contrast to reflective teaching, which illustrates Van Manen’s notion of technical reflection, Boud et al.’s (1985) orientation is similar to Van Manen’s practical reflection. Like Van Manen, they focus on the interpretation of experience, but unlike Van Manen, emphasise the process, rather than the content, of this interpretation.

MAKING SENSE OF EXPERIENCE: BOUD, KEOGH & WALKER
To Boud et al. (1985), reflection is "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" (p.19). They argue that the complexity of this process makes a precise explanation impossible,
but suggest that a number of stages are involved. These include returning to the experience, attending to feelings, and re-evaluating the experience. This view of reflection as an active, deliberate and purposeful process of learning from experience owes much to Dewey. Similarly, their emphasis on the striving for connections, synthesis and meaning which underpins this process of reconstructing experience and results in changed perspectives and behaviour has much in common with Schon's notions of reframing and reflection-on-action.

Mclean's (1994) overview of conceptualisations of reflection underpinning Australian teacher education programs suggests that Boud et al.'s orientation is highly influential. Thus, the paucity of published critique of their work is surprising. Boud & Walker (1992), themselves though, note some dissatisfaction with their earlier work, commenting that "while we were satisfied that our first approximation had captured something important, there remained too many loose ends and matters which we believed needed further development" (p.165). Their subsequent revision included more emphasis on what they saw as chronological stages of reflection. In their earlier version, they indicated that returning to the experience was the beginning of the reflective process. Their later version, though, included two prior stages - preparing for reflection and reflection-in-action, in the sense that Schon uses this term, during the experience itself.

Interestingly, the language which Boud & Walker use to describe their revised version seems somewhat inconsistent with their greater emphasis on what they consider the temporal nature of reflection. In their earlier version they referred explicitly to stages of reflection. In their later version they substitute instead the term clusters of reflective activity. As they make no mention of this softening of terminology, it is unclear whether this change was inadvertent, or intended to convey growing appreciation of the complexity of reflection. This apparent inconsistency, however, seems to suggest some confusion on their behalf.

In addition, it could be argued that Boud & Walker's revised model retains a number of limitations evident in their previous version. First, like their earlier model, it implies that reflection is a cyclical but repetitive process that fails to build upon itself. A spiral model, on the other hand, would imply a cyclical but
developmental process, which seems more appropriate to their orientation to reflection as personal and professional growth.

Second, contrary to their recommendation in their earlier work, they do not explore further the contribution of emotion to reflection. While they were among the first to emphasise its importance, they fail to explain how emotion contributes to reflection, other than to suggest that "positive feelings ... can provide us with the impetus to persist in what might be very challenging situations" and "help us see events more sharply" (p.29) while "negative feelings ... can form major barriers" (p.11). Their later revision does not advance this somewhat limited understanding of the role of emotion (Michelson, 1996).

Third, they fail to address the dichotomy between intellectual and affective activities which detracted from their previous work. Seemingly equating intellectual with thinking and affective with emotion, they overlook the possibility that both may be inextricably linked and unable to be disentangled meaningfully (Duffy & Duffy, 1994; Dunlop, 1984). Although in some ways their model appears to acknowledge the complexity of reflection, this continuing dichotomy may limit their understanding of this complexity.

Finally, their later version retains a strong emphasis on reflection as making sense of experience. They acknowledge that their model could be criticised for placing too much emphasis on the personal and for its lack of reference to the socio-cultural-political context, which they claim was an oversight. Unlike most advocates of a narrative orientation, they appear apologetic about this emphasis and contend that a critical perspective could be readily incorporated into future revisions. Proponents of critical reflection (e.g., Smyth, 1992; Zeichner & Tabachnick, 1991), though, may disagree for they see reflection as an inherently political and collective, rather than personal, process.

