CHAPTER 3

ACTION RESEARCH AND REFLECTIVE PRACTICE

3.1 Searching for change

My concern for the lack of involvement of pupils in the learning process was described in Chapter 1. The possibility of Cooperative Learning (CL) helping to motivate pupils was also discussed. It was indicated in that chapter that for the teacher to implement CL in general, and the Structural Approach in particular, into a new curriculum, considerable change in the teacher’s classroom practice is required. The notion of change is closely bound to both Action Research (AR) and Reflective Practice (RP).

This chapter will begin with an account of how the researcher came to examine AR and RP. Thereafter, influential theories of AR and RP will be reviewed to extract the views of these theorists as regards ‘change’ and the related notions of ‘reflection’, ‘professionalism’ and ‘practice’.

Twelve years ago when I began training pre-service teachers, I was introduced to the practice of AR. It was instantly recognisable to me as I had been researching and reflecting on my own practice for years: reviewing what was going on in my teaching, identifying areas where I thought there were difficulties that could be rectified and consequent attempts to improve the situation. This was followed by further reflection and more change. My actions appeared to have credibility according to my understanding of AR.

When I proposed researching CL and its possible learning outcomes, utilising AR was the logical methodology. Essentially, I wanted to help the teachers bring about change by introducing CL into their classrooms. To do this would involve
teachers examining their practices, the new curriculum and their learners in context. They would then identify the outcomes to assess the effects of the change. The next step would be to examine once again the changed situation, decide what to do about it, institute change and so go through the process again. Teachers needed to research by reflecting in and on their practice.

Later, as questions and queries surfaced, I was to discover that AR was not the straightforward process I had assumed it to be. Questions about the process of the teachers’ own action research came to the fore. Questions such as: if the teacher is the judge of what is ‘right’ for her teaching, what standards are being used to measure this? What is the function of the researcher in this process? What counts as reflection? Is AR as conducted in South Africa the same as in first world countries where these theories were formulated? And there were many more questions.

Turning to the literature for guidance, more issues surfaced. Each researcher presented his or her view of a specific facet/s or focused on different aspects of AR (Elliott, 1991). In some of the writings the focus is on the theory of research and practice (Stenhouse, 1975; Carr & Kemmis, 1986; Winter, 1989; Elliott, 1991), in others on reflection (Schön, 1987; Zeichner & Liston, 1987; Zeichner, 1996), while in yet others, teacher empowerment (Prawatt, 1991; Smythe, 1989), the procedure for the research (Kemmis & McTaggart, 1981; McNiff, 1988; Elliott, 1991) or professional practice (Hager, 1996) is foregrounded. The meaning of ‘reflection’ (Convery, 1998; Munby & Russell, 1989) is given different interpretations as is ‘practice’ (Carr, 1987b) and ‘action’ (Coulter, 2002). Some principles are emphasised rather than others, while in some instances, the same principles are interpreted differently. In addition, there is the contentious issue of the researcher as the ‘outsider’.

Elliott (1991: 52), in his concern that the term ‘action research’ was being twisted out of recognition said: “The time may have arrived for facilitators of reflective practice to stop using the term ‘action research’. I find myself trying to express
the idea which it referred to in different words.” He explained his disquiet as emanating from the relationship academics have with teachers as follows:

Rather than playing the role of theoretical handmaiden of practitioners by helping them to clarify, test, develop and disseminate the ideas which underpin their practices, academics tend to behave like terrorists.

He goes on to describe how academics alter the important ideas which underpin teachers’ practice by giving these ideas the status of “academic jargon”. These “hijacked” ideas are decontextualised and reinterpreted so that it appears that:

[I]deas like ‘educational action research’ and ‘teachers as researchers’ [. . . ] could be applied to any sort of practice in schools, regardless of teachers’ conceptions of education, knowledge, learning and teaching, and regardless of the institutional and social context of their practices. (Elliott, 1991: 14)

My concerns about AR stem firstly, from the numerous interpretations and definitions of the terms used to discuss AR and secondly, from the differences in context of the research from sophisticated first world countries of the United Kingdom, United States of America and Australia where resources are readily available, to what exists in terms of both human and physical resources in a developing country like South Africa.

Concerning resources, it is interesting to note that on a visit to the United States ten years ago, over an eight week period I observed lessons in a primary school in Columbia, South Carolina, a school that the local teachers regarded as by the local teachers as underprivileged. In comparison to privileged ex-Model C classrooms and some upmarket private school primary classrooms in South Africa, the South Carolina school was much better resourced. For example, there is no comparison between the two worlds in the number, range and quality of reading books, games, puzzles, computers, posters, charts, video equipment, science and games equipment. Noteworthy was the availability of teacher helpers in classrooms where the teacher / pupil ratio was far lower than the 40:1 (Myberg, 2004). This teacher / pupil ratio is statutory in the Intermediate Phase of the primary school
classroom in the province of Gauteng where the schools used in this study are situated.

Not only are the resources in South African schools fewer but there are also other vital areas of difference. Two of these are: language – where many teachers are not teaching in their preferred language and the language of instruction is not that of the learners – and secondly, the level and effectiveness of teacher training. Many teachers are still struggling from the deleterious effects of an apartheid education system. Teacher training, according to apartheid era practice, disallowed the development of critical thinking: this practice was reinforced through the content that was taught and the methodology that was utilised. For example, topics that might stimulate contention, such as politics, religion and sex were suppressed and methodology was strictly didactic – teacher fronted and authoritarian.

To return to my first concern, the confusion that arises from the differing terms and explanations, seen in the light of Elliott’s comments, could be the result of different academics interpreting aspects in such a way that they fit the theories they are formulating. Similarly, the focus on different aspects might emanate from what that particular academic regards as important.

Despite Noffke’s claim (1996: 306, cited in Marcel and Gaddis, 1998) that, “...action research is best thought of as a large family, one in which beliefs and relationships vary greatly”. In the initial stages of the research it was difficult to decide where the members of my research family fitted in. As the research proceeded, a niche in AR was found.

