You and Your Action Research Project

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Introduction

Jean McNiff, Pam Lomax, Jack Whitehead

This book has been written in response to numerous requests from practitioners over the years for a basic guide to educational action research. We have resisted writing it until now, because in our opinion, one should not tell others how to do action research. The term embodies a whole set of principles, processes and procedures that one has to experience personally for the whole process to make sense. We felt that any book that legislated would in fact deny the essence of action research.

However, several trends have made us write the book now. Three World Congresses (1990, 1992, 1994) in Brisbane and Bath, on Action Learning, Action Research and Process Management have shown that there is a worldwide debate among researchers about the standards of judgement which can be used to define educational action research and good quality action research. There does appear to be agreement that anecdotal or nonself-reflective accounts, no matter how valuable in some contexts, could not, on their own, count as action research. Second, action research is appearing increasingly on award-bearing courses. Often it appears as a module or a piece of small-scale research. Whilst we are supportive and wish to encourage self-reflective practice we want to avoid our work being used to justify a self-contained technical exercise. In saying this, we want to emphasise the importance of your originality, imagination and creative capacities in retaining ownership of your own action enquiry. We draw many examples from the work of Pam and some of her colleagues on the MA programme at Kingston University to show how ownership can be retained by the individual action researcher. Jean's good friend Una Collins in Dublin has said, 'You have to show me the steps before I can dance'. Action research is only one kind of dance, and the steps we follow are only one version of that dance.

We are asking you to approach our text in the spirit of an invitation to dance. If you see anything of value in what we are doing, do use it and create your own approach in your own context. By offering your account it gives other people the opportunity to learn from you. We hope you experience our 'telling' how to do action research, within an approach which treats as sacred the value of your integrity and creative spirit. We want to relate to you, through our text, in a way which does not violate your integrity. As educators we are always faced with questions of encouraging people to express values of freedom, democracy, fairness and self-determination, without stifling these qualities through the imposition of inappropriate conceptual structures and power relations. Through our work in higher education we wish to support the values of truth, honesty and justice and to support each other and other practitioners, in making their contributions to a more peaceful, just and productive world.

We have written in this spirit. Our guiding principle has been the need to share good practice and to share the values of the 'good' which motivate people to try to improve their practice. Throughout, we state that our knowledge is incomplete, in a constant state of restructuring and re-creation. The approaches we are sharing here work for us, as well as for many other people with whom we work. That does not mean we have it right. Ideas are constantly revised and reformulated. Colleagues offer amended versions of our ideas, and we incorporate those into our work, in the same way that they learn from us and adapt our work. This is our experience of being in a dialogical community.

It is very important that this message is communicated clearly. We are not presenting a definitive answer. We are showing how we do action research, in the spirit of modelling our practice and inviting you to use it, if it is appropriate and relevant to your situation. Throughout, we strongly recommend that you should devise your own strategies, work out your own ideas, using ours perhaps as prompts to get you started. Nor is this so much rhetoric. We can identify change in ourselves as we have worked together. If you compare previous work of ours, you will see that the ideas in this book are developments and, we would argue, improvements from previous work. That is one of the strengths of action researchers; they are entitled to change, improve, discard, make mistakes and enhance their learning.

Audience

Action research is used extensively on pre- and in-service programmes of professional education, particularly teacher education. In recent times its scope has broadened to include other professions, such as health, service professions, civil and military services, as well as other contexts, such as religious and political development. It is used in some contexts as the basis for participatory action in bringing about social reform and cultural renewal; and is embraced as a valuable form of personal and social development for young people and adults in school and community contexts. We (Jean, Pam and Jack) are all involved in programmes of continuing professional development, and our work is located mainly in higher education, although we also work in other contexts, such as schools and adult education, management, and religious communities. Because we have written this book out of our own experience, our examples are drawn primarily from teacher education. We do wish to emphasise, however, that action research has virtually unlimited scope in relation to the development of personal and professional self-awareness, regardless of context or discipline. Action research, as a form of morally committed action, knows no boundaries other than those that the individual practitioner wishes to construct. We hope therefore that this book is relevant to all contexts of individual and community learning, and we commend it in that spirit.