**CRITICAL REFLECTION**

Critical reflection is based on a belief in the collective construction of social practices, concern for their impact on equity and social justice, and commitment to eliminating inequalities and injustices (Zeichner & Tabachnick, 1991; Smyth, 1989). Extending beyond traditional educational concerns, critical reflection involves questioning the broader structures of society and
challenging the status quo (Wellington & Austin, 1996; Adler, 1991). Teaching is seen as a political process taking place in a political context (Smyth, 1989; 1992). Fundamental questions underlying critical reflection include "Whose interests are being served?" (Zeichner, 1995; Smyth, 1986) and "In what ways do educational institutions replicate the status quo and how might they work to overcome social and cultural oppression?" (Wellington & Austin, 1996).

Yet, as Smyth (1989) points out, "the idea that teaching is a political process serving certain interests in demonstrable ways while actively excluding and denying others is not a notion that has general acceptance either among teachers or the wider community" (p.4). Proponents of critical reflection suggest that this view, in itself, is an outcome of a political agenda which has encouraged teachers, both inservice and preservice, to see themselves involved in an apolitical process. They argue that teachers must overcome this naivety and learn to question the images and purposes of teaching perpetuated by policy makers (Smyth, 1992). Furthermore, they contest that an emphasis on reflection on personal experience is misleading and counterproductive as it focuses concern on self rather than others and reinforces conservative political attitudes (Buchmann & Floden, 1993). They suggest that it should be promoted as a communal rather than an individual process, arguing that the empowerment of individual teachers is insufficient to achieve institutional, social and political change (Zeichner & Tabachnick, 1991).

While some proponents of a personal orientation to reflection appear to overlook the critical aspects of reflection - as Boud & Walker (1992) acknowledge about their earlier work - others contend that personal transformation is more powerful than the political transformation advocated by critical theorists. Arguing from an ecological and transformational rather than a dialectical perspective, they claim that social problems are more likely to be overcome through personal than political liberation (Wellington & Austin, 1996). Moffett (1994), for example, asserts that the self understanding and inner strength arising from the integration of personal, professional and spiritual growth enhances the individual's ability to contribute to the well being of society as a whole. He argues that because the individual mind is but part of a complex and interconnected universal mind, the attainment of knowledge, understanding and harmony through the development of self will
flow through to the universal, and thus benefit society. As Moffett acknowledges, from their materialist perspective, critical theorists may contest this view as irresponsible and narcissistic. Yet they appear to overlook that from a holistic or spiritual perspective, the individual and collective are one. Indeed, this holistic perspective underpinned Confucianism, which is widely credited with promoting a just and harmonious society (Arcodia, 1994).

Given the extensive critique of many other orientations to reflection, the lack of debate about critical reflection is surprising. Pertinent questions for such a debate might include whether the tendency of some critical theorists to dismiss other orientations to reflection as naive may hint at political pedantry, as Moffett (1994) implies, or whether the rhetoric of critical reflection is ultimately exclusionist (Brookfield, 1995). Are critical theorists, in fact, pursuing an agenda as equally rigid as the political agendas they eschew? What if one concludes, after sustained reflection, that calls for social equity merely constitute a particular socio-political or cultural bias, or that equity is not a viable or worthwhile goal? At a more prosaic level, is it possible or desirable to focus only on critical reflection, to the exclusion of technical or practical reflection? These questions appear to warrant discussion for they suggest that conceptualisations of reflection are informed by ideological as well as epistemological beliefs.

In many respects the remaining two orientations to reflection to be reviewed in this chapter represent the antithesis of critical reflection. That is, they tend to focus specifically on self development rather than social and political reform (although this may be an eventual outcome) and to be individual rather than collective in nature (Wellington & Austin, 1996). The discussion turns first to narrative reflection.

**NARRATIVE**

The narrative orientation to reflection emphasises the importance of voice and story in inquiry (Elbaz-Luwisch, 1997; Beattie, 1995a; Clandinin, 1992; Richert, 1992; Sparks-Langer, 1992). Proponents see voice as "an instrument of self consciousness that allows teachers to examine their beliefs and experiences" (Richert, p.190). Similarly, story or narrative is seen as a medium which reveals "the unities, continuities and discontinuities, images and rhythms of our lives" (Clandinin, p.124). By talking or writing about "what
they do, feel, or think, teachers raise to a level of consciousness the complex matters of their own work" (Richert, p.190). Thus, from a narrative perspective, reflection entails finding one's voice and constructing one's personal narrative about "what it means to be a teacher" (Goodman, 1992, p.177). As such, reflection "entails a personal search, a search for meaning" (Hultgren, 1987 p.30).

Although the narrative orientation to reflection has some similarities to feminist theory in that both emphasise the centrality of voice, (McEwan, 1997; Goodman, 1992; Richert, 1992), typically the former is seen as essentially constructivist rather than critical (McEwan, 1997; Munby & Russell, 1993). As such, it has been criticised for failing to reach beyond the individual (Buchmann, 1993b; Beyer, 1991; Bullough & Gitlin, 1989). At worst, argue Bullough & Gitlin (1989), narrative "becomes therapy, a form of disconnected but interesting indwelling" (p.287); at best, they claim, it simply maintains the status quo, while doing nothing to confront inequality and injustice. As McEwan (1997, p.87) elaborates:

*Critical theorists argue that narratives are subtly persuasive: functioning coercively as a conservative social force to bind belief and action to dominant power structures and established institutional forms ... Stories aim to offer some legitimacy for our present actions and beliefs. They strengthen our prejudices and conceal the weaknesses in our unexamined beliefs.*

Rather surprisingly, proponents of a narrative orientation to reflection, in general, seem rarely to have responded to such criticisms. They might do so, however, from a number of perspectives.

First, they might claim that narrative reflection is ideologically different from critical reflection. Emphasising relationships and collaboration (Beattie, 1995b; Clandinin, 1992) and based on an ethic of care (Noddings, 1986), in some ways it is diametrically opposed to critical reflection which emphasises confrontation, conflict and struggle. Alternatively, they might concur with Goodson (1997) that reflection on personal issues can be a precursor to socially critical reflection. Citing Graham (1987), Goodson points out that "stories are pre-eminently ways of relating individuals and events to social contexts, ways of weaving personal experiences into their social fabric" (p.115). In this way, stories can provide a starting point for enhancing understandings of social constructions.
The focus of much of the literature about narrative reflection and inquiry, however, suggests that proponents might be more likely to emphasise the emancipatory power of stories. They might adopt the stance referred to by McEwan (1997, p.88) that narratives offer "a way of giving expression to personal experience" and in doing so "function to free our thought from the oppressive grasp of conformity, and provide us with a means of expressing new meanings". They might further emphasise the emancipatory power of stories by arguing that stories provide a "non-hierarchical way of ordering experience" (McEwan, p.89) which can be less coercive than alternative hierarchically-structured discourses such as argument.

Proponents of a narrative orientation to reflection could develop the notion of narrative as emancipatory rather than coercive even further by emphasising the role of the unconscious mind in writing. As explained in later chapters, advocates of freewriting (e.g., Brand & Graves, 1994; Elbow, 1994; Holman, 1994; Macrorie, 1985; Brande, 1934) see it as a conduit between the unconscious and the conscious. In other words, the unconscious intuitively perceives connections which the conscious mind then structures. As such, they argue that freewriting enables the unconscious and the conscious to work together in synergy. Most proponents of a narrative orientation to reflection, though, appear to overlook the role of the unconscious.

Indeed, as this chapter has shown, most orientations, as commonly interpreted, emphasise the role of the conscious and the analytical (Korthagen, 1993; Tremmel, 1993; Houston and Clift, 1990; Yinger, 1990). The following orientation to reflection as contemplation provides some counterbalance to these prevailing conceptualisations.

CONTEMPLATION

Although several commentators criticise the constraints of Western notions of reflection and suggest turning to other traditions for enrichment, few offer guidance as to what alternative conceptualisations might look like. Yinger (1990) and Tremmel (1993), who explore the role of contemplation in reflection, are among the exceptions. Each turns to an Eastern tradition for inspiration, with Yinger drawing on Taoist principles and Tremmel on Zen Buddhism.
From most Western perspectives, Yinger argues, reflection is regarded as the final stage in an analytical process of planning, implementation and reflection. Eschewing this sequence he proposes a holistic process of *improvisation, contemplation, and preparation*. He describes improvisation as skilled, sensitive and complex action which is "highly patterned", "intelligently composed", and "continually responsive" (pp.85-86). It draws upon and, where necessary, reconfigures patterns of past action to meet present exigencies. In some ways similar to Schon's (1983; 1987) reflection-in-action, it owes much to intuitive feel and artistry. Yet improvisation is inward looking, whereas reflection-in-action has an outward focus, namely the solving of a specific problem.

Interestingly, Yinger rejects the term *reflection* because of his concerns about its Western connotations of sharply focused deliberation, logical analysis and problem solving. Instead, he adopts the term *contemplation* to describe a process of the mind roaming freely as it searches for "order, balance, harmony and symmetry" (pp.87-88). He contends that during this process, the mind is not detached from thought and feeling, rather "the contemplative mind ... uses the heat of feelings to warm the intellect" (p.87).

A similar emphasis on freedom and movement is evident in his notion of preparation. While planning seeks to control uncertainty by imposing "a framework to constrain possibility" (p.88), preparation recognises uncertainty as an integral aspect of professional practice. It involves responding to uncertainty, not by denial, but by becoming receptive to infinite possibilities.

Together, improvisation, contemplation and preparation lead to "holistic comprehension" (Yinger, p.85), an understanding in some ways reminiscent of Eastern notions of enlightenment, explained more fully in Chapter Three. Indeed, Yinger uses a traditional Taoist story to illustrate how planning gives way to instinct in the presence of contemplation and receptivity. In doing so, he presents an alternative to what many see as the traditional Western preoccupation with action (Wonder & Blake, 1992) and concentrates instead on immersion in the experience.

In this sense, Yinger provides a starting point for exploration beyond Western cultural traditions. Yet he does not proceed far with that investigation, for while he alludes to Eastern notions of reflection, he does not consider these
in any depth. Furthermore, some of his claims suggest either a possible misinterpretation of Eastern perspectives, or a deliberate but unspoken departure from them. He sees contemplation as a process of the mind "roaming freely", for example, whereas typically, Eastern traditions see it as a process of stilling or focusing the mind (Shaffi, 1988). Similarly, he claims that feelings and thoughts are involved in contemplation, whereas from most Eastern perspectives, contemplation commonly involves transcending feelings and thoughts. Clarification about whether he intended to base his notion of contemplation on Eastern understandings of reflection or whether these were only incidental would be helpful for those interested in extending his work.

In comparison, Tremmel (1993) adheres more closely to traditional Eastern perspectives. In doing so, he considerably advances Yinger’s tentative exploration of the possible contribution of Eastern traditions to Western understandings of reflection. Also interested in the notion of contemplation as an aspect of reflection, he focuses on the Zen Buddhist tradition of mindfulness. He explains that "mindfulness in simplest terms means to pay attention to 'right here, right now' and to invest the present moment with full awareness and concentration" (p.443). When the mind wanders, as is its wont, it must be returned to awareness of the present. To be mindful means giving up "mindless absorption in the endless parade of thoughts through the mind" (p.444). To be mindful, one must live in the present and pay attention to the processes of one’s mind, and to oneself in one’s surroundings. Through mindfulness one may come to a direct and immediate understanding unattainable through analytical thought.

According to Tremmel, attention to the processes of one's mind, and to oneself in one's surroundings is lacking in most Western notions of reflection. Rather than awareness of mind, he argues, they tend to emphasise use of the mind. He contends that from most Western perspectives, reflection typically involves using the mind for a specific purpose, such as analysis, evaluation, decision making or problem solving. From these perspectives, reflection must have a practical outcome to be valued. Yet, as Tremmel points out, undue emphasis on the outcomes of reflection, may divert attention from awareness of the present to preoccupation with the future. In other words, an overemphasis on outcomes may discourage the development of mindfulness.
While there seems little reason to argue with Tremmel's interpretation of the Zen Buddhist tradition of mindfulness, questions inevitably arise as to its usefulness in enhancing understanding of reflection within a Western context. As explained in more depth in Chapter Three, many Western traditions highly value analytical thought as a means of arriving at practical solutions. Is there any place, therefore, for contemplation or mindfulness? Are there any links between contemplation and practice? Even if one were to accept that contemplation was of value, how feasible would it be to pursue in Western educational contexts? Finally, as critics might argue, could Tremmel's (and Yinger's) interest in pursuing these alternative perspectives constitute an example of uncritical enthusiasm for Eastern ideas? These questions are explored more fully later in this thesis.