A further difficulty which Elliott identifies is the idea that educational enquiry is a form of teaching and the reverse has been lost in all the theorising. This first perception in effect sets the power relations between the teacher and the academic. Elliott then logically questions academe’s motives in attempting to control and manipulate teachers’ thinking. He concludes (1991: 14) by asking whether the
control is “in order to reproduce the central assumptions which have underpinned a contemplative academic culture detached from the practices of everyday life?”

The editors (Day, Elliott, Somek and Winter), of the 2001(9: 2) edition of *Educational Action Research*, conclude from the articles in this edition that the process of AR depends on factors “operating in particular societal and institutional contexts”. They then ask (2001: 165):

> Does anything go then with respect to action research? If there are no set rules for doing it, then surely what counts as action research is simply a matter of subjective choice. If a group of people say that what they are doing is ‘action research’, then we are bound to accept their self-definitional definitions of the enterprise?

If this is so, we can cite Carr (1989b: 85) who comments that:

> Everybody knows what action research is against. But the important and still unresolved question is what is it for?

To attempt to formulate a clearer idea about AR, a survey of the key theories of AR follows.

### 3.2 What is Action Research for?

The discussion of the main points of the AR theories of Lewin, Stenhouse, Carr and Kemmis, Elliott and Winter is set out below.

#### 3.2.1 Kurt Lewin

It is generally agreed that AR had its origins in the USA in the 1940s in the work of Kurt Lewin (Adelman, 1993; Ebutt, 1985; Bryant, 1996; Ponte, 1999). Lewin set up a research unit at the Massachusetts Institute for Technology in the post war years where he conducted research on practical situations of social conflict occurring in minority groups. Lewin (1948) was particularly concerned with research in what he termed ‘change experiment’. For these experiments, which had as their purpose the bringing about of change in a problematical situation, he proposed and developed *action research*. The action component of his work derived from his insistence on democratically guided social change and that
“remedial efforts should be introduced into a community prepared to study the results of their own social action” (1948: xiii). To attain this end, Lewin developed a cyclical model.

The process began with planning and fact finding. This laid the foundation for the development of an overall plan and the decision/s on the first step of the process. After completing the first step, the situation is reviewed as accurately and as objectively as possible. This reconnaissance involves evaluation and the review of the new situation. On the basis of these new findings the original overall plan is modified so completing the second step. The cycle is then repeated in the third step to prepare the basis for the fourth step and so on. In Lewin’s (1948: 206) words:

Rational social management, therefore, proceeds in a spiral of steps each of which is composed of a circle of planning, action, and fact-finding about the result of the action.

Ebutt (1985) draws attention to the mixed metaphor in the use of the words ‘a spiral’, ‘steps’, ‘a circle’. He contends that the metaphor that Lewin had in mind was that of a ‘spiral staircase’ but Ebutt (1985: 13) modifies this idea when he claims:

... that a more appropriate way to conceive of the process of action research is to think of it as comprising of a series of successive cycles, each incorporating the possibility for the feedback of information, within and between cycles.

As regards Lewin, the important point is that he introduced the idea of AR and that this research proceeds in a cyclical manner. It will be shown below that the different theories do not all interpret the research process in the same way.

The central goal of Lewin’s research was to bring about social change, so it is fair to say that Lewin was concerned with social science research rather than education research. After researching an issue, he wanted to introduce remediation into a situation where the community would examine the results of its own social actions. Thus outsiders would introduce change to set the cycle in motion, insiders would then investigate and reflect on their actions, and from then on, insiders
would be in charge of the process. He wanted researchers (outsiders) to help the community (insiders) to become their own researchers. Lewin died shortly after the publication of his paper on AR. He had plans to get the communities to become their own researchers:

Socially, it does not suffice that university organizations produce new scientific insight. It will be necessary to install fact-finding procedures, social eyes and ears, right into social action bodies. (Lewin, 1948: 206)

Regrettably, when he died his theory still kept apart the role of the researcher and those being researched.

The central focus of Lewin’s AR was the idea of ‘change’. He wanted change for a better society – non-racialism and non-discrimination against minority groups. After Lewin’s death in 1948, his followers continued to carry out research along the lines he had established. Soon after, criticism concerning the lack of scientific rigour in AR pushed it into the background. The rise and spread of behaviourism reinforced the use of a scientific model and this situation persisted for nearly 20 years while research conducted in the positivist paradigm held sway (Bryant, 1996).

3.2.2 Lawrence Stenhouse

Action research emerged in the United Kingdom in the 1960s. Bryant (1996) cites three major influences that led to the establishment of AR as a movement. Firstly, there was the work of the Humanities Research Council into curriculum reform, where teachers were recognised as researchers in their own classrooms. Secondly, based on his research in the Humanities Project, Stenhouse the director, produced a view of curriculum development that led to a reappraisal of AR. Lastly, the Tavistock Institute in its clinical psychology approach adopted “group processes to changing practices” (1996: 108). These developments used AR procedures that were explicitly counter to the then currently accepted views of ‘scientific’ research.
Stenhouse, a key figure in laying the foundation for the development of ‘modern’ education AR, was appointed to the task of setting up a national curriculum development project in an education climate that was dominated by an ‘objectives’ model of curriculum planning and design. In this means-end model of curriculum development, the aim was to: “relate empirically verified principles of effective teaching to the need to achieve predetermined educational goals” (Carr 1989a: 7). In this model, theory and practice are separated.

Stenhouse’s view of curriculum development was influenced by R.S. Peters’ philosophical analysis of educational aims. Peters (1977 quoted in Carr, 1989a: 6) argued that education is not an end in itself nor is it for “the sake of something extrinsic that is worthwhile” rather, “being worthwhile is part of what is meant by calling it ‘education’”. On the basis of Peters’ views, Stenhouse built a theory of curriculum development that moved away from the “technological assumptions” of the “objectives” approach. According to Carr (1989a: 7) in Stenhouse’s model

\[\text{Curriculum development is understood as a way of relating the educational values already implicit in the teaching process, to teachers’ professional obligation to improve the educational quality of their practice.}\]

Stenhouse (1975) regarded ‘curriculum development’, ‘professional development’ and the research process as closely inter-linked: they are the key aspects of the process in which the teachers are engaged to bring about change – an improvement in their practice. For Stenhouse (1975: 156), theory and practice feed into each other in a process model where the teachers become their own researchers.

\[\text{Effective curriculum development of the highest quality depends upon the capacity of teachers to take a research stance to their own teaching [. . .] It is not enough that the teachers’ work should be studied: they need to study it themselves.}\]

The essential thrust of Stenhouse’s view is that the teacher is a researcher and the teacher as researcher is the link to professional development. Moreover, research is tied to reflection.
Stenhouse also showed that teaching is a form of inquiry that is itself a form of curriculum development. In his development of the notions of ‘reflection’ and ‘professionalism’ in AR, he attempted to break down the barrier between ‘research’ and ‘practice’. He (1975: 144) encapsulates this idea in:

. . .the outstanding characteristic of the extended professional is a capacity for autonomous professional self-development through systematic self-study, through the study of the work of other teachers and through the testing of ideas by classroom research procedures.

Although Stenhouse writes of “the extended professional” who is not the average teacher, what the extended professional can do is what the average teacher can work towards and approximate very closely. By relating the idea of teacher as researcher to an analysis of professionalism, Stenhouse was able to argue that professional development required teachers to be provided with opportunities and resources to study their own practice through systematic, critical reflection and research.

Stenhouse’s view of curriculum development as a ‘process’ and the teacher as researcher, were undoubtedly a major advancement on previous views on AR. A growing awareness of the significance of his suggestions, re-established interest in the importance of AR. However, the model he proposed, is not without problems. The first and most important of these relates to his use of the concept ‘professionalism’. This concept appears to mean the development in the teacher of an awareness of whether or not s/he is doing something valuable. “What in particular, is required is a detailed analysis of the nature of the professional knowledge informing the art of the teacher” (Carr, 1989a: 7). That is, the epistemological basis of the concept of ‘professionalism’ is not explained.

The second issue revolves around Stenhouse’s (1988: 96) contention that: “[The] strength and weakness of the process model is that it rests on the quality of the teacher”. This raises questions such as: Is the process model restricted to the ‘strong teacher’? What does he mean by ‘weak teacher’? In what way will such a teacher negatively influence the procedure? Although the ‘weak’ teacher would
seem intuitively not able to mount a sustained process of self-study and the consequent action, is it not possible to instruct and support such teachers to reach some level of reflection? Stenhouse, in arguing that the teacher is the researcher of her own practice, precludes the need for the researcher and the researched being different people. Despite this problem, it will be illustrated in Chapter 7 that once the teacher understands how she can research her own practice and she is supported in her efforts, the teacher’s ability to reflect will develop.

Ebutt (1985: 5) classified Lewin’s work as “classic action research”. He terms the re-emergence of AR via Stenhouse as the bridge between classic and education action research. An account of the views of Elliott (1991), Carr and Kemmis (1986), and Winter (1989) as major representatives of education action research follows, their key points will be presented, then points of contention will be raised, and finally, further issues illustrating contrasting views will be discussed.

### 3.2.3 John Elliott

Elliott, who worked with Stenhouse on the Humanities Project, is located in the Stenhouse tradition where curriculum development is central to the conceptualisation of action research. While Stenhouse concentrated on the idea of ‘the teacher as researcher’, Elliott (1991: 24), builds on this to focus on ‘the teacher as an action researcher’.

Elliott (1991) posits two different ways of viewing how teachers reflectively develop their practices. These are: firstly, the teacher recognises a practical problem and decides to research this. On the basis of what she finds, she changes some aspect of her teaching. Here the teacher first attempts to understand the problem before making changes – “reflection initiates action” (Elliott, 1991: 21). Secondly, after recognising that there is a practical problem, the teacher changes some aspect of her teaching (1991: 23):

> [T]hen monitors its effectiveness in resolving it. Through evaluation the teacher’s initial understanding of the problem is modified and changed. The decision to adopt a change
strategy therefore precedes the development of understanding. Action initiates reflection.

Elliott (1991) argues that in the first account, inquiry and practice are separated as a theory of rational action comes into operation when the teacher selects what she wants to change. This involves standing back before the decision is made and action is taken. In the second account, the teacher acts immediately and then contemplates the situation.

When one is faced with a practical problem, it is better to take the calculated risk of getting it wrong, and adjusting one’s action strategy retrospectively, than of not doing anything about the problem until one has fully understood it. (1991: 24)

Theory and practice are not separated here. Elliott (1991) claims that the first account is what Stenhouse meant by “teacher as researcher” and the second account is his own view of “teacher as action researcher”. In the latter account, the teacher acts with partial understanding as she will not really understand the situation until she has tried out different ways.

According to Elliott (1991: 49 – 51), the fundamental aim of action research is to improve practice rather than to produce knowledge. Improving practice involves ensuring that the end values are realised in concrete forms of action. Thus reflective practice in action research “aims to improve the realization of process values”. To achieve this, ongoing reflection on the part of the practitioner is vital. This means that both process (values formulated in practice) and product (end values) must be considered.

Elliott (1991: 52) further explains the action research cycle when he states:

[it] improves practice by developing the practitioner’s capacity for discrimination and judgement in particular, complex, human situations. It unifies inquiry, the improvement of performance and the development of persons in their professional role.

In relation to the teachers’ professional role, action research develops their capacity for a form of practical understanding that enables them to “discern the right course of action when confronted with particular, complex and problematic
states of affairs”. Because in action research “theoretical understanding” is not as important as the development of “holistic appreciation of the situation as a whole”, the theory-practice divide as perceived by teachers is resolved (Elliott, 1991: 53).

Elliott’s view of the teacher as researcher was shown above to be the teacher whose action is initiated by reflection, while the teacher as education researcher is one whose “action initiates reflection”. The teacher who gives precedence to action over reflection, must still have some “stimulus” which prompts her to follow “the right course of action”. And, this course of action could be based on a wealth of experience and understanding gained from “reflecting-on-action”. It must be noted that Elliott’s ideas concerning the teacher as researcher and the teacher as action researcher anticipate that of Schön’s (1987) notions of “reflection-on-action” and “reflection-in-action”. In the discussion of Schön’s ideas below, it will be shown that reflection on-action and in-action are both necessary. The researcher contends that the theory-practice divide can be bridged if the teacher can appropriately be both teacher as researcher and teacher as action researcher.

3.2.4 Wilfred Carr and Stephen Kemmis

Carr and Kemmis (1986) espouse a critical approach to educational theory and AR is its methodological expression. They (1986: 162) define AR as:

A form of self-reflective enquiry undertaken by participants in social situations in order 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.

Carr and Kemmis (1986) construct and develop their emancipatory (critical) view of AR on the basis of a critical analysis of the similarities and differences, and the strengths and weaknesses of a positivist (natural scientific) approach and interpretive approaches to education.
Briefly, they develop their argument as follows. Firstly, Carr and Kemmis (1986: 129 – 130) formulate five criteria as essential for a theory to be acceptable as coherent educational science. These are that educational theory must:

1. reject positivist notions of rationality, objectivity and truth;
2. accept the need to employ the interpretive categories of teachers;
3. provide ways of distinguishing ideologically distorted interpretations from those that are not, it must also provide some view of how any distorted self-understanding is to be overcome;
4. it must be concerned to identify and expose those aspects of the existing social order which frustrate the pursuit of rational goals, and must be able to offer theoretical accounts which make teachers aware of how they may be eliminated or overcome;
5. recognise that educational theory is practical, in the sense that the question of its educational status will be determined by the ways in which it relates to practice.

From a careful examination of Habermas’ idea of a critical social science, Carr and Kemmis (1986) concluded that these five formal criteria fulfil the requirements of a critical social science. In this examination, it was shown that the positivist and interpretive approaches to educational research cannot be adequately justified. The positivists fail to take into account that educational problems cannot be interpreted before the research process, while the interpretivists “adopt procedures for uncovering the theories in terms of which educational practices are conducted and made intelligible” (Carr and Kemmis, 1987: 117), but the argument for the interpretivist approach ends at this point. In this view, once the problem has been interpreted, no evaluative criteria are considered by which to judge these interpretations. Thus, educational problems are identified but no attempt is made to solve them.

Carr and Kemmis (1986: 118) propose that what is required is a view that incorporates aspects of both the ‘scientific’ and ‘interpretive’ approaches so that:

. . . the only legitimate task for any educational research to pursue is to develop educational theories of educational
practice that are rooted in the concrete educational experiences and situations of practitioners and the attempt to confront and resolve the educational problems to which these experiences and situations give rise.

They then argue that from the general conception of a critical social science, a critical educational science which “has the aim of transforming education: it is directed at educational change” (Carr and Kemmis, 1986: 156) can be derived. Although the positivists aim at explanation and the interpretivists at understanding, these are only parts of transformation; they consider only the past and this is not sufficient. Transformation in the critical mode is “directed at the future and at changing reality rather than merely interpreting it” (Bleicher, 1980, cited in Carr and Kemmis, 1986: 156).

Critical educational research is thus bound up with transformation. Different modes of educational research involve different views of the relationship of theory, practice and change. Carr and Kemmis (1986: 156) show the differences as follows:

…[P]ositivism views education reform as technical; interpretive research views it as practical. A critical educational science, however, has a view of educational reform that is participatory and collaborative; it envisages a form of educational research which is considered by those involved in education themselves.

Critical educational research also involves the idea that because education is a practical value-laden activity, it is not possible that the conclusions can be neutral. While the positivists assume that objective reality can be attained by causal explanations, interpretive educational research claims that the subjective interpretations of education practitioners are made up of educational realities involving understanding, meaning and action. Although in this respect the two approaches are vastly different, in both positivism and interpretivism the researcher stands outside of the research and “social reality is described in a neutral, disinterested way” (1986: 99).
In that critical education takes into account the educational understandings and values of those involved in the research as well as the social framework in which their actions occur, critical education is research *in* education rather than research *about* education. Research *in* action, links critical education research to educational action research.

In their view, the emphasis in action research is on informed, committed action i.e., *praxis*. As only the practitioner has access to the commitments and practical theories which inform praxis, only the practitioner can study praxis (Carr & Kemmis (1986: 191). The practitioner is both committed to and in control of the improvement of practices (Carr & Kemmis, 1986, Bryant, 1996).

Carr and Kemmis (1986) argue that there are three conditions which must be present both individually and in combination for a research process to be termed action research. These are: first, the subject of the research must be a social practice; second, the research must follow the spiral of planning, acting, observing, and reflecting; there should be more that one sequence of spiralling. Third, those responsible for the practice must be involved in each of the stages of the process, gradually including others, to increase the participation and the controlling of working collaboratively.

In terms of method, Carr and Kemmis (1986: 184) adopt the Lewinian notion of a self-reflective spiral of cycles of planning, acting, observing, reflecting – then replanning, further action, further observation and further reflection. In this self-reflective spiral, reflection and action are held in dialectical tension, each informing the other through the process of planned change, monitoring, reflection and modification.

Action research deliberately explores the power and limitations of practices, understandings and situations by changing them and learning from the effects of change. The linking of reflection to action offers teachers a way to approach those aspects of the social order which frustrate rational change. In addition, action
research involves returning to the question of theory and practice, to show that self-critical communities of action researchers enact a form of social organisation in which truth is determined by the way it relates to practice.

Another important aspect of action research is that it “is also a deliberate process for emancipating practitioners from the often unseen constraints of assumptions, habit, precedent, coercion and ideology” (Carr and Kemmis, 1986: 192). Action research places transformation in the hands of those involved in action. These theorists claim that in any action research project, the practitioner will only be able to achieve some or parts of these aspects. According to what results researchers achieve, they can be classed in one of three variants of action research.

Firstly, there is technical action research – which is concerned with the relative efficiency and effectiveness of practice. It has an outsider agenda, with the purpose of sustaining the commitment and collaboration of participants for purposes of the outsider. The development of the teachers’ own practices is not considered; however, this kind of research may help and motivate teachers to develop skills to monitor their own practices.

Secondly, practical action research – this aims at the improvement of practitioners’ understandings and action but does not necessarily develop collective responsibility for participants’ practices. The view of Carr and Kemmis (1986: 203) is that the outsider enters into a cooperative relationship with the teachers, helping them to “monitor their own educational practices” in order to develop their practical judgement. The outside facilitator acts as a sounding board which adopts a Socratic role so that “practitioners may try out ideas and learn more about the reasons for their own action, as well as learning more about the process of self-reflection”.

Thirdly, in emancipatory action research, Carr and Kemmis (1986) see the practitioners as taking over this role themselves. Rather than an outsider, the group takes responsibility for the development of practice, understandings and
situations, “and sees these as socially-constructed in the interactive process of educational life” (1986: 203). According to Carr and Kemmis, essentially AR aims to improve and to involve in three areas; practice, understanding and the situation in which the practice takes place”.

Carr and Kemmis tell us ‘who’ is to carry out the research (the practitioner) and what it is ‘for’ (education improvement), the ‘how’ it will be carried out (self-reflective spiral) and that the relationship between action and research is dialectical. They have not, however, explained ‘reflection’. Bryant (1996: 112) comments that in Carr and Kemmis’ account of action research they “build on a substantial theory of change through critique and reflection”. They present a theory of critique based on Habermas’ ideas of knowledge. Although reflection is “asserted as an essential component of the spiral of practitioner research activity, [it] is not theorised”.

3.2.5 Richard Winter

It is on the lack of theorising of ‘reflection’ that Winter (1989) develops his argument for AR. Winter (1989), after reviewing early accounts of the AR process presented by Kemmis (1982) and Elliott (1982), criticised the cursory treatment given to ‘reflection’ by these theorists. He finds in their writings that the process of reflection is often taken for granted: “reflection is tacitly assumed to be a straightforward familiar process”. For Winter (1989: 25), “reflection is the crucial process by means of which we make sense of evidence”.

Winter (1989) argues that by adopting Lewin’s cycle of planning, action, and “fact-gathering”, the theories developed by Carr and Kemmis (1987) and Elliott (1991) allow some positivist elements into the role given to the data collection, that is to “observation”, “diagnosis” and “monitoring of effects”(1989: 31). Winter raises questions about the manner in which these AR theorists have incorporated these notions into their theories.
Winter (1989) opens his critique with the point that if observations are based on a representative sample, then reflections of these observations can be tentatively claimed to be generalisable. Practitioner action research has resource constraints, thus if “observation” is not based on a representative sample, then it is not at all clear on what principle reflection should proceed. This also means that a generalisable interpretation cannot be the aim. And if the aim is not generalisable then the researcher needs to be sure that the observations do not simply confirm the original “view” which is supposedly in need of transformation. In addition, confirming the old view does not mean that it is correct. If correctness is not the aim, then perhaps “value” is. If a re-view is to be valuable, “it must open up previously neglected possibilities”, otherwise the process has no point. Winter concludes this part of his argument by posing the question concerning the kind of reflection that can be utilised so that the process does not just shut down.

Winter (1989) then goes on to examine the notion of “diagnosis” to establish what form of reflection is involved. In a positivist research approach “diagnosis” has connotations of “comfort” because if we can find out what is wrong we can take steps to right it, for example, in mechanics and medicine. Practitioner AR is, however, too extensive to apply tests resulting in incomplete evidence. Winter (1989: 33) nevertheless admits:

… the notion of diagnosis helpfully suggests that reflection is to do with deciding on a practical course of action in a particular case (rather than with attempting to create general law-like statements, for example) but it does not suggest what form of reflection would be appropriate in cases where evidence is necessarily incomplete.

It is interesting to note here that, on the one hand Winter admits to instances where evidence is incomplete, and on the other he claims that “a process of reflection is required which is clearly different from the logic of natural science and clearly different from the logic of everyday action” (1989: 33); otherwise the process will be either incomplete, time-wasting or lack of clarity. Winter omits to point out that evidence is never complete, no matter which research approach is adopted.
In Kemmis’s and Elliott’s proposed research cycle, research produces findings and ways of changing these findings so that they can be implemented. Winter (1989) contends that this is a model derived from those who do the research, and afterwards others implement the findings. In other words, theory and practice are separated. This contradicts one of the driving forces behind action research: a concern with only one practice. Winter has here presented a rather simplistic view. Researchers “find the findings”. In a situation where the teachers are committed to change, they will act on these findings and then reflect on the process.

To overcome the shortcomings Winter had discussed above and to explain reflection so that it takes its key place in the action research process, he (1989: 38) proposed six principles for the conduct of action research. These are

- reflexive critique
- dialectical critique
- collaborative resource
- risk
- plural structure and
- theory, practice and transformation.

The main points of Winter’s explication for each principle are outlined below. The first two principles, reflexive and dialectical critique, focus on refining the process of observation and reflection, the next three, concentrate on a redefinition of the relationship between the initiator of an investigation and the other members of the situation being investigated. The sixth and last principle attempts to answer the question about and address the issue of the crucial relationship between theory and practice.

Winter’s (1989: 38) presentation of reflexive and dialectical critique indicates possibilities of redefining the processes of reflection and observation; “they give general and objective grounds for selecting among many lines of argument and interpretation that may seem potentially interesting in relation to given data”.

70
Because his notions do not require specialist knowledge and large amounts of data, his approach, while being rigorous, is also accessible.

As Winter (1989: 40) points out, in our professional lives we make judgements all the time and we know that these judgements are open to question but it is difficult to know how to question them without producing a further set of judgements. He then goes on to argue that the principle of reflexivity is of relevance here because reflexivity is closely bound up in the process of making judgements on practice and it is present in all negotiated statements on reflection. Claims made in reflexivity are based on personal experience rather than “universally agreed categories” (1989: 42) and “by questioning my claim, I may increase its validity by relating it more closely to the experiences in which it is grounded” (1989: 43).

Although these examples can be analysed, the analysis will not be conclusive “because the inquiry will take the form of questioning claims rather than making claims”. The result will not be a certainty but rather a dialogue of possible interpretations. Thus, being concerned with questioning knowledge, claims and interpretation, reflexivity enables new lines of action and leads to changing practice. As Winter (1998: 43) says:

showing that a statement is grounded in reflexive interpretive judgements, rather than in external facts, I make it possible to review other possible interpretive judgements concerning that statement, and thus to envisage modifying it.

The practitioner cannot be involved reflexively all the time: practice would never proceed. Bryant (1996: 113) argues that the logical conclusion to Winter’s argument is that we can only call up reflexivity when our practice is special – when something needs to be changed. In other words, “reflective practice is thus extraordinary practice”. Although Bryant does not comment further, the question that here comes to mind is: who decides this and when?

For Winter (1989), dialectics (the second principle), also serves to reinterpret observation and reflection. He contends that we know that the apparent stability by which situations, events and people present themselves to us in our
professional lives, is “incomplete, simplified, and inaccurate”. Alternative explanations of these can be overwhelming. He sees dialectics as a way of helping us to decide what is ‘significant’ among these infinite possibilities and thus to contain our choices in the practical limits (for example, time, resources) of practitioner research. Winter (1989: 46) explains dialectics as a coherent general theory both of the nature and structure of reality and also the process of analysing and understanding reality.

The following three principles focus on redefining the relationship between the initiator and the other members of the situation being investigated. The first of these, collaborative resource, Winter (1989: 56) explains as the acceptance of all viewpoints, there are no privileged views. In the research process it is the differences in views that are debated, not the similarities. This also means that no member of the process has greater credibility than the others. Different people are looking and commenting on different views to find the best one. This process is not one of consensus seeking; it is finding the best possible solution by considering a multiplicity of viewpoints.

In the fourth principle risk, Winter (1989) claims that for practitioners, the research process will be threatening. Who they are, what they know and what they stand for in their profession will be scrutinised. Thus more than the hypotheses they may hold are at risk. As the research process is a collaborative one, the participation of all involved in the investigative process is important. All those involved will submit their accounts to critique. This process will minimise risk by ensuring the approach is ethical and tactful (1989: 60).

The fifth principle concerns plural structure. Here Winter (1989: 62)) proposes a plural structure for the research report. He claims that while a

‘unified structure’ is appropriate for the presentation of positivist modes of enquiry, a dialectical, reflexive, questioning, collaborative form of inquiry will create a plural structure consisting of various accounts, and ending not with conclusions (intended to be ‘convincing’) but with questions and possibilities (intended to be ‘relevant’ in various ways for different readers).
Because the principles discussed above “embody general and rigorous criteria of relevance” (1989: 65), the arguments and evidence selected are economical and they also guide the selection to become relevant “for the experiences of others”. In addition, the plural format of the report enables “it to speak simultaneously to readers with differing view-points, and it is in this sense that the report may be able to claim ‘objectivity’ i.e., “relevance and plausibility for readers with widely varying contexts” (1989: 65). Reports are questioning rather than assertive.

The sixth and last principle, *theory, practice and transformation*, attempts to answer the question: What of the crucial relationship between theory and practice, between research and action? According to Winter (1989), theory and practice are not two distinct entities but two different yet interdependent and complementary phases of the change process. Each contains elements of the other – the researcher engages in practical activities; the practitioner engages with theory both in terms of knowledge and method. There is a theoretical phase, in which theory questions practice – why did I choose (reflection) for that particular course of action? But practice questions theory as well. It asks the question: which of these insights is valuable? Practical decisions are always open to question and theoretical questions aim for transformation of practice, but theory is itself always open to question.

In brief, Winter’s (1989) view of action research is that it is a process that seeks differences, contradictions, possibilities and questions, as ways of opening up new avenues for improved action. It details principles for the conduct of AR but it still leaves some issues unanswered; chief among these is “What is reflection?” Tied to the question of reflection is the question “What is AR?” This has yet to be answered.
3.3 Connecting Action Research and Reflective Practice

Winter’s theory of AR build on his six principles was developed specifically to incorporate reflection. Bryant (1996: 114), however, finds that “the nature of the relationship between action research and reflective practice still remains problematic, begging a number of questions”, a key question being: are AR and RP the same thing? Elliott (1991: 50) argues that they are:

This kind of joint reflection about the relationship in particular circumstances between processes and products is a central characteristic of what Schön has called *reflective practice* and others, including myself have termed *action research*.

Elliott’s (1991: 51) concern is to position “action research in the kind of reflective practice which aims to improve the realisation of process values”. In other words, the importance given to how RP is carried out will determine whether or not what is happening is AR. AR therefore cannot take place without RP. In order to establish whether Elliott’s contention that AR and RP are the same thing, RP needs a closer examination. This will begin with an account of Schön’s views.

3.4 Reflective Practice

Donald Schön, in his two books, *The Reflective Practitioner* (1983) and *Educating the Reflective Practitioner* (1987), offers an account of the epistemology of practice and of professional knowledge inherent in practice (Munby & Russel, 1989: 71). Although Schön does not specifically discuss teachers and teaching, his views have excited a great deal of interest among the teaching fraternity because he has given credence to teachers as “professionals”. Latterly, however, there has been criticism of his views in relation to teachers and teaching (Waks, 1999). In order to ascertain any validity in his views for teachers, in particular in relation to bringing greater understanding to the meaning of RP,
Schön’s (1987) theory will be outlined and then discussed in relation to the classroom.

Schön (1987: 6) contends that there are two sides to professional practice: firstly, those clearcut and manageable problems which can be resolved through the application of technical rationality and secondly, those messy problems that defy the use of technical rationality. “...[I]ndeterminate zones of practice and uncertainty, uniqueness, and value conflict – escape the canons of technical rationality.” Schön offers a theory of reflective practice as an alternative to the positivist model of reflection, as technical rationality, which can be applied in “messy” situations.

Schön (1987) explains that technical rationality derived from positivist philosophy not only views practice as separate from theory but also as inferior to it. In technical rationality, theory is rigorous and should be applied to situations systematically, while professional knowledge must refer to theoretical knowledge about how to achieve given ends. Further, professional practice is seen as a process of problem solving, and professional competence as the skilful application of theoretical knowledge to the instrumental problems of practice.

Schön illustrates the hierarchy of knowledge around which technical rationality is constructed. Here the basic sciences are in the top or privileged position and they inform the applied sciences; these in turn guide practice which is on the lowest level. Schön rejects technical rationality and its instrumental problem solving by showing that the application of these scientific principles is not able to solve higher level problems, and it is these which are so frequently found in education.

Schön makes an important distinction between “problem solving” and “problem setting”. He argues that the technical rationalists reduce practitioners’ work to problem solving and thus have taken away from practitioners the essential function to identify and redefine problems of practice. “Problem setting is a process in which, interactively we name the things to which we will attend and
frame the context in which we will attend to them” (Schön, 1987: 40). We need to understand what we are doing, otherwise we are simply involved in the positivist approach of transmitting solutions. On the point of practitioners not being in control of or empowered in their situations, all the AR theorists discussed above share Schön’s concern. Unless teachers are their own researchers, they will not problematise or develop their own theories; they will simply transmit ready made solutions.

Schön develops his theory of reflective practice around the notions of knowing-in-action, knowledge-in-action, reflection-on-action and reflection-in-action. He begins his argument for knowledge-in-action and knowing-in-action through a discussion of the term *professional artistry*. This refers to the kinds of competence practitioners sometimes display in unique, uncertain, and “conflicted situations” of practice. He believes that this artistry is “special”; it is not the same as we display in our everyday acts. It involves tacit knowledge. Both of these types of competences, that is, everyday behaviour and “special” behaviour, generally cannot be described but we do know whether they are appropriate or inappropriate. These competences also often do not operate on a conscious level. He uses the term “knowing-in-action” to refer to the sort of knowledge we reveal in our intelligent action: it is tacit knowledge as we cannot describe it, but it is shown by us in the skilful performances which can be seen but not described. “Knowing suggests the dynamic quality of knowing-in-action, which, when we describe it, we convert to knowledge-in-action” (Schön, 1987: 26). The knowing is in the action.

Our knowing-in-action is what guides us in our tasks and activities through familiar routines during the day. We have these competences and we do not have to think about them – they smooth our way. When our familiar routine is interrupted by the unexpected, we can either ignore it or we can respond by reflecting on what occurred or did not occur. This happens in one of two ways. Firstly, “[w]e may reflect on action, thinking back on what we have done in order to discover how our knowing-in-action may have contributed to the unexpected
outcome” (Schön, 1987: 26). We can do this either after the incident or we may stop in the midst of our action or activity to do what Arendt (cited in Schön, 1987: 26) called “a stop-and-think”. In both of these cases we are reflecting after the event.

Or we could reflect-in-action. Here we re-think in the midst of an action and make a change then and there. It takes place in the action present, there is no interruption. “Reflection-in-action has a critical function, questioning the assumptional structure of knowing-in-action. We think critically about the thinking that got us into this fix” (Schön, 1987: 28).

Schön describes the process of meeting the unexpected in what could be termed an “action spiral” as follows:

A routine action produces a surprising outcome → reflection takes place in the present → the practitioner initiates or thinks up a way/s to solve the problem → there are yet more surprises → further corrective measures are taken → the solution is still not satisfactory → yet, further corrective messages are taken → if satisfactory, then understanding is consolidated.

In this process “my present reflection on my earlier action begins a dialogue of thinking and doing through which I become more skilful” (Schön, 1987: 31). Thus problematic situations are addressed dialogically not logically and they are addressed in action (Munby & Russell, 1989:73). It is this non-logical and “dialectic thinking” that accompanies action and transforms it.

As Carr (1989a: 10) explains, for Schön, reflection-in-action involves reflecting on knowing-in-action. It is the process through which the previously “taken for granted knowledge, implicit in action, is made explicit, critically examined, reformulated and tested through further action”. In this sense, reflection-in-action is a research process which brings together theory and practice through which the
simultaneous development of professional knowledge and improvement of professional practice occur simultaneously (Carr, 1989a).

An important underpinning idea of Schön’s theory is that learners or students learn by doing. According to him, professionals have and use a special form of knowledge that “resides in practice, is constituted differently and held differently also” (Munby & Russell, 1989: 75). He illustrates how, when someone is initiated into a community of practitioners, he has to learn the “rules” of that practice and Schön (1987) suggests three different conceptions of a practicum which have a developmental aspect.

Firstly, professional knowledge can be seen in terms of facts, rules, and procedures simply applied to specific problems. In this technical training the instructor will communicate and demonstrate how to apply the rules in the relevant circumstances and the student will be expected to read, listen to and to practise appropriately. The coach would observe student performance, looking for errors and showing the “right” way of going about practice.

In the second kind of practicum, professional knowing is seen in terms of “thinking like a … (teacher, architect, musician, etc)” (Schön, 1987: 39). Students are still required to learn facts, rules and procedures, but they need to become competent in reasoning in problematical situations. It is, however, assumed that there is a right answer for every situation. Coaches could emphasise either the “rules of inquiry or the reflection-in-action by which on occasion, students must develop new rules and methods of their own” (1987: 39).

Thirdly, students are guided by the point that existing professional knowledge does not fit every case and that there is no right answer to every problem. Students have to learn a kind of reflection-on-action that goes beyond statable rules in order to construct and test “new categories of understanding, strategies of action, and ways of framing problems” (Schön, 1987: 39). The coach is here concerned with the indeterminate zones of practice and reflective conversations with the
materials of the situation (1987: 40). In these practicals students become proficient at a kind of reflection-in-action.

Schön (1987: 40) points out that the third kind of practicum need not obviate the other two. He argues:

> Perhaps we learn to reflect-in-action by learning first to recognise and apply standard rules, facts, and operations; then to reason from general rules to problematic cases, in ways characteristic of the profession; and only then to develop and test new forms of understanding and action where familiar categories and ways of thinking fail.

Thus according to Schön, reflection-in-action is an art that can be acquired with guidance. He goes on to mention that effective reflection depends on reciprocal reflection which occurs in the dialogue between the coach and the student. Reciprocal reflection develops as the student and the coach move through the different levels of the practicum.

While Schön provides a promising conceptualisation for understanding something of what professionals know when they act in complex and uncertain situations, and for charting how this knowledge might arise, according to Munby and Russell (1989: 78), the picture lacks empirical fortification and a methodology for developing this. Ideas concerning the levels of reflection will now be looked at in the attempt to pin down the elusive concept of ‘reflection’.

### 3.5 Forms of reflection

Various theorists (Van Mannen, 1997; Tabatchnik & Zeichner, 1991; Wellington & Austen, 1996) have proposed frameworks for forms or traditions of reflection. Habermas (1974) as quoted in Wellington and Austin (1996: 308) contended that: “Without critical reflection, we run the risk of confining our understanding and analysis to unarticulated assumptions and conditions”. It is proposed here and
supported in the data analysis in Chapter 6 that for many teachers reflection is developmental. Critical reflection, the final stage, is not often attained. Van Mannen (1977) in expanding and explicating on the work of Habermas and relating it specifically to education, distinguishes three forms of reflection. Each of these has its own criteria that guide the choice of action that is required. These forms are: firstly, technical rationality; this is based on the empirical-analytic tradition and it uses logical positivist methodologies. In this form the dominant concern is with the efficient and effective application of educational knowledge for the purposes of attaining ends which are accepted as given. Technical rationality is used as an instrument to control practice. It is technical rationality in all its aspects that Schön critiques in 3.4 above.

The second form, practical action, is based in the hermeneutic-phenomenological tradition. Here qualitative methodologies are emphasised. Validity, understanding and communication are the focus of the questions. Reflection is used here to inform practice through understanding. The third form, critical reflection, is based in the critical-dialectical tradition. Political and historical methodologies are emphasised. Essential here are concerns for justice, equality and fulfilment. “Here both the teaching (ends and means) and the surrounding contexts are viewed as problematic – that is, as value-governed selection from a larger universe of possibilities” (Zeichner & Liston, 1987: 25). Here reflection transforms practice.

The teacher who is the focus of this study (Chapter 6 and 7), could, according to the criteria given above, be said to conform to the second form, that is practical action. Her approach to the problems she identified that in some way interfered with the learning in her classroom, were examined against the background of her understanding derived from practical knowledge and experience. She would then act according to her understanding of various views of teaching. The process described here depends on reconstruction, retrospection and recollection of the event and the associated feelings. It is therefore similar to Schön’s reflection-on-action. As Munby and Russell (1989: 77) explain, for Schön, reflection-on-action “refers to reflective thinking about an action as it transpires”. Munby and Russell
(1989: 76), however, argue that not taking reflection-in-action into account when looking at reflection on various levels is “to miss a portion of teachers’ professional knowledge – the portion that resides in practice and is part of the individual teacher’s epistemological interests”.

Wellington and Austen (1996: 309) argue that based on the literature on reflection, their data suggests that five orientations better explain the concept of reflection. What they propose as, the technical, the deliberative, the dialectic closely approximate what Van Mannen called, the technical rationality, practical action and the critical-dialectical. They have added the immediate and the transpersonal, claiming that they provide finer distinctions that better explain what happens with reflection in the classroom. The immediate, explains teachers who work for the immediate demands of their group or the task, that focuses on “pleasant survival” (309) and are essentially non-reflective. In the transpersonal orientation, the focus is on self-development and on the relationship of internal to external. In addition, Wellington and Austen (1996) ground the five notions of the ‘practical’ in three questions. They then discuss each orientation in relation to each question. Although these orientations and questions make possible fine distinctions, this framework is subject to the same difficulties as Munby and Russell (1987) pointed out above: the reflection is still only reflection-on-action.

Wellington and Austin (1996: 314) hold that this classification scheme simply pigeonholes people and practices – it does not advance what reflective practice is about. Most importantly, however, they claim that at a deeper level “the scheme highlights distinct, interactive aspects of the consummate practitioner”. Further they add that no one of these forms constitutes ‘good’ teaching – a combination of aspects from different forms contributes to the “fully developed educator”. Both the researcher and the teachers need to acknowledge all these levels or forms and their orientations. They also need to recognise their own preferred level, but not close themselves to the possibilities of the others, so that they can expand and develop and reflect on deeper and deeper levels.
Although Wellington and Austin (1996) say their five forms should not be viewed hierarchically but rather that they flow into one another, they can be viewed as going from lower to higher order levels. They begin with the immediate, the lowest rung where there is very little reflection happening, on the next rung, the deliberative, where there is an emphasis on discovery and understanding of both the educational situation as well as the learners. Lastly there is the dialectic, where political liberation is advocated. It is possible that teachers in the reflection process move freely from one tradition to the other depending on the context but they dwell more on the higher levels and so engage in deeper meaning.

When a teacher begins her reflection on the immediate level, she will probably need some guidance and help to move on to higher levels of reflection. Elliott’s experience (Chapter 5 below) illustrates this when the research team encourages the teachers who are essentially non-reflective and blame the learners for their lack of success in implementing a new pedagogy to realise their part in the problem. Schön’s (1986) three kinds of practicum indicate the possibility of developing from reflection-on-action to reflection-in-action and then to reflecting reciprocally.

Munby and Russell (1989: 78) claim that:

For Schön, reflection-in-action is learning from experience, although in a special way. The promise of Schön’s work lies in his view that significant professional knowledge arises immediately from the direct interaction between the practitioner and the action.

The interaction between practitioner and action relates to reflection-in-action. Reflection-in-action develops into reciprocal reflection and reciprocal reflection in turn relates to the position of the outside researcher. The position of the outside researcher will be the subject of the next chapter.