CHAPTER 3

RESEARCH DESIGN, METHODS AND ANALYSIS

Chapter 3 considers in greater detail than in Chapter 1 the purpose of the research project, develops the basic research question and gives reasons for the decision to adopt a qualitative approach in considering it. The three sources from which data were collected, that is the informed practitioners, the learner participants and myself as participant observer, are identified and reasons given why each source was chosen. The "Facilitating Adult Learning" (F.A.L.) program is described and grounds for the decision to choose the learner participants from it are explaine 1. The reasons for using structured interviews rather than written questionnaires as the principal means of collecting data are outlined and the briefing paper distributed in advance to all those who were interviewed is explained. An account is given of how the interviews; were conducted and recorded, then typed and resubmitted to those interviewed before being entered into a computerised program for data analysis. The functions and operation of QSR NUD*IST for analysing qualitative data are discussed. Reasons are given for why this particular program was chosen, followed by a description of how it was used.

THE RESEARCH QUESTION

Levin (1978) has expressed the importance of following a clear and systematic procedure in developing a research design:

A thesis should not start from a methodological point of departure such as an exercise in survey research or multiple regression or evaluation or epistemology. Rather the methodology should follow from the nature of the problem and the theoretical insights yielded by the conceptual framework (Levin 1978, p. 50).

It will be recalled that a significant aspect of the criteria for the professional doctoral thesis in education is that it should be "dire ted at a problem or problems related to practice in

education" and that "drawing out the practical implications of the research is an essential part of the EdD thesis" (U.N.E. 1995, p. 2). The "problem of practice" which attracted my sustained interest as a result of my reading and professional extension within the EdD program centred around what Mezirow has called transformative and emancipatory learning. There were two reasons for my belief that transformative learning represents a problem of practice in the area of adult learning. The first stemmed from my own experience and the second from the statement of Mezirow "that adults, when learning, need to become critically aware of how and why the structure of their psychocultural assumptions has come to constrain the way they see themselves and their relationships" (1981, p. 6). In order to learn effectively, Mezirow maintained, adults need to identify, critically appraise and in certain cuses reconstitute the structure of their psychocultural assumptions in order to permit a more inclusive and discriminating integration of knowledge and experience. I had no empirical evidence at this time to support the validity of Mezirow's assertion but I was aware of Taylor's statement (1995, p. 1) that little in the way of empirical study had been cone in the area since Mezirow's initial work in the 1970s. From the opposite perspectize, however, my experience was also that inability to identify and at times to reconstitute psycho-cultural assumptions in adulthood not only inhibited personal growth but also as a consequence professional performance. If Mezirow's statement were in fact true the consequences of ignoring it, as far as educators and educational administrators were concerned, constituted a problem of practice.

I found and read the account of Mezirow's original research (1978a) and the significant body of subsequent theoretical writing on the subject by Mezirow himself and others, as detailed in the Chapter 2. A number of things struck me as a result of this reading. The first was that there was a substantial theoretical base in the writing of Freire and Habermas for what Mezirow was saying. The interest and even controversy aroused by Mezirow's theoretical writings which followed his research in my view merited further empirical investigation with adult teachers and learners.

It was apparent also from reading the literature that there were a number of problematical aspects associated with Mezirow's writing. Was transformative learning purely rational or were the emotions and the imagina ion of learners involved? Was what Mezirow termed

"transformation theory" an entirely new way of looking at adult learning or simply another manifestation of what developmental I sychologists had been writing about for decades? Was perspective transformation primarily an individual experience or did it have more significant social and political implications? Was it so significant that ignorance of it would limit the value of some adult learning programs? All of these issues were sufficiently unclear in my view to justify an empirical study.

Another issue arising from the treatment of experiential learning and "transformation theory" in the literature was that some writers, notably Brookfield, Boud, Keogh, Cohen and Walker, addressed much the same issues as Mezirow, Griffin, Keane, Newman and Cranton, but without using Mezirow's terminology. Moreover Mezirow had himself changed his position on some aspects of the theory with which he has become so closely identified indicating in 1985 that "n y having designated emancipatory learning as a separate, and in some sense, comparable domain of learning was confusing" (Mezirow 1989, p. 175). The challenge for me therefore was to undertake an empirical study of the teaching and learning of adults which might clarify some of the outstanding issues from the aspect of practice and personal learning experience. That was the genesis of the project. I took as my topic "Perceptions of Transformative Learning" and derived over time four questions of which the last two related to implications for practice as required by the criteria set down by my university for the thesis as the culmination of the EdD program.

When actually addressed to the practitioners and participants during the research these four research questions were prefaced by the words "What are your perceptions of ...". The actual questions as addressed to all those interviewed therefore were:

- 1. What is your perception of transformative learning?
- 2. What is your perception of the internal processes of transformative learning?
- 3. What is your perception of the procedures or strategies which facilitate transformative learning?
- 4. What is your perception of the implications of transformative learning for facilitating the learning of acults?

Choice of a qualitative methodology for the research

Although all approaches to research have certain common characteristics it has become customary to describe individual methodologies as "quantitative" or "qualitative" according to the emphases which particular research projects require. An essential element of quantitative research is that it is bused upon observations that can be divided into certain defined and discrete units which can then be compared with other measured units by means of appropriate statistical procedures. Statistical analysis is an essential component of quantitative research. Qualitative research on the other hand examines perceptions of reality through observation, narration and description. It considers the language and actions of individuals or groups in such a way as to acquire as accurate as possible an understanding of their perception of experience. Whereas quantitative research is positivist in its orientation, qualitative research is based upon phenomenological considerations and technical and practical intent.

Quantitative research is often seen as identified closely with the physical sciences and with the scientific method as a way of investigating observable reality. Quantitative research can be both inductive and deductive. It involves systematic observation and precise measurement and it typically produces hypotheses obtained through inductive thinking which can then be tested through controlled experimentation. Quantitative research is appropriate to the study of hard, external and objective reality (Burrell and Morgan 1979). It expresses itself most forcefully in a search for universal laws which explain and govern the reality which is being observed. It considers the basic source of knowledge to be what is available through observed and measured reality.

As the name suggests, qualitative research is more concerned with exploring the nature and quality of experience rather than with measuring and comparing specific quantities identified within the experience. Qualitative research looks for meaning and deals with words, actions and intentions to a greater extent than with facts and figures. It seeks to understand human and social behaviour from within, that is, as lived in particular social settings and as perceived by those who make up such settings. The biggest challenges for

qualitative research are in establish ng criteria for its judgment, that is, for its validity, credibility and trustworthiness.

Altheide and Johnson (1994) give the criteria for judging qualitative research as plausibility, credibility, relevance and significance. Ely (1994) emphasises the importance of trustworthiness and fairness in qualitative research and stresses the importance of grounding research in ethical principles. LeCompte and Goetz (1992) distinguish between internal and external reliability in research and emphasise that the assumptions underlying particular qualitative projects must be identified. Marshall and Rossman (1994) stress the importance for any qualitative research project of developing a sound rationale for the choice of methodology, and of giv ng reasons for choosing one approach and rejecting others. Most commentators in the area of qualitative research emphasise how important it is not to generalise from particular instances nor to pretend that all qualitative research is replicable. They believe that qualitative researchers should purposefully avoid controlling research conditions and concentrate on accurately recording the complexity of contexts and interrelations.

These latter considerations are particularly relevant in regard to the present project. They have influenced both the nature of the questions which have directed the research and the extent to which generalisations can be drawn from it. It became clear to me that in my research I would be working principally through the medium of language on perceptions deriving from personal learning experiences. Data that I would collect would most probably come in the form of words, images, impressions and personal observations. Because of their complexity these are not aspects of human understanding which lend themselves to quantification. I would be drawing upon individuals' perceptions of experience - informed perceptions containly, but perceptions nevertheless.

It was also clear to me that I would not be settling once and for all what transformative learning was nor what its implications were - the relatively narrow scope of my research was unlikely to allow for broad generalisation in that direction. However, I became convinced that there would be considerable value in a thorough and empirically based research project involving groups of teachers and learners. Data about perceptions of

learning processes and procedures could be gathered from two groups of carefully chosen teacher-facilitators and learners through personal interviews and from sustained observation over a considerable period. On that basis the research would have its own limited but nevertheless genuine value as an empirical study. Moreover, if a quality computer based software package for data analysis were used these persons' perceptions could be comprehensively tested against the views expressed in the literature. My information needed to come not orly from an extension of the meaning of theoretically based concepts based upon my own personal observation and reflection but from the perspective of other teachers and learners aware of and working with emancipatory and transformative concepts in actual learning situations.

A STRUCTURE FOR THE RESEARCH

I decided that the structure required for my proposed research required two groups of adult persons, teachers and learners respectively, who had some genuine understanding of and experience with adult learning and who were prepared to be interviewed on the subject. I believed that the first group - the teachers - needed to be adult learning practitioners who were aware of the principal theoretical issues involved in transformative learning as expressed in the literature. This was because I had acquired from my reading some awareness of the complexity of the concepts involved and I felt that if I had first to explain to the people I was interviewing the whole idea of transformative learning I might be in danger of putting words into their mouths. I decided therefore that these people - my "informed practitioners" whom from now on I describe as simply "practitioners" - needed to be academics and teachers who had shown in their published work that they were recognised contributors to the theory and practice of adult learning. I believed that it was important that they be at least acquainted with the research of Mezirow and others in the area of transformative learning and that they should have some knowledge of the theoretical constructs on which it was based. At the same time they should also be "practitioners" in the sense that they should be actually involved as teachers and facilitators in adult learning programs. If they were not then they might be in danger of responding from the perspective of the theore ical literature only and this would defeat the whole purpose of the empirical study of teachers and learners which I wished to conduct. I believed they should not all be of the same mind in regard to transformation theory, nor should they all be colleagues working in the same institution. Moreover, because they were to be interviewed it was a practical requirement that they be reasonably accessible to me.

The second group - the learners - I believed needed to consist of a selection of adults who were also experienced as facilitators of adult learning and who were willing to undertake a learning program which amongst other approaches made specific reference to transformative learning. For all the reasons relating to the learning of adults given in the previous chapter they had to be willing "participants" and this was the name I decided to give them as a group and which I will use from this point onwards. For the ethical reasons given in Chapter 2 the program they were doing should not be one which specifically set out to transform its participants or the rivalues or frames of reference. At the same time, however, it needed to be structured in such a way that its participants would acquire at least some understanding of the concept of transformative learning as well as other aspects of the ways in which adults learn. It reeded to involve critical reflection, it should be practically and experientially oriented and it should employ appropriate adult learning strategies including group work, discourse and dialogue.

Because I believed my own experience and my observation of the learning of other adults were valid ways of conducting qualitative research provided they were checked and qualified by other sources of relevant information, I decided to become involved as a "participant observer" in the learning activities involved once a decision had been made about their context. I give further reasons for the decision later in this chapter. The learning program I chose therefore had to be conducted by a facilitator who was prepared to accept and to some extent co-operate with the researcher (myself) as a "participant observer". Again for ethical reasons governing such research and consistent with the ethical guidelines set down by my university I would at some time in the process need to explain to the other participants the fact that I was undertal ing research as well as being a participant, and that I would be seeking interviews with some of them at its conclusion. The decisions about the program and the identification of the individuals who made up the two groups need now to be considered.

The informed practitioners

After reading much of their published work and following discussion with my supervisors and other persons at my own university I chose the persons listed below as the "informed practitioners". Each of them agreed that I should use his name and not a pseudonym. The seven persons were:

- David Boud, Professor of Adult Education, Head of the School of Adult and Language Education, University of Technology Sydney. N.S.W.
- Ross Keane, Senior Lecturer, Faculty of Educational Administration, Australian Catholic University, Sydney. N.S.W.
- Jack Mezirow, Professor Emeritus of Adult Education, Columbia University, New York. USA
- Alexander Nelson, Lecturer, United Theological College, North Parramatta. N.S.W.
- Michael Newman, Senior Lecturer in Adult Education, University of Technology, Sydney. N.S.W.
- Mark Tennant, Dean of the Faculty and Professor of Adult Education in the Faculty of Education, Un versity of Technology Sydney, Sydney. N.S.W.
- David Walker, Director of the Educational Centre, Randwick. N.S.W.

In addition to their publications which are listed in the bibliography I make the following comments by way of justification for my choice of each of the seven practitioners.

David Boud is Professor of Adul Education and Head of the School of Adult and Language Education, University of Technology Sydney, N.S.W. (U.T.S.). He was formerly Director of the Professional Development Centre at the University of New South Wales where he was responsible for training and staff development for all categories of staff in the university, including clerical and administrative personnel, teaching staff and management. He has been involved in learning and adult learning especially for more than twenty five years in the UK, at Curt n University Western Australia, the University of New South Wales and most recently the University of Technology Sydney. His research interests include learners taking responsibility for their learning, problem based learning and the facilitation of learning from experience. He has published widely, especially in the area of adult and experiential learning.

I chose to interview David Boud after reading much of his published work and especially Boud, Keogh and Walker (1985), *Reflection: Turning Experience into Learning*, Boud and Griffin (Eds) (1988), *Apprecia ing Adults Learning: from the Learners' Perspective* and Boud and Walker (1990), *Maki ig the Most of Experience*. Boud's contribution to the theory of adult learning and critical reflection upon experience as especially relevant to the learning of adults has been significant and has continued to the present time. He has a keen interest in research in the area of learning and teaching and is an academic and lecturer with wide practical experience in all aspects of adult learning. He was available and agreed to be interviewed.

Ross Keane is currently a senior lec urer in the Department of Educational Administration at the Australian Catholic University Sydney. He has been a teacher and school principal, Dean of Studies, Faculty of Educat on, Loyola Jesuit University Chicago and Director of Professional Development for the Catholic Education Office, Archdiocese of Sydney. His doctorate in adult education is from the University of Toronto where his research was supervised by Virginia Griffin a noted contributor in the field of adult learning. Keane's research is described in Boud & Griffin (Eds) (1988), Appreciating Adults Learning: from the Learners' Perspective and Cranton (1994), Understanding and Promoting Transformative Learning, a Guide for Educators of Adults. Other relevant published work is listed in the bibliography.

I chose to interview Keane because of his theoretical background in the field I proposed to research, and because he is a competent and experienced practitioner. He offers the *Facilitating Adult Learning* (F.A.L. program from time to time for experienced educators in the field of adult learning. I read Keane's publications of 1990, 1991 and 1993 from which it was clear that one of the significant theoretical bases of the F.A.L. program was Mezirow's published work on transformative learning. I discussed F.A.L. with Keane personally on two occasions and explained the nature of my current professional studies. After listening attentively Keane made it clear that he would accept me as a participant observer in the F.A.L. program he was to conduct in mid 1995 for senior educational administrators in Sydney should I be an applicant for it. He also agreed to be interviewed formally for the research.

Jack Mezirow is emeritus professor and for many years Professor of Adult and Continuing Education at Teachers College, Columbia University, New York. He is the author of several books and many articles on adult learning, transformative learning, and community education, the most significant of which are listed in the bibliography. Chapter two of this thesis describes Mezirow's research in 1976-8 and his theoretical writing since that time. I was aware that at Columbia Mezirov' had used transformative approaches to learning in his programs conducted for adult learne's. Although now retired he continues to lecture in the area of adult learning in many parts of the world and to publish in the area of adult and especially transformative learning with which he has become identified.

I wished to interview Mezirow pr marily because he is the originator of the learning concept I was investigating. In September 1995 whilst visiting Australia he gave me two lengthy interviews. During the first he questioned me at length on the nature and purpose of my research and in the second he gaze me the interview I was seeking, which I recorded. I have corresponded with him since (1996, p.1). A transcript of my interview with Mezirow I have attached to this thesis as Appendix B, partly because of its intrinsic value and partly as an example of the thirteen interviews which I conducted for my research. The transcript is presented in the format required by the QSR NUD*IST qualitative data analysis package which I used and which I explain below.

Alexander Nelson is a lecturer at the United Theological College in North Parramatta, Sydney and has recently completed a doctoral thesis, *The Role of the Imagination in Autobiography and Transformativ? Learning*, at University of Technology Sydney. Nelson's research involved working over a period of a year with a group of six former Catholic priests. His work on the role of autobiography, the imagination, symbol and parable in this research has been outlined in Chapter 2. An important part of the theoretical basis for Nelson's research is Mezinow's work on transformative learning but he has also been particularly concerned with the role of the imagination in personal transformation following Ricoeur (1971, 1984), Boy'd and Myers (1988) and Deshler (1990).

I chose to interview Nelson because of his work in the area of transformative learning, because his study was empirical and because it was recent - in fact his thesis had not as yet

been accepted when I interviewed him. I believed Nelson's position as a lecturer in a theological college gave an added perspective to my group of practitioners. Nelson's research with middle aged men undergoing a life transformation makes an interesting contrast to Mezirow's research with women undergoing similar changes in life perspectives almost two decades earlier. Nelson too was available and prepared to be interviewed.

Michael Newman has worked as an adult educator in both the U.K. and Australia. He returned to Australia in the early 198(s and was educational director for the Metropolitan Region of the Workers' Educational Association (Sydney) and a teacher and facilitator with the Australian Trade Union Training Authority. He is now a senior lecturer in adult education at the University of Technology Sydney. His published work in the area of adult learning is listed in the bibliography. His recent volume *The Third Contract, Theory and Practice in Trade Union Training* in which he deals extensively with the concept of transformative learning, received in 1993 the Cyril Houle Award for Literature in Adult Education from the American Association of Adult and Continuing Education.

I chose to interview Michael Newman after reading *The Third Contract*, which I found a most practical and readable book. It upplies transformative learning theory in the area of trade union training and uses illustrations based upon the experience of actual learning situations. The fact that Newman continues to be involved with trade unions and with learning amongst adult Australian indigenous people is of particular interest. I found Michael Newman articulate, available and willing to be interviewed.

Mark Tennant is Dean and Professor of Adult Education in the Faculty of Education U.T.S., N.S.W. He has published widely in the area of the psychological aspects of adult learning and was a visiting fellow with the Department of Continuing Education at the University of Warwick United Kingdom in 1986 during which he wrote Psychology and Adult Learning (1988). He and Michael Newman have been in continuing touch with Jack Mezirow on the issue of transformative learning, most recently in the 1994 (vol. 44) issue of the Adult Education Quarterly ir which they and Mezirow respond to one another's recently published work.

I chose to interview Mark Tennant because he combines a background in psychology with his work in adult learning. The ver/ nature of transformative learning involves the identification and transformation of deeply inculturated assumptions, habits of mind and personal frames of reference. Its emphasis upon emancipation and personal liberation clearly relates it to personal therapy and in Tennant's book *Psychology and Adult Learning* (1988) he discusses the behavioura aspects of adult learning and its relation to psychotherapy. Mark Tennant was available in Australia and agreed to be interviewed.

David Walker is the founding director of the Education Centre, a College for Christian Adult Education in Randwick, Sydney. For twenty five years he has been involved in adult religious formation and education and he is very much a practitioner in the field. He has published widely in the area of adult learning, often in association with David Boud. His areas of special interest include experiential learning, the nature of religious experience, the role of reflection on personal experience, the formation of the human person and the professional preparation of teachers.

My principal interest in interviewing Eavid Walker was to ascertain his perceptions of the processes and procedures of learning, rather than in the content of the learning. I wished to know why in his written work, whilst referring to Mezirow's concepts, he and David Boud almost studiously avoid Mezirow's terminology - terms like meaning schemes and meaning perspectives for example. I was interested also in the fact that like Michael Newman and Alex Nelson, Walker worked in an adult learning centre outside the traditional tertiary model. He too was available and willing to be interviewed.

From the reasons given for choosing each of the seven practitoners listed above it will be clear that I was seeking genuine know edge of the theoretical aspects of adult learning as well as practical experience with a range of learning groups. I was particularly interested in the findings of Nelson's empirical study and in meeting Keane who had done similar work for his research. At the same time I was strongly committed to undertaking personal interviews as my major sources of information because I believed that in this way I would find out far more than I could from a written questionnaire which was a possible alternative way of collecting data from a broader range of subjects. It would certainly have been very

worthwhile for me to have interviewed people like Brookfield, Cranton and Sveinunggaard but the travel involved was beyond my resources. In the event also I believed my research had more to gain from depth of contact than from enlarging the number of practitioners and participants interviewed.

The learner participants

In addition to a group of informed practitioners, persons knowledgeable in the area and experienced as facilitators of the learning of adults, I needed access also for my study to a group of adult learners of about the same number. It was important that they be carefully chosen, and that there should not be so many as to provide an overwhelming quantity of data. In addition, because the concepts I wished to enquire about were complex - the nature, processes, procedures and implications of transformative learning - I believed they needed some knowledge of and experience with the processes of adult learning generally. It would be very helpful also if they had been through some form of common learning experience of which I too had been a part and that they had some basic general acquaintance with the concept of transformative learning. If this were not the case I felt I would almost inevitably be drawn not explaining transformative learning to them during the interviews and as a result running the risk of influencing their answers to my questions.

I was looking therefore for a learning program of which I could be part so that I would have personal knowledge of the learning experiences in which the learner - participants were involved, and just as importantly because it was my hope that this would contribute to building a relationship of trust between us and dispose them to sharing their experiences with me later. The question of trust and a completely ethical approach on my part was very important because both the program and the interviews would involve the discussion of personal assumptions, habits of mind and frames of reference at some depth. After much reflection, and consultation with my supervisors, I made the decision that Keane's Facilitating Adult Learning (F.A.L.) program met more of the above requirements than any of the possible alternatives available to me. My decision was influenced too by the fact that Keane was himself aware of the concept of transformative learning and had done an

empirical study of adult learners in 1984-5 for his own doctoral thesis. I approached him personally and after we had clarified some ethical and other issues he agreed to accept me as a participant observer in a program he had scheduled over two months in mid -1995. He also agreed to my informing the other participants of what I was doing, indicating to them that provided they were agreeable, ray role as participant observer had his general support. What then of the F.A.L. program?

The "Facilitating Adult Learning" Program.

The Facilitating Adult Learning (1².A.L.) program which I had chosen as the way to achieve sustained contact with an appropriate group of adult learners is a fee-charging course which was developed by Ros; Keane in partnership with Elizabeth Keane, a clinical psychotherapist, as part of their private consultancy. Ross Keane's background and credentials have been outlined in the previous section. F.A.L. is an action-learning based program the primary purpose of which is to equip persons responsible for the professional development of adult educators and especially educational leaders with an understanding of the nature of adult learning and of the processes and procedures involved. My initial understanding of the program was derived from six substantial booklets constituting course notes and collected readings which are distributed as pre-reading to all F.A.L. participants. A perusal of the booklets reveals that they included, amongst much other relevant material, articles by Mezirow (1978, 1981), Griffin (1987, 1988), Keane (1985, 1990, 1993), Boud and Walker (1990) and Brookfiel (1990a) relating to experiential learning and the transformation of personal assumptions.

Following a thorough perusal of this material I had an extensive interview with the Drs. Keane. I was given access to Ross Keane's doctoral thesis, to his published writing and to a report on the F.A.L. program prepared in 1993 for a research project on action learning and staff development at Griffith University Queensland. This research project was funded by the national Technical and Further Education (TAFE) Staff Development Committee as part of a strategic national plan for the professional development of employees of the Queensland TAFE organisation and it helped establish for me F.A.L.'s credentials. F.A.L.

was one of five case studies selected as examples of best practice by the Griffith University team and it has been used by Keane for professional development with TAFE and a number of commercial companies, with the Australian Catholic University and across the spectrum of N.S.W. secondary education. The strategic intent of F.A.L. according to Keane grew out of

dissatisfaction with existing in-service programs which concentrated solely on the development of knowled se and competencies that make a technically good leader ... In this category were functional skills such as staff recruitment, strategic planning, change management, problem solving and human relations skills such as conflict management and negotiation (Keane 1993, p. 1).

Earlier Keane (1991) had articulated two critical questions in regard to facilitating adult learning. These questions sought to ascertain how those involved in the facilitation of adult learning could make best use of participants' life experiences, and how they could facilitate participants' becoming aware of and f necessary transforming those assumptions about themselves and their professional practice which in times of change especially might inhibit the full realisation of their learning objectives. Drawing upon the theoretical writing of Habermas and Freire, to which he lad been introduced by a comprehensive reading of Mezirow's journal articles, especially hose of 1978, 1981 and 1985, Keane (1985, 1990, 1991) questioned whether existing adult learning programs which concentrated upon practical skills in facilitating adult learning (the instrumental domain) and human relations and communication (the communicative domain), important as these might be, were sufficient of themselves. Keane believed that such skills would contribute to making adult learners and their institutions functionally competent and efficient but they would not in his view produce exciting, innovative and reflective leaders for those institutions. This was because

in my experience it is rare that such functional knowledge and skills will result in adult learners becoming aware of. let alone transcending the underlying assumptions on which their view of themselves, their institutions, their leaders and helpers are premised (Keane 1991, p. 2).

Keane indicated to me that individual F.A.L. programs are conducted in three sessions of two days each, with about one month between each of the two-day sessions. Participants are asked to produce an initial reflective paper before the program begins and a personal journal of their learning experiences for submission to the facilitator (Keane) within a week of each of the first two sessions. They are also required to submit a longer piece of work dealing with their learning over the whole program after its final two-day session. After each two day session they are asked to apply what they have learned to their everyday work situations and at the next session to report and comment to the group upon what they had experienced. In both the interview: I had with him Keane said that he emphasised to participants the importance of such journal writing as a learning process and he responds to each person constructively and immediately. Most participants, he said, complete the journal requirement.

The key procedures built into the F.A.L. methodology are critical reflection upon experience - undertaken sometimes alone, sometimes in pairs or small groups and sometimes in the whole group - he development of a strong, trusting, interpersonal learning environment, emphasis upon learning as a "whole-self" involvement including recognising the relationship of feelings to learning and using the imagination, identification and questioning of assumptions and value systems, and "working things through" both in private journal writing and sharing within the group. Ethical issues such as confidentiality and respect for individuals are emphasised throughout.

Although the major emphasis of the F.A.L. program is experiential, that is it deals with real-life issues including those occurring in the actual program rather than with role plays or simulations, Keane sees a place for occasional input from the facilitator to the whole group, but only when participants indicate a readiness for it. Such input might take the form of clarifying the meaning of terms such as meaning perspectives, critical reflection upon oneself or the theoretical concepts of Habermas, Freire or Mezirow. The F.A.L. program stresses the need for congruence between content and process. Issues in the "technical" or "practical" domains, to use Habermas' terminology, are dealt with through modeling - that is, the facilitator or participants model the procedure, or fail to do so, and this is discussed by the whole group. Writing down and sharing personal reflections

especially assumptions and habits of mind occurs throughout and at the end of each day people are given time before leaving to reflect upon and write down what they have learned during the day.

It needs to be made clear here that F.A.L. is not a program designed to concentrate on personal transformation along lines previously decided upon by Keane. This would be inappropriate and unethical and Keane makes it clear to participants that the program is about the facilitation of adult learning in all its aspects, not just about transformative learning. However Keane is also corcerned to make sure that participants in F.A.L. become aware that there is more to adult learning than instrumental and communicative learning, and that what we have already learned may influence and even determine what else we learn, and whether we are prepared to learn in certain areas at all. This involves an introduction to some of Mezirow's concepts and the latter's definitive 1981 article "A Critical Theory of Adult Learning and Education" is one of several pre-readings for the first session. During the F.A.L. program the concept of transformative learning is worked through in groups and participants thare and discuss experiences of it, as indeed of other aspects of adult learning, both from their own personal experience and from their observation of others. Certainly the potential for transformative learning is there, but whether or not participants actually experience personal transformation during the program does not necessarily determine its success for them. What is important in Keane's view, however - and I agree with him - is that they come to understand that identifying and possibly transforming inculturated assumptions is, along with others, a significant aspect of how adults learn, and that as professional facilitators it is important that they have an awareness of its significance.

My decision to use F.A.L. rather than other possible alternatives as the source of identifying and hopefully interviewing six participants who had been through a common learning experience, each in his or her own way, and who had a basic knowledge of the theory and practice of transformative learning was made because I believed it best fulfilled my own research purposes. A corresponding possible disadvantage of choosing this group, however, was that being a well informed group of middle class professionals, coming from one particular sector of education, they might not provide as wide a range of background

and experience as might be desirable. In addition they might well be influenced very strongly by Keane with whom they vere going to work closely over a period of over fifty hours and their perceptions might is a result be unduly influenced by those of Keane himself. For me as researcher however, the advantages of choosing the FAL program outweighed the disadvantages. The issue is simply identified here and after reading the analysis of the results of the research the reader will doubtless make up his/her own mind about it.

Because the interviews deal with deeply personal experiences and because so much emphasis was placed during the program on confidentiality, I have decided to identify the six participants by first names only, these first names not being the true names of the individuals concerned. I have also changed other biographical details in ways designed to preserve anonymity. There were sixteen participants in the F.A.L. program, nine women and seven men, all of them employed in some capacity in the one education system within New South Wales. Of the nine women, three had recently completed substantial periods as principals of schools and were now employed by the system authority as educational consultants, two for primary and one for secondary schools. Two others were involved in the co-ordination of parent and community relations with schools, their role being to act as the means of liaison between the system and recognised parent associations. Another was a consultant in religious education and one was responsible for special education in the system. Two others were consultants for specific academic subjects in secondary schools.

Of the six men apart from myself is participant observer, two were senior management persons. Three were consultants for specific subject areas and a sixth was one of a team responsible for system public relations and for training school personnel in communications and dealing with the press. All sixteen had appropriate education for their positions and although not all were professional educators all had significant involvement in facilitating the learning of other a fults in their respective areas of competence. At one of the early sessions it was established that whilst not all had volunteered for the F.A.L. program, all had been consulted and had eventually agreed to be part of it. Keane (the facilitator) made it clear at the time that willingness to participate actively was very important in his view to the success of the program. There was very little absenteeism and

my observation was that once the program got under way, people became very committed to participation in it.

I made a decision to interview six participants at depth rather than to endeavour to interview all the fifteen for a shorter period. This decision was made because I believed indepth interviewing would be the key to allowing people to think about what they were saying in regard to such complex issues as personal assumptions about life and learning. I also for obvious reasons wanted people who would be articulate and willing to share their experience. It was possible either to choose the six at random or to make a selection on some specific criteria. I chose the latter course in order to achieve a balance of men and women, as well as a spread of age groups. I also made a decision not to choose only those with formal teaching qualifications. I ranked the participants in order on this basis and, as explained above, I was given time by Keane to explain to the whole group what I was about and to distribute the briefing paper. I then individually contacted the six persons in the order in which they had been ranked, either personally or by 'phone, after the last session of F.A.L. had concluded. The first six I approached expressed interest in and support for what I was doing and a will ingness to be interviewed. The six selected were as follows:

Geraldine is part of a regional community liaison team for the system. She is in her late forties, is married with a family, one s ill at school. Some have passed through the school system but "have by no means completed their education". Geraldine has had a long association with school, church and I arent associations and was invited to take up her present part-time employment after doing similar work for many years in a voluntary capacity. She went through a discer ment process with her husband and family and although this involved their becoming more self-reliant in domestic matters they supported her in her decision to complete her qualification as a personal and family counsellor. Geraldine is intelligent, astute and art culate, and has a strong commitment to a positive role for women in the community and in education.

Jane is in her early forties. She is a highly qualified teacher librarian and a leader in her professional association. She is a senicr teacher-librarian for the system and worked in this

capacity for some years in a large Australian public education system. Jane is currently employed in the system's central reference library. She is married with several children. She is part of a team conducting in service programs for librarians and teacher librarians. She has strong views on schools and how they should recognise the contribution in leadership women can make. She is articulate and forthright, with a positive and outgoing personality.

Marion in her mid-forties, is a well qualified teacher and has spent most of her adult life in schools. She is an intelligent and experienced educational leader. She was recently responsible for closing her campus of the school for girls of which she had been the principal for a significant number of years. Marion is a single person with strong views on the rights of women and marginalised children and on the value of smaller, girls only, schools. Although she at first strongly opposed the decision to amalgamate her school she believed she had no choice but to support the rationalisation decision once it was final and to use what influence she had to secure places for all her students and alternative positions or acceptable redundancy packages for her staff. She felt she lost friends unfairly in the process and was hurt and angry about the whole experience. Her immediate supervisor stood by her, however, and achieved for her the consultancy position she now holds. Marion feels she is "treading water" and is still processing the whole experience. However, she has found that she greatly appreciates a break from the constant stress of the past three years and finds she thoroughly enjoys her consultancy role.

Paul is in his early thirties and is a regional consultant in a subject area for the system. He was surprised to be awarded the consultancy position for which he applied "to test my arm", but he enjoys it because it involves helping young teachers, especially those dealing with less gifted students. He regards this work as a really worthwhile challenge. Paul is married with several young children. His family is very important to him. He is involved in a great deal of in-service work with teachers and is keen to talk about and improve his skills in the area. He recently enrolled for a doctoral program in his field with the major university from which he received his master's degree.

Sean is in his early fifties. He too is a management person within the system and is an acknowledged expert in his field. Sean has a degree in philosophy and philosophical considerations are one of the consuming passions of his life. He is married with several young adult children in whose tertiar / studies he takes an intense interest. Sean worked as a journalist for a major broadcasting network for twenty years but resigned because he felt he was "in a rut". He enjoys his present work. He is an extremely well read person with many and varied intellectual interests. He gives the impression of being both confident and competent in his work.

Tom is in his mid-fifties. He graduated in arts and trained as a teacher but gave up teaching after several years to work in preparing educational and promotional materials for one of the large national airlines. He was with that corporation for twenty years, moving into public relations for the last seven of those years before taking up his present position. Like his friend Sean, Tom felt he too was "in a rut" and as a result applied for his present position, handling the system's pub ic relations. Much of Tom's work is public relations consultancy for individual schools which may suddenly find themselves in crisis situations. He works with principals in helping them promote their schools and handle communications with the press. He also assists them in preparing crisis management plans. Tom is a confident person and gives the impression of being very competent in his work. Although not religious he feels "phil psophically comfortable with the system".

DATA COLLECTION

I made a decision to use structured interviews as my main approach to collecting data about peoples' experiences of various forms of learning for my research and I chose seven "informed practitioners" and seven "learner - participants" if I include myself in this last category. A disadvantage of this latter decision was the fact that that reducing the number to six restricted the range of opinions that could be canvassed. A compensating advantage in using interviews as a research too is that as researcher I was free to go into much greater depth in order to clarify issues which remained unclear to me. The interview as a research tool, moreover, is not merely a stin ulus/response event. When it is conducted well it can

be a dynamic, non-linear process characterised by active listening and empathetic interpersonal skills to generate a more accurate understanding of reality (Hamilton 1993).

Another reason for choosing interviews as my major reason for collecting data about participants' learning experiences was that I believed that much of the reflection upon those experiences was likely to come in the form of personal narrative. Telling one's own story about how one interprets reality is a fundamental and universal human activity (Lucaites and Condit 1985; Bruner 1987). People relate stories about their own experiences both to recount and account for that experience and through active listening by an interviewer they are often able to define and clarify how they interpret experience (Bruner 1987; Finger 1989).

Interviewing is a widely used method in qualitative research. Eisner and Peshkin (1990) settle for three types of interviews, the informal conversational interview, the general interview guide approach and the standardised open-ended interview. Wolcott (1990) lists seven types of interviews - the key informant interview, life history interview, the structured or formal interview, the informal interview, projective techniques and personally delivered checklists and standardised tests. He describes an interview very broadly as "anything that a field worker does that intrudes upon the natural setting and is done with the conscious intent of obtaining particular information directly from one's subjects" (Wolcott 1990, p. 194)

Marshall and Rossman (1994) refer to four types of interviewing which they describe as ethnographic interviewing, phenomenological interviewing, elite interviewing and focus group interviewing. An interview properly conducted is a useful way of getting large amounts of data quickly. On the other hand however, interviewing as a means of discerning what is true has limitations and weatnesses. Interviews often require personal interaction and the interviewee may be unco-operative in not answering the questions the interviewer is seeking, or alternatively he/she may give the interviewer what he or she thinks the interviewer wants to hear. I have had to be very cautious in this regard and when I thought it might be the case, noted and recorded it in Chapters 4 and 5.

Kahn and Cannell (1957, p. 149) describe interviewing as "a conversation with a purpose". Silverman (1971) sees the interview as "an observational encounter" but stresses that interviews are conducted between particular persons in particular situations. As such they are encounters which have their o'vn rules which may be formal and enacted (legal), ceremonial (etiquette) or relational (affected by relationships). These layers or "rules" can make the interview as a research instrument a highly complex encounter. Even if the subject of the interview is relatively straightforward, interviewers are nevertheless moving into the private world of individual perceptions which are the domain of emotion, self-image and personal or professional status. As a result each interview takes on a dynamic of its own, irrespective of its context, and this is something of which the interviewer must be well aware, and take into account. In my own case I allowed the person being interviewed substantial latitude to follow issues of interest to them. However, I kept firmly fixed in my consciousness the four questions upon which I wanted a response and made sure that I covered and received a response to each of them before the interview concluded.

Fontana and Frey (1994) list the characteristics and approaches to successful interviewing as accessing the setting, understanding the language and culture of the interviewee, deciding how to present oneself, locating a time and place suitable to the informant, gaining trust, establishing rapport and being aware of other empirical data about the informant and the situation. Keats (1988) adds to this list the requirement that the interviewer must be an effective but at times active listener, and yet able to keep the interview on track. He or she must be aware of non-verbal communication and be able to suit the interviewing style to the age or other characteristics of the interviewee. Finally if recording devices are used permission must be sought and acceptable ethical standards and courtesies upheld.

It would have been possible for me, at least as far as the "practitioners" were concerned to devise a questionnaire dealing with all the key issues and to distribute it by mail, using established procedures to ensure an optimum return. I decided against this after making a few tentative steps towards devising such a questionnaire. The issues involved in exploring transformative learning are far too complex to be answered in a closely structured way and the number of short answer questions people would have to answer might well militate

against a good response rate, particularly as my request might come quite unexpectedly. As far as the learner - participants in the F A.L. program were concerned, I was convinced that people who had not worked over a sustained period with the concepts and terminology involved in transformative learning would in all probability not be able to answer adequately for my purposes any questic nnaire I could devise. But there had to be a "focus" for the interviews I proposed and I came to the conclusion therefore that the "structured interview" was by far the best choice for collecting data in the present instance, especially because as far as the participants were concerned, I had spent so many hours as a learner in the group, working through with them many of the issues to which I wished to direct my questions.

Structured interviews.

The method of going about the interview must be appropriate to the circumstances. Interviews are classified as "structured" or "unstructured" (Fontana and Frey 1994; Wolcott 1990) and a general interview designed to find out attitudes to particular issues in life might require a very casual approach with the real work taking place during data analysis. However when particular and precise issues are being explored, the interview might be better characterised by a formal set of questions from which no departure can be made. In this case the interview is virtually an o al filling-in of a set questionnaire.

In the case of my own present research because I was seeking answers to three specific questions, one of them with two parts, and using language and terminology with quite specific meanings, I decided that the general style of interviews should be "structured", that is determined by the research questions with the addition of "What are your perceptions of ..." because that is basically what people, especially the practitioners could give me, their own personal perceptions. In addition because I was particularly interested in examples of perceived instances of transformative learning, either in the experience of the interviewees themselves or observed by them in others, it was clear that the interviews should be allowed to be relatively free-flowing with my role as interviewer being that of keeping a general control of the interview and seeing that the interviewee did at least have the

opportunity during the interview of addressing each of the basic research questions. In this sense they were somewhat less than fully "structured".

It is worth re-emphasising here the point made earlier that F.A.L. is primarily about adults acquiring an understanding of learning generally, and about transformative learning to the extent that in Keane's view approaches to adult learning which confine themselves to instrumental and communicative learning are incomplete. Keane's view is that the latter approach ignores the ways in which the learning individuals have already acquired, inculturated psycho-cultural assumptions, habits of mind, frames of reference and meaning perspectives to use some of Mezirow's terminology, influence and "filter" (Mezirow 1978b) new learning. They consciously and unconsciously affect what people are able to learn, how they learn it and what they may even be unable to learn. F.A.L. is not a program designed to facilitate transformation of people's meaning perspectives along certain lines. It is open to identification, critical reflection and possible transformation of meaning perspectives but that is an issue for the individual participant.

The persons I have identified as "in ormed practitioners" in all probability met the criteria for "elite interviewing" (Dexter 1970; Marshall and Rossman 1994), or "key informants" (Wolcott 1990). These persons were in Wolcott's terms

individuals in whom one invests a disproportionate amount of time because they appear to be particularly well informed, articulate, approachable and available ... I suspect that most field workers rely on a few individuals to a far greater extent than their accounts imply (Wolcott 1990, p. 195)

Elite interviewing selects persons who are influential, prominent, and well informed. They are selected for these reasons - and additionally in my case because of their prominence in published theoretical writing on the subject of the research. A positive advantage of my decision to use "elite" interviewing for my research was that these recognised contributors in the field understood not only the relationship between the basic concepts but also their particular nuances. There were issues I could clarify with them about how change had occurred for them over time in sone of their understandings. It is of course possible that elite individuals may resent questions they may see as ill-phrased or too narrowly based -

or they may well take charge of the interview and even turn it on its head. However on the positive side they are very likely to respond to provocative, wide open questions that allow them to use their broad knowledge and imagination. This was in fact my experience in interviewing the "informed practition ers".

In five cases I was able first to call upon the practitioners and in the other two cases I telephoned them to introduce myself and to explain what my research was about. I followed this up with a letter to a l seven which set down precisely the nature of my request, and its purpose. The letter enclosed a copy of the research questions as well as my own prompt paper (Appendix C), an I confirmed the time. In the letter I also confirmed my verbal request for permission to record the interview. I typed up each interview, made my best judgement about anything that I ad been unclear from the tape or the context, and after that was completed sent a transcript of the person concerned with a stamped self-addressed envelope. An accompanying letter (Appendix D) expressed appreciation and invited correction, but not change. Finally, some six months later because of the very time consuming task of entering and analysing the interviews, I sent transcripts of Chapters 4 and 5, the results of the research, to the practitioners so that they would know exactly how I had quoted them, and in what context. I did this for ethical reasons and in my letter I offered the practitioners the opportunity to amend anything they had said if they wished. The letter explained all this and a sample appears as Appendix E. In the case of Mezirow I received a letter in return which made a number of very significant additional comments. I have decided to deal with these at so ne length in Chapter 6 rather than to treat them as part of the original data because they are largely a response to how I had quoted Tennant in Chapter 4.

In regard to the six "participants" I conducted the interviews in very much the same way. I did not prolong them much beyond an hour, but I did allow people to keep speaking if they wished. I followed the same procedure as with the practitioners in regard to offering the opportunity of correcting what they had said without actually changing the substance of the response, and returning the corrected copy. I turn now to the question of my own position as a participant observer in the F.A.I. program.

Participant observation.

In discussing earlier in this chapter ray selection of the group of learner participants I indicated that I believed there would be major advantages in my undergoing the F.A.L. program myself as a "participant observer". This was a significant decision affecting the structure of the research proposal and further justification of why the decision was made seems necessary at this stage. Participant observation is one of many recognised approaches used in qualitative research. It has its theoretical origins in that aspect of qualitative research known in the literature as ethnography. Ethnography has been used for many years in the field of cultural and social anthropology. It is variously known also as naturalistic description, analytic circumspection, constructivist observation through fieldwork, and "an elaborate venture in 'thick description'" (Geertz 1975, p. 6). Ethnographic research is best understeed not so much as a method but as an attitude of mind leading to an intellectual activity following active participation on the part of the researcher (Duignan 1981, p. 285). Ethnography focuses on the interpretation of behaviour and participant observation can greatly assist such interpretation.

In recent years ethnography has been acknowledged and widely used as an alternative strategy available for research in the social sciences. The term implies both a process and a product. The process involves obtaining through observation and "immersion" in a social group and recording in some appropriate way a picture of what is going on within it. The researcher has the responsibility of interpreting what has been observed and experienced, and this needs to be undertaken in a rigorous and systematic manner. The "product" represents the inferences the researcher makes of aspects of the culture of the group, that is, of its particular constellation of concepts, beliefs and principles of action and organisation (Cohen and Manion 1994). The success of ethnographic research depends upon the ability of the researcher to make him/herself a sensitive research instrument by transcending personal perspectives and becoming receptive to the perspectives of individuals and groups being studied (Lincoln and Guba 1994).

Participant observation may or may not be associated with other forms of ethnographic data gathering. The participant observer endeavours to become part of the social life of those

he/she is with, and to enter fully into their world. In addition to full participation, participant observation involves asking such questions as: What is happening here? What is important in this situation to this person or group? How would they describe what is happening? What language would they use? In what ways other than language would they express it? "The task is one of listening hard and keenly observing what is going on among people in a given organisation or culture in an effort to more deeply understand it" (Maykut and Morehouse 1994, p. 69).

The meanings people ascribe to their own actions are not always self-evident, even to themselves, and individuals may even endeavour, consciously or unconsciously, to conceal their true attitudes. True attitudes may become less easy to disguise over time and for this reason a longer immersion in the group may be an advantage in participant observation. The participant observer also needs to know as much as possible about individuals and the group from other sources. One of great challenges in participant observation is gaining genuine entry and acceptability. In n y own case this was particularly important because of the in-depth interviews I hoped to undertake with my fellow participants when the F.A.L. program was completed. Mere presence is insufficient and may even inhibit accurate observation. To gain acceptability may require a great deal of time as well as a readiness to be vulnerable and to admit to ignorunce (Atkinson and Hammersley 1994). Certainly the attitude of the participant observer must be one of collaboration and working with, never one of appearing to be making judgements or expressing personal opinions about other participants.

During the twenty four sessions over the six days of the F.A.L. program I took notes as appropriate (as I noticed did others) although not ostentatiously or when listening or speaking to another person or during interactive groups. At the lunch break each day and again at the end of the day I slippe I away and recorded from my notes and recollections expanded versions of what had beer taking place during that session. At all times I had in mind my research questions, that is, how the events I had observed that day and experienced myself had helped me understand what transformative learning is, what its processes and procedures are and what its implications might be for facilitating the learning of adults. I was alert also to anything which might throw light upon feelings, the use of the

imagination and other problematic issues relevant to transformative learning which I have discussed in Chapter 2.

Following my decision to become a 'ull participant in the F.A.L. program I broached the matter with Ross Keane (the facilitater) as already indicated. We discussed in detail what I was doing, I stressed the value I place I on confidentiality for course participants and Keane gave an assurance of his support if that were necessary. On the first day, during the introductions, I gave my name as did others, and a few simple facts about myself. I told the group that I was undertaking doctoral research into transformative learning and that I was interested in finding out in a practical situation what the concept meant and what it implied. I was careful to say that I would be a full participant in the program as was everyone else. My comments took only a few moments and were received without comment.

On several occasions over cups of coffee, other participants asked me about my research and I answered their questions openly and honestly. Towards the end of the very last day, that is after I had known and worked collaboratively with the group for six full days over a period of eleven weeks, with Keane's support and the group's agreement, I was given fifteen minutes during which with the assistance of an overhead transparency I explained at slightly greater length the nature of my research. There were several questions and my impression, confirmed by several later comments, was that the group as a whole reacted positively and were supportive of what I was doing. I then distributed the briefing paper (Appendix A) to all participants and said that I would be approaching a sample of six persons for an interview based upon the questions in the briefing paper. The interview would take about an hour. It would be recorded but those interviewed would have the opportunity to check what they had said from a typed transcript which I would send them. I chose the six people and later two of them in fact offered the unsolicited comment that they believed they would not have responded as openly to my questions had they not come to know me quite well as a result of my full participation in the program.

Ethical aspects of the research

Because qualitative research involves the study of human beings through their words, actions and observable attitudes, researchers have ethical responsibilities to the persons they involve in their research. A researcher may be conducting research in order to learn experientially how research is done and in order to qualify for a particular academic award. In this case the principal beneficiary is the researcher. On the other hand, research may be conducted for the benefit of that section of the general population to which those being researched belong - for example teachers, ethnic groups and disadvantaged young people. According to LeCompte and Goe z (1982) the researcher has a significant ethical responsibility and an obligation to ensure that no harm comes to those involved. In the second, he or she needs to consider whether the processes used are such that the benefits to the particular population concerned outweigh any risks in conducting the research. As my research belonged principally to the former category, I judged my ethical responsibilities to be significant.

Subjects of research have a right to know in general terms the nature and purpose of the study and they should be free to give or withhold their informed consent to participate (Cassell 1980; Eisner and Peshkin 1990). This does not mean that every detail has to be explained, however. There may sometimes be a dilemma for the researcher if knowing every detail may unduly affect the I kely response of subjects. An example of this is that given by Crowl (1993) who asked teachers to grade the content of audio tapes of student work when he was in fact concerned with whether the quality and tone of voice of the individual student affected the mark the teachers gave. In this case Crowl did not tell the teachers this beforehand because that would have alerted them to what he was a really about and perhaps have invalidated the research. He did, however, inform the participants afterwards, answered questions and shared the results of the research with them. He described this as "dehoaxing" that is, Crowl believed he had an ethical obligation to reveal to the teachers at the end of the research the true purpose of his enquiries and face any response they had to make. In the case of my research project I did not say on the first day that I was going to ask for interviews at the end of the program. But during my address on day six I told the group that I would be seeking interviews. Withholding information which subjects might reasonably expect to be given, however, or engaging in deliberate deception, are ethically unacceptable in almost any circumstances and I was at pains to avoid them.

It must be conceded that there are par icular problems associated with using volunteers in qualitative research. If volunteers only are used it is possible that this may result in an unrepresentative sample being chose i. Perhaps only persons favourably disposed may volunteer. In the case of my research I decided it was best to arrange interviews by simply approaching individuals personally and asking them. It was partly for this reason that I decided to be a full participant in the program, hoping to win the trust of the other participants. I did not ask for volunteers, I relied upon my personally expressed requests for interviews and in this way I believe I had a better chance of getting a cross-section of the group, and of ensuring a balance of ger der, occupation and age group.

A less obvious example of the responsibility of researchers to exercise due care arises when there is the possibility of exposing participants to injury to self-esteem, loss of personal reputation or other experiences which might result in undue emotional distress. An example of this might be requiring subjects to recall past experiences which may be painful or even traumatic. In the case of the present research into transformative learning, dealing as it does at times with deeply held psycho-cultural assumptions and value systems, this is a very relevant issue. However as I was in the position of participant observer rather than facilitator of the F.A.L. program I saw my responsibility as participating in an open, non-evaluative and non-judgmental way and simply being an ethical group member. Later my decision to give interviewees the chance of checking transcripts of their interviews and to correct them if they wished to do so reflected my sense of ethical responsibility in this regard. Appendix D is a sample of the letter sent with the transcripts.

Confidentiality and anonymity often pose significant ethical problems. This is certainly the case in research such as the present involving personal interviews in which people may reveal details about themselves or their relationships which might cause distress if revealed in a publicly available document such as a thesis. My decision to use coded first names for the "participants" and certain other emissions and disguises to preserve anonymity in

analysing the data, reflected this ethical responsibility. In regard to the practitioners, the situation was different. Most of them are well known in their profession, both personally and through their published work, and this was clearly an advantage to my research. Their circumstances were also quite different from those of the practitioners in that they did not participate in a program and were interviewed only on questions they knew in advance. Each person interviewed had the opportunity to amend the transcripts of his interview. As indicated earlier I sent each of the practitioners final drafts of the whole of Chapters 4 and 5 which included the precise quotations. On this basis all practitioners agreed to their names being used.

Cassell (1980) relates the question of relevant ethical issues in social science research to the role of academic supervisors and maintains that it is an ethical responsibility for institutions under whose auspices research is being conducted to see that due process in ethical matters is followed. There may be legal obligations also for researchers in this and in other areas which must be understood and adhered to. The University of New England deals with these issues in its "Code of Conduct for Research (1994)" and I here declare that under the guidance of my supervisors I adhered to the spirit and the letter of what is therein set down.

DATA ANALYSIS

By the time the interviews were completed and transcribed there were sixteen documents, seven from practitioners, six from part cipants and three recordings of my own perceptions as participant observer. All had taken between an hour and an hour and a quarter and all were of approximately the same length, around nine to ten thousand words. Although only the four basic questions had been put to each of the persons interviewed there was a great deal of other material in the transcripts - conversation and reflection ranging across a broad spectrum of the lives, learning and experience of those interviewed. Whereas in theory the focus of attention was the four questions put to each person it could not be assumed that any of the material in the interviews was irrelevant - it all needed to be analysed. It would have been a massive task to do so by reading, manual coding and tabulation of the material

and I made a decision therefore to use a computer based program, QSR NUDIST, for this purpose.

The QSR NUD*IST data analysis package

QSR NUD*IST is a software package for the analysis of qualitative research data and it is particularly suited to analysing intervicus and conversations. It was developed at La Trobe University Melbourne and placed under copyright by Qualitative Solutions and Research Pty Ltd (Q.S.R.) (1994) from which company the present writer purchased the program under licence #3-WP304E281141. The acronym NUD*IST stands for Non-numerical Unstructured Data Indexing Searching and Theorising. The program does not think for the researcher but carries out his/her directions comprehensively and virtually instantaneously. Q.S.R. NUD*IST has the capacity to store in a systematic and logical manner an almost infinite amount of instantly retrievable data recorded during research projects and it provides a ready means for exploring that data for the concepts, ideas and trends embedded within it. One of the great advantages of QSR NUD*IST is that it greatly reduces repetitive clerical work. Through a conceptual coding and numbering system chosen by the researcher it keeps accurate track of decisions made in classifying expressions of particular ideas, supported by precise references o texts.

QSR NUD*IST operates by making it possible for the researcher to build up patterns of ideas through a process which begins with something akin to a concept-mapping exercise from the original documents but go is much further. It keeps meticulous track of the patterns of ideas and relationships which are seen as analogous to the interconnected "roots" of a single "tree" and they are in fact defined in those terms. Thus the "tree" with its interconnecting "roots" provides a conceptual structure parts, of which can be made visible upon a computer screen. The inter-connecting elements have a precise and defined relationship to the central concept being researched and these inter-connecting points between the roots of the "tree" are described in the program as "nodes". Each node has three forms of inter-relationship - a "child" relationship to a "parent" concept from which that node is derived, a "sibling" relationship to nodes derived from the same "parent" at the

same level, and a "parent" relationslip to nodes which are themselves derived from that particular node. Each node is given a name by the researcher as well as a definition and the program then allocates an index number to that node through which all the data allocated to it are immediately accessible. It is very important that nodes be defined precisely, "sibling" nodes especially having the requirement of being collectively all embracing whilst at the same time being mutually exclusive. Memos can be written on any matter of interest to the researcher and stored at the appropria e node.

The key to the availability of information stored at various nodes in QSR NUD*IST is the indexing system. The indexing system begins with the "root" numbered as 1 and each level below that has its own identifying number, the sequence and order of the digits representing each node's logical relationship to all other nodes. The program files all the indexing, and a complete listing of rodes in numerical order with names, definitions and attached memos is retrievable at any time. Information from documents - for example from an interview in the form of phrases o sentences representing concepts - can be attached at the appropriate nodes. These attachments carry with them all the identification of the original document from which they came. It is possible to add, edit or delete information at nodes at any time. Material in the form of quotations can be moved backwards and forwards between the original transcripts and from one node to another without additional typing. Once a bank of nodes and information relating to them is built up QSR NUD*IST will, when requested, search all documents for particular words or phrases, giving the researcher the location and text of he paragraphs in which those particular words and phrases are located, together with accompanying statistics on the frequency of their occurrence.

QSR NUD*IST relatively easily provides assistance for the coding and management of the complex data found in interviews. Because computers work with structures of codes rather than with ideas, once the text is coded, relationships are more easily detected. Q.S.R. NUD*IST has the ability to retrieve all the text or texts surrounding a certain coded concept and it can sort texts on a numeric or Boolean basis (Richards and Richards 1991). At the same time because sources, that is sources of interview opinions or expressed perceptions, are also coded it is possible to search text on a basis of inclusion or exclusion.

Q.S.R. NUD*IST will retrieve text or presence or absence of two or more codes, that is, report and optionally display all text portions, indexed by the nominated codes, and display statistics about such retrievals. QSR NUD*IST places no limits on the number of coding categories and no limits on the number of times a particular passage can be coded. In the most sophisticated forms it can assist the discovery of unrecognised ideas and relationships and promote the construction and exploration of explanatory links between ideas embedded in the data. This can lead to the formulation of hypotheses about opinions or perceptions, about who expressed them and how of en, which can ultimately lead to theory building.

Preparation of data for analysis

After the corrected transcripts from the thirteen persons interviewed had been returned, the necessary adjustments (there were not many) were made to the transcripts and they were then prepared as computer documents for analysis by QSR NUD*IST. Each document was changed to Courier font and "text only", which ensured that paragraphs containing ideas, rather than individual lines, would be sequentially numbered, and was then moved to the named project as a "rawfile". "Headers" were given to each file listing the actual surname for practitioners and pseudonym first names for participants. Headers also indicated whether the individual was practitioner or participant, age in decade groups, gender, and date of the interview. Because paragraphs were chosen as "text units" each new response of an interviewee to a question was a paragraph which the program numbered automatically.

The three documents from my own recorded reflections during my participant observer role in the F.A.L. program, one for each two day session, were prepared and moved to the program as "rawfiles" in precisely the same manner as described above for the interview documents. They were named John 1, 2 and 3 and the "header" in these cases indicated whether the rawfile represented reflections upon the April, May or June 1995 sessions of F.A.L. respectively.

During the processing of data and when allocating nodes in QSR NUD*IST the first "child" of the first root node is "base data". Documents may then be allocated to "base

data", which allocation automatically provides the necessary categorisation under source, gender, age and so on. In the present case a decision was made to code base data by the name of the person, whether that person was practitioner or participant and the person's gender and age group in decades. Thus the interview with "Jane" once it has been introduced to the program was coded as follows: "Jane, participant, female, 41-50". Any statement of Jane when attached to a node would carry this identification which the program instantly recognises. The views of individual men or women on a particular ethical consideration in regard to personal transformation, for example, can then not only be collected, identified, stored and relieved, but also grouped. As a result it is possible to tell whether there is a difference in the perceptions of men and women on a particular issue, whether practitioners thought difference. It is the researcher always, however, who decides which questions are to be asked.

After a number of trials and errors I lecided that the second "child" of the root should be identified as transformative learning Transformative learning then had three "children" relating to the three research questions [theory (what is ...) practice and implications]. "Practice" was then in turn allocated three "children" (processes, procedures and outcomes) and so on. Because there were more than a hundred nodes it was not possible for the computer to print the whole tree except in many small sections. Appendix F gives the first three to four levels however and Appendix G is a printout of all nodes showing for each node its name, definition, and the number of text items from documents indexed at that each node. As a result it was possible to go through all sixteen documents, attaching information at various nodes and expanding, modifying and developing the tree on the basis of the information emerging from the documents.

The analysis of the interview documents was a long process and it was found easiest to print the sixteen documents from QSR NUD*IST as hard copy with the paragraphs numbered sequentially by the program. They were then able to be examined closely in hard copy and because the paragraphs as "text units" were numbered consecutively, identification of particular concepts and perceptions could more easily be ascertained and allocated to nodes. Once this had been done it was possible also to search the nodes for

particular concepts which began to emerge from the interview material and to test numerically the support for them. For example, taking "emancipation" and "liberation" as synonyms, it was possible to find text for all the uses of those terms in all documents, to ascertain whether they were used more often by practitioners or participants and how often they were used by the women as dis inct from the men interviewed. When this had been completed patterns began to emerge from the data and these could then be examined by going again to the sources in the original documents. This in turn was assisted by the fact that, if required, QSR. NUD*IST will also provide text on either side of the selected passage in order that the context of particular perceptions can be examined.

CONCLUSION

Chapter three began with the assertion that, based upon a survey of the published literature in the field, much of what has been written about transformative learning over the past two decades has been theoretical in nature and that very few empirical studies involving actual learning situations have been under aken. The introduction restated the purpose of the present project which has been to improve present understandings of the nature, processes, procedures and implications of trans ormative learning through a detailed analysis of the perceptions of such learning of two groups of teachers and learners, moderated by participant observation by the researcher in the actual learning situation. The chapter considered the relative merits of quartitative and qualitative approaches to research design for projects such as the present and put forward a considered argument supporting the decision to adopt a basically qualitative methodology. It pointed out the advantages and limitations of such an approach as well as the ethical considerations relevant to the present purpose. It also gave explanations for certain decisions taken to ensure that such ethical issues were respected and taken into account.

The chapter went on to set down an appropriate structure for the research project. This involved looking at the research questions from the viewpoint of the perceptions of two groups seen in broad terms as composed of a selection of theorists who have published in the field and who were also teachers, and a group of adult educators who had undertaken a

specific program for facilitating adul learning which amongst other experiential learning strategies involved a study of transformative approaches to adult learning. An explanation of the value of participant observation as an appropriate method of gathering qualitative data was offered together with a justification for the decision to use this approach as an additional source of relevant information. The seven "informed practitioners" and the six "participants" in the F.A.L. program were named and reasons for choosing them given.

Alternative ways of collecting data were outlined and reasons given for the decision to use structured interviews as the principal means of gathering information. Theoretical aspects of interviewing were considered as well as best practice derived from such considerations. How the interviews were conducted with these considerations and safeguards in mind was explained and justified and a brief account given of how the material was prepared for processing. The chapter concluded with a description of the nature and working of QSR NUD*IST, a computer based software package for managing, analysing and reporting on qualitative data gained from interviews, and hypothesis formulation and testing. Chapters 4 and 5 deal with the results of the research.