Interestingly, apart from notable exceptions such as MacKinnon (1996) and Korthagen (1993) there has been relatively little response to Tremmel's and Yinger's alternative conceptualisations of reflection, especially by researchers attempting to identify evidence of reflection. Perhaps the lack of widespread debate concerning their contributions suggests that their ideas have been judged by many as essentially irrelevant. If so, this could be interpreted as further confirmation of the reluctance to venture beyond Western notions of reflection. Alternatively, lack of debate might simply indicate awareness of the methodological difficulties of investigating these orientations to reflection, as the decisions taken in several studies reviewed in the following chapter seem to imply.

Unfortunately, reluctance to venture beyond the accustomed, compounded by a pragmatic response to methodological challenges, could well contribute to what appears to be an impasse concerning contemporary understandings of reflection. As Tremmel points out, "we are caught in a circle of our own mind's making" (p.441). In other words, despite the diversity of orientations to reflection, our understanding of reflection remains essentially embedded in analytical Western traditions and continues to be shaped by those traditions. One way to enhance our current understanding may be to "try to gain a perspective from outside the ... circle - a perspective born of an entirely different epistemological tradition" (Tremmel, p.441). This challenge is taken up in Chapter Three.
CONCLUDING COMMENTS

The present chapter has highlighted the diversity of orientations to reflection cited in the contemporary teacher education literature and explained their underpinning epistemological differences. Like Michelson (1996), it concludes that as "reflection is a spatial metaphor, by definition it involves positionality and point of view. The angle of reflection ... determines ... what can be seen" (p.447). In other words, "reflection has no one definition; it is perceived in the eye of the beholder" (Sparks-Langer, 1992, p.165).

Nevertheless, it can be argued that these diverse perspectives and orientations share one commonality. As the preceding overview has shown, all incorporate the notion of reflection as a search for meaning. For this reason, henceforth in this thesis, reflection will be referred to as 'a search for meaning'. This conceptualisation recognises the diverse processes which reflection can entail, while emphasising that it is a deliberate act, undertaken with the intent of enhancing understanding.

In this thesis, understanding is interpreted as one's "inner grasp of what is at issue" (Barnett, 1994, p.99). A complex phenomenon, it is seen as a continuum which encompasses explicit, recognisable and communicable knowing (Barnett, 1994), unarticulated, tacit knowing (Polyani, 1967) and enlightenment in which the knower and known are at one (Heshusius, 1994). Meaning, on the other hand, is used to refer to understanding in context. As such, meaning involves awareness and appreciation of interconnections (Fuller, 1990; Bateson, 1979). This thesis posits that holistic processes incorporating cognitive, affective and intuitive aspects are integral to understanding and meaning.

Conceptualising reflection as a search for meaning is consistent with the argument, developed throughout this thesis, that this diversity of perspectives has the potential to enhance rather than hinder understanding of reflection. Realising this potential, however, would to seem to require a greater appreciation of the complexity of reflection than currently evident in much of the literature. In particular, heightened awareness of the epistemological differences underpinning different orientations to reflection, greater care with terminology, and commitment to making explicit the meaning attached to reflection would appear to be needed.
This chapter has also argued that no one orientation to reflection provides an all encompassing perspective and that the current tendency to rely heavily on conceptualisations of reflection as predominantly analytical thought constrains our understanding of other aspects of reflection (Korthagen, 1993; Munby & Russell; 1993; Houston & Clift, 1990; Yinger, 1990). Consequently, more awareness of "relative positionality" is required (Michelson, 1996, p.447). Thus, those who seek to identify evidence of reflection should consider such questions as "How does relative positionality determine what is and is not visible? Who is looking? Who is being looked at? Who is standing where?" (Michelson, p.447). As the following chapter shows, these questions have been asked too rarely.