The series of three books

This is the first in a series of three books. It offers advice on doing action research and is written from our own experience of doing educational action research and supporting others in doing theirs. The creative energy for its genesis was provided by Jean. It rests on her ability to express her values of loving care for others and a passionate commitment to enable the work of good teachers to be communicated, published and celebrated. Working with colleagues at Marino Institute of Education, in Dublin, Jean has helped to establish and sustain a teacher research network whose publications have been most influential in showing the generative phases of action enquiries. She is doing pioneering work in the development of portfolios of material for the accreditation of prior learning. We believe this book contains useful advice for all those who are initiating action enquiries and who wish to have their professional development accredited.

The second book in the series includes some of the best case studies from the practitioners we support and who are making their own creative contribution to strengthening and extending our educational action research networks and communities. They are also making their own contributions to educational knowledge. The inspiration for this text was provided by Pam and it draws extensively on her experience of managing the impressive growth of educational action research in the award bearing courses at Kingston University. It includes examples of memory work, educational management, representation and educational standards of judgement. It shows in a more extended fashion, through case studies, the values, understandings and lived experience that have informed this approach.

In the third book, we offer a more closely theorised rationale for our views about educational action research approaches, also with case study material, to show the reality of how we and others are working. We draw a distinction between social science and educational action research and

explain how the creation of living educational theories from action research can be related directly to improvements in managing professional practice, pupil learning, cultural renewal and chaos and complexity theory. The inspiration for this text was provided by Jack who draws on his commitment to publish progress reports of his own educational development, and to encourage us all to show how we are developing our own work in collaboration with others and contributing to educational and cultural renewal through our enquiries of the kind, 'How do I improve what I am doing?'.

About the authors

Jean McNiff works as a consultant in education in national and international contexts. She is particularly active in the Republic of Ireland, where she is helping others to establish action research approaches to professional development. She is Director of the Modular Programme for Professional Development, in partnership with the University of the West of England, at Marino Institute of Education, Dublin. She is an Honorary Visiting Fellow at the University of the West of England. Her research interests include the relationship of educational theory and chaos and complexity theory, the generative transformational nature of educational research, and the role of listening in support practices. She has written widely on these and related issues. She is married to Alan Hyde, and is in partnership with him in retail and publishing businesses.

Pamela Lomax is Professor of Educational Research at Kingston University in England. Her commitment is to working with practitioners, particular with teachers, who want to get their work accredited within higher education. She has developed and implemented a number of innovative programmes within the portfolio of courses offered by Kingston University, including what has been identified as one of the best action research MA programmes in the UK and an award winning post-graduate diploma programme which is provided by partner schools. Pam has considerable experience as a researcher, but in recent years has come to prefer action research to other approaches. She facilitates a large action research network centred on Kingston University and extends an open invitation to anyone who wants to become part of it. Her work is widely published and a great deal of her time is spent in helping less well-known action researchers put their research into the public domain.

Jack Whitehead is a Lecturer in Education and a member of the Centre for Action Research in Professional Practice at the University of Bath. He is also the convenor of the Action Research in Educational Theory group in the School of Education. In the self-study of his own educational and professional development, as an educational research and university teacher, he has encountered and analysed power relations surrounding the educational standards used to validate and legitimate different forms of educational knowledge. His original contributions to educational knowledge include the idea that each one of us can create our own living educational theory in the descriptions and explanations we offer for our own educational development in enquiries of the kind, 'How do I improve what I am doing?'. His enquiries are now beginning to focus on developing the relationships between living educational theories and cultural renewal in a way which enables educative communities to express more fully their sacred, aesthetic, ethical, epistemological, political, economic and use values.

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Chapter 1

Living educational action research

This chapter deals with basic issues concerning the action research process. Many of these issues apply to research in general, not only to action research. But educational action research also has unique characteristics that make it different from other research. This chapter will help you clarify what action research is and how it is different from other research.

The contents of the chapter are:

- What is action research?
- How is action research similar or different to other research?
- What are the main features of the action research process?

What is action research?

Action research is one kind of research. There are many other kinds. As someone who is undertaking a research project, you need to be aware that there are different ways of doing research, so that you can justify your choice of doing action research.

1 Practitioner research

Action research is a form of practitioner research that can be used to help you improve your professional practices in many different types of workplaces. Practitioner research simply means that the research is done by individuals themselves into their own practices. For example one of us (Jean) has been working in a school with a group of teachers and parents, exploring together how they might evolve a 'code of behaviour' for the home-school community. Rather than simply write out a code, they decided to see if they could live their beliefs first and then write down a description of what they had done, drawing the code out of the observation of their practice. Parents, teachers and children worked together in living rooms as well as in classrooms on this project. The notion of research was demystified because they built together a perception of research as a vehicle for improving the quality of their life in their own social contexts.

We believe that well-conducted action research can lead

- ➤ to your own personal development,
- → to better professional practice,
- → to improvements in the institution in which you work, and
- ➤ to your making a contribution to the good order of society.

These are powerful claims, not to be made lightly. We hope that this chapter will help you see how you can make them with confidence.

2 Good professional practice

You might say that you already do action research, that many aspects of good professional practice and ways of working that you already use are forms of action research. You probably often reflect on your practice and change it in the light of what you learn. We have a lot of sympathy with this view, and we will argue that the informal, personal enquiries undertaken by good practitioners are a sound basis for the more rigorous methods used by fully-fledged action researchers. However, many informal enquiries are concerned with technical matters that do not involve practitioners in questioning their own fundamental practice; and a major difference would be that the outcomes of these informal enquiries are not put in the public domain and are therefore never really opened to serious challenge. Good professional practice emphasises the action but does not always question the motives for the action. To be action research, there must be praxis rather than practice. Praxis is informed, committed action that gives rise to knowledge rather than just successful action. It is informed because other people's views are taken into account. It is committed and intentional in terms of values that have been examined and can be argued. It leads to knowledge from and about educational practice.

3 Action and research

The easiest way to understand action research is to look carefully at the two words in the title. When we brainstormed some words to do with action and research we came up with the following words. Think of some more that you can add.

Action words	Research words
doing	enquiring
intervening	standing back
intending	being careful
committed	disciplined
motivated	evidence
impassioned	systematic

There are a great number of definitions of action research that emphasise different aspects which particular authors think are important, although most would accept the relevance of the words listed above. We have taken one from *The Action Research Planner*, which was written by Stephen Kemmis and Robin McTaggart to help people who were just starting to use action research. They said:

'The linking of the terms action and research highlights the essential feature of the method: trying out ideas in practice as a means of improvement and as a means of increasing knowledge...' (Kemmis and McTaggart, 1982)

This definition emphasises the importance of the action. We would agree that the action drives the research and is the motivating force. Action researchers tend to be committed and often impassioned about what they are doing. A number of recent publications have celebrated the importance of feelings (Dadds, 1995; Whitehead, 1995:630–632), or shown the need for an awareness of affective aspects that inform practice (Laidlaw, 1994; Collins and McNiff, 1996). Action researchers tend to be working intentionally towards the implementation of ideas that come from deep-seated values that motivate them to intervene. This emphasis on action is also clear in John Elliott's statement that:

'Action research is about improving practice rather than producing knowledge...' (Elliott, 1991)

Elliott's definition is interesting because it seems to be at odds with the quote from Kemmis and McTaggart. Whilst the latter say that action research is a means of increasing knowledge, Elliott distinguishes between improving practice and producing knowledge. We seem to have run into a difference in opinion between two of the main schools of thought about action research: one centred at Deakin University in Australia, where Stephen Kemmis was the central figure, and the other centred around the University of East Anglia, where John Elliott was the main figure. In fact, neither of the quotations above do justice to their authors' thoughts about this complex issue and are a warning that you must be careful about making assumptions on the basis of such extracts.

4 Research as a contribution to knowledge

We think the apparent difference between the two quotations is really about differences in the way the word 'knowledge' has been used. This whole question of knowledge is a tricky one and there are many books that outline different perspectives about what constitutes knowledge. Michael Bassey, in a very simple definition says that

'Knowledge means understandings about events and things and processes; it includes descriptions, explanations, interpretations, value orientations, as well as knowledge of how these can be arrived at; in other words it includes knowledge that something is the case and knowledge how to do something; it includes theory-in-the-literature as well as the personal theory of individuals which has not been articulated in writing.' (Bassey, 1995:3–4)

The whole point of researching is to find out something that we did not already know. In this sense all research is a contribution to our own knowledge. We think that making a public claim to knowledge is more than contributing to personal knowledge. It implies that we have something relevant to say that others in the public arena will find useful and that we have convincing evidence to support what we claim to know.

5 Research as professional development

An important principle of action research is for the research to be educational in the sense of self-developing. It is through enquiring into our own practice that we are able to create a living form of educational theory (Whitehead, 1993) that is constituted by the descriptions and explanations that we produce about our own educational development as we answer questions like, 'How do I improve what I am doing?' Action research, in this sense, is insider research and every action researcher engages in a form of professional development. We find it strange that some authorities treat this as a limitation of the research rather than an additional bonus.

We end this section by quoting from what Pam wrote about teacher action research in the context of staff development:

'...action research is a way of defining and implementing relevant professional development. It is able to harness forms of collaboration and participation that are part of our professional rhetoric but are rarely effective in practice...[it]...starts small with a single committed person focusing on his/ her practice. It gains momentum through the involvement of others as collaborators. It spreads as individuals reflect on the nature of their participation, and the principle of shared ownership of practice is established. It can result in the formation of a self-critical community: extended professionals in the best sense of the term.' (Lomax, 1990b: 10)

The point we wish to emphasise is that action research involves many people other than the researcher, and the way in which these people are involved is crucial for the methodology. The quotation above applied specifically to teachers, but action research is appropriate in all walks of professional life where education and training take place. So it can be used by professionals in the health, welfare and education services as well as professionals in the police force, the armed services and many other religious, cultural and social organisations.

How is action research similar or different to other research?

There are different ways of doing research. It could be argued that some methods are more useful in particular contexts. However, certain processes and procedures are common to all kinds of research. It is these processes and procedures that qualify research as research and not just ad hoc activity. Good action research shares the basic characteristics of all good research, but it also has its own special characteristics.

1 Doing something about it

Lawrence Stenhouse said that research was a 'systematic enquiry made public' (Stenhouse, 1975:142–165). You could usefully apply this definition to your action research project but it would not be sufficient, because it does not include the imperative of action which is integral to action research. However, if your project was not systematic and was not made public, it would not qualify as research, let alone action research. Elsewhere in his writings, Stenhouse enlarged the concept, making a strong case for teachers being researchers because it was a means through which they could bring about improvement in their teaching. This is another example of how a statement taken out of context does not give its author's full story!

The focus of your research will be your action to achieve the purpose you set yourself. 'Doing something about it' is a feature of action research that does not apply to other kinds of research. For example, in most kinds of social science research there are clear rules about not influencing the object of the research by intervening in the action. Another difference of action research is that it has an explicit value basis. Your intention as an action researcher would be to bring about a situation that was congruent with your value position. This is not the case in most forms of social science research which are non-interventionist by definition.

2 Some key ideas and qualifiers

Bassey (1995:6) distinguishes three categories of research: theoretical research, evaluative research and action research. He says that theoretical researchers try to describe, interpret and explain events without making any judgements about them; evaluative researchers describe, interpret and explain events so that they or others can make evaluative judgements about them; whereas action researchers are intent on describing, interpreting and explaining events while they seek to change them for the better.

There are some key ideas hidden in Bassey's description of action research. We have identified these ideas by the bracketed words we have inserted into his statement about action research below. Action researchers are intent on describing, interpreting and explaining events (enquiry) while they seek to change them (action) for the better (purpose).

These ideas need some important qualifiers if they are to be acceptable as the basis of our view of action research. We would wish to qualify the ideas as follows:

- → systematic, critical enquiry made public
- ➤ informed, committed, intentional action
- ➤ worthwhile purpose

Enquiry means asking questions for which you do not know the answers. Engaging in enquiry means that you want to learn something new. Authentic research is where you do not already have the answers. Authentic action research adds to this the idea that what you find out is going to make you change what you are doing, both mentally and in the practical world. In this sense it incorporates action that is informed, committed and intentional. It means that you are willing and able to change your own understanding of the issue that you are researching and that you will work to bring about practical changes outside your own practice also. You will be aiming to show what doing the research means in your life, both in terms of how your thinking and understanding are growing, and also in terms of how your research is having an impact on the social situation that you are in. In this sense the research is worthwhile and driven by your own values about what is good.

All research should be systematic and critical. Unfortunately not all research is made public, and there is considerable disquiet in the research community about the amount of funded research that has restricted publication because of government policy. Research might also have restricted publication because of commercial interests or national security. The publication of action research is also subject to some debate. We think that action research should be as open as possible, as restricted publication adds to the dangers of action research being used for manipulative rather than educational purposes.

All research is enquiry conducted for some purpose, the purpose usually being to make a contribution to the advancement of knowledge. The main purpose of action research is to bring about an improvement in practice. This improvement in practice is, in action research, always associated with an advancement of knowledge but it is the purpose of the action that is the key feature, and this purposeful action must be demonstrably worthwhile.

A good example of how action research is different from other research is in the difference between the following two questions: **How can I improve the quality of my practice here?** (Whitehead's question)

What is happening here? (Bassey's question)

Whitehead's is an action research question and Bassey's is not. 'How can I improve...?' questions indicate your commitment to an imagined solution that depends on your own action. Such questions, asked within a professional context, highlight the centrality of your own values as a professional dealing with an issue to which you are committed to finding a solution. Many writers add the adjective 'educational' before 'action research' to emphasise the point that action research aims to bring about an improved situation through a careful evaluation of action. It should not be used as a manipulative device but as an educational means of bringing about a good social order for all concerned (McNiff *et al.*, 1992).

In summary

Action research shares the following characteristics with other research:

- → it leads to knowledge
- → it provides evidence to support this knowledge
- → it makes explicit the process of enquiry through which knowledge emerges
- → it links new knowledge with existing knowledge

Action research is different from other research because

- → it requires action as an integral part of the research process itself
- → it is focused by the researcher's professional values rather than methodological considerations
- it is necessarily insider research, in the sense of practitioners re searching their own professional actions.

A common misconception: You cannot use statistics in action research. You can!

Action researchers can employ both qualitative research techniques and quantitative research techniques. When you use qualitative research techniques you will be looking at a small number of cases in as much detail as possible. When you use quantitative research techniques you will be looking at a larger number of cases in less detail and will probably find statistics useful aids. Many action researchers use both quantitative and qualitative research techniques. Whichever techniques you use, you must follow the guidelines that have been developed for using the technique. Action research is not an excuse to use an established research technique badly.

What are the main features of the action research process?

This is a summary of the main features. These ideas will be dealt with more fully in the appropriate chapters.

Action research involves:

- 1. a commitment to educational improvement
- 2. a special kind of research question
- 3. putting the 'I' at the centre of the research
- 4. a special kind of action that is informed, committed and intentional
- 5. systematic monitoring to generate valid data
- 6. authentic descriptions of the action
- 7. explanations of the action
- 8. new ways of representing research
- 9. validating claims made as a result of the research
- 10. making the action research public.

1 A commitment to educational improvement

Action research is an intervention in personal practice to bring about improvement. The action is not haphazard or routine, but driven by educational values that need to be explored and defended. It is a practical form of research that recognises that the world is not perfect and that professional values have to be negotiated. A central value that is accepted by most action researchers is the value of respect for others which means that their views and values must be accommodated. The role of 'others' in action research is a central concern that needs to be given careful thought.

2 A special kind of research question

The special kind of question that action researchers ask begins:

How can I improve...

...my personal practice? ...my understanding of this? ...the wider educational situation?

It is important to be aware that particular research questions and hypotheses lead to particular research designs and many of these are inappropriate for action research.

In action research there is an emphasis on your deliberate intention to intervene in your own practice to bring about improvement. This concern needs to be stated in a special way. Action research questions should be of the type: 'How can I improve...?, because action research should be about your action, not the action of others.

3 Putting the 'I' at the centre of the research

You are the person at the centre of the research. It is a good idea to use the personal pronoun but only where you are asserting your particular ownership of the statement being made. Some people use the personal pronoun too loosely to make statements that they cannot possibly own. The personal pronoun is important in action research and must therefore be used with great care.

How do 'I' fit into the research?

- → I am the subject and object of the research
- → I take responsibility for my own actions
- → I own my claims and judgements
- → I am the author of my own research accounts

How do 'I' fit into the action?

- ➤ by seeing my own practice as the central focus of my research through critical reflection and self study
- → by encouraging others to participate in a negotiated definition of shared practices
- → by showing respect for other ways of doing things
- → by showing humility and exposing my vulnerability
- → by being open to argument
- → by being willing to accept that I could be wrong
- → by owning my mistakes
- → by standing my ground when my principles are at stake

4 What kind of action?

a Informed action

Action enquiry is itself a method for making sure that your action is informed. It means systematically investigating your own actions and motives, treating your findings and interpretations critically, and making yourself open to alternative viewpoints so that you reduce your personal biases. For your action to be informed you need to be proactive in exploring your own motives and values so that you are clear about why you are acting as you do. You need to be open to alternative strategies for action and alternative explanations for its outcomes. We have suggested that making your research public is a way of inviting other viewpoints which can inform what you do. Another important way of doing this is to read what other people have written, particularly other research findings.

b Committed action

We also suggest that in successful action research, the action should be committed. This means that your action stems from a strong personal commitment to bringing about the improvements that you are seeking. Action research is not a good method where the researcher is merely implementing the dictates of other people. This does not mean that action research is selfishly personal, or that it cannot be used to implement organisational plans. It does mean that the action researcher needs to be a stakeholder in the action and can commit her or his personal values to the project.

c Intentional action

Action research must also be intentional. Making and implementing plans, monitoring the action and evaluating it are necessary aspects of the process. However, in action research, enquiry is a process not a product, and many important unintentional events and consequences intervene. Good action researchers take advantage of these unplanned happenings and integrate them into future cycles of action. It is also true that many insights come in retrospect and therefore are not the result of planned action. Despite what Griffiths (1990:43) has called 'the messy business of real life', action researchers do act with intention: the intention to improve practice, to be systematic, to invite criticism, and so on.

5 Systematic monitoring to generate valid data

An important outcome of your action research will be your changed understanding about your professional practice. You will need to be able to show how this has happened by describing your changed thinking over time and explaining how this has resulted from your investigation of your own action. Being systematic about collecting data is important for many different aspects of the action research process. Part of being systematic involves collecting data so that you can pinpoint where your evaluation of your action has led to new insights about your practice. Being systematic about monitoring and evaluating your action will help you make explicit tricky decisions as it is not always possible to predict which data will be the points at which learning takes place. Collecting data involves some important later in the process. Being systematic means that data collecting is not random, but should be done in accordance with some sort of plan. It should be as comprehensive as possible because many important insights come after the event, as you try to make sense of the data you have collected. The data can be used as evidence of these changes. We will give some guidance about the sort of data you might collect and about strategies for dealing with it in chapters 4 and 5.

6 Providing authentic descriptions of the action

Monitoring the action should generate data that can be used to provide authentic descriptions of the action. Many action researchers reduce the authenticity of their accounts by mixing up their explanation of the data with its description.

a Factual accounts

Most descriptions of action are factual accounts based on transcripts of conversations and meetings, or summaries of data from questionnaires and interviews. Often statistical summaries are included to show, for example, changes in the composition and quality of individual contributions to a staff meeting discussion. Video and tape recordings are also ways of capturing factual data.

b Subjective accounts

Other descriptions may be based on more subjective accounts taken from diaries and personal reflections and observations. These are subjective only in the sense that they represent one person's viewpoint. It could be that they have been produced more systematically and with less bias than the more 'objective' accounts described above.

c Fictionalised accounts

Many action researchers are experimenting with fictionalised accounts that can preserve the anonymity of participants. For example, action research that deals with staff development or staff appraisal may necessitate hiding the real identities of people. Other researchers have written stories that enable them to open up to public discussion events that would be too confidential to report, for example the confidential parts of governors' meetings. These fictionalised accounts can be written so that the context is changed or the characters are given identities that mask their real identity.

7 Explaining the action

It is best to explain the action after it has been carefully described. Explaining the action will involve you in:

- → identifying possible meanings
- → theorising
- ➤ constructing models
- → linking with other work
- → making the description 'critical'

There are a number of strategies that can be used to help explain the action. Although action research is not usually about testing hypotheses and applying predetermined models to a situation in order to decide action, reading the literature can be a great help in identifying possible interpretations of the action.

Although taking a critical stance about your action and its outcome is difficult to do, it is an important aspect of coming to a useful explanation. Remember the words that we wrote down about research at the beginning -they included standing back and being careful. These are particularly important in action research where 'being subjective' is both an advantage and a weakness. It is an advantage because it allows you to have insider knowledge of events. It is a weakness because it can easily lead to you reaching biased conclusions about what you are doing. For these reasons, you need to be systematic in questioning both your motives for action and your evaluation of its outcome. In order to get an unbiased picture of your action research and its outcomes you need to involve other people to check out your interpretations (Lomax, 1991:102-113). Where you have got good data that enables an authentic description of the action, you have a means of sharing the action with others subsequently so that it can be discussed and analysed. Video recordings of the classroom or workplace are particularly useful in relation to this.

There is another aspect of 'making critical' that is useful in this respect. Making an episode 'critical' means exploring its significance from a range of different perspectives. It means questioning the taken-for-granted assumptions about it. Once an episode has been made into a critical incident it can be linked to broader issues such as different educational theories or the management philosophy of the school or organisation in which the incident has happened. There are also a number of social and political factors that could inform a discussion on a more general level.

8 Representing the action research

Being able to share an authentic description of action based on specific pieces of data is a great help to developing explanations for parts of the action research. Representing the process as a whole is much more difficult (Lomax and Parker, 1995:301–314). Often research is represented in scientific terms which highlight certainty and exclude alternative ways of making connections. Action researchers are more concerned with identifying contradictions. There are some exciting new ways of representing action

research which embody how conceptions of practice change over time (Laidlaw *et al.*, 1996). They can help the researcher express feelings about the process and progress of their enquiry, including admissions about contradictions between practice and intention.

Using self-reflection

Barrie Jones (1989:47–62) uses an interesting technique in which he engages himself in a conversation to show the process of how his understanding of his action research came about. He writes:

'Introduced by Diamond (1988) to the idea of using biography as a tool for self-understanding, my interest in this approach was given momentum by a book written by Boud and Griffin (1987) in which they discuss the potential of standing away from the process of one's learning in order to tease out and crystallise the development therein. These inputs stimulated my thinking and led me eventually to the idea of concocting an "imaginary" friend, an interlocutor who would become a springboard for my selfreflection.'

Mary McCarthy wrote 'a conversation with myself that shows the process of self-reflection in action. She says: 'You can apply this to the whole of your life, this action research. It's a whole reflective enquiry into your own practice, to be constantly saying to yourself, "What am I doing? Why am I doing it like that, and how can I improve it?"' (McCarthy, 1994:49)

Using dialogue and conversation

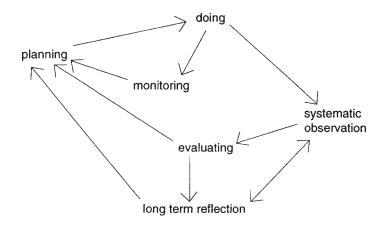
The authors of this book (Jean, Pam, and Jack) have presented some of their action research writing in conversational form (Lomax and Cowan, 1989:114–129; McNiff, 1993:71–98; McNiff, Whitehead and Laidlaw, 1992: 91–96; Whitehead and Lomax, 1987:175–190; Whitehead, 1993:142–184). These dialogues are a new way in which action researchers try to represent the living aspect of their theories about practice. Jack Whitehead (1993:69) argues that this approach celebrates a 'living form' of educational theory, that it is open-ended and contains an intention to create something better. Eames (1995) argues that it can also provide a professional knowledge base for teaching. This vitality is lost if the action research data must be organised in inappropriate ways, which is often the case when we try to make it into an 'acceptable' journal paper or dissertation.

Using narrative and story

Story is another way of representing action research. Stories are generative in the way they encourage diverse and original interpretations for both their authors and their audiences. Moyra Evans has used story in this way and we refer to some of her work in Chapter 7. Like McNiff (op. cit.) she sees it as an exploration in which the search for the theory behind the story is more important than the issue of how real (or how true) the story is.

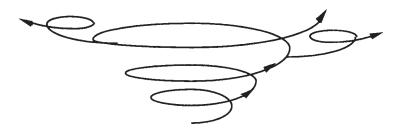
Using action research cycles and spirals

As we have noted at the beginning of this chapter, researchers have described the processes of action research in different ways, and produced various diagrams and models to represent them. A significant feature of action research that everyone agrees about is that it operates in cycles. The action research cycle or spiral is sometimes used as a way of representing action research. Its essential features are the cyclical moments of planning, executing and fact finding, but there are many variations like Morwenna Griffiths' 1990 model. Griffiths' model contains three loops which adds an inner loop associated with reflection in action (Schön, 1983), and an outer loop associated with long-term reflection. She explains that the 'research proceeds by doing and by making mistakes in a self-reflective spiral of planning, acting, observing, reflecting, planning, etc. This spiral is one in which feedback is going on in many ways at once. This is recognisable as the messy real world of practice...' (Griffiths, 1990:43).



For some excellent material which shows education students beginning to use action reflection cycles for the first time do look at *Screams of Experience: Starting Action Research*, produced by Course 801B during the fall term of 1995 on 'The Improvement of Teaching' and published by the Faculty of Education, Queens University, Kingston, Ontario.

By transforming action research cycles into spirals of action, the dynamic of the research and its capacity to adapt to new influences can be shown. By employing a variation of the spiral which allows for other issues to be investigated as side spirals, the complex and creative business of real life can be accommodated (McNiff, 1988:45).



Action research cycles are ways of disciplining the research process rather than ways of representing research. They are best for helping us organise the research, and less effective for helping us to develop explanations of our practice or to communicate these to an audience.

Cycles transform into new cycles, and so the whole enquiry may be seen as 'a cycle of cycles' or a 'a spiral of spirals', which has the potential to continue indefinitely. For example, McDermott and Corcoran (1994) studied the friendship groupings in their college. The project changed in focus over time, and each change involved the expansion of the area of enquiry: 'The project was, essentially, about three things: first, building up student morale and a shared sense of purpose...; second, developing study skills within the groups; and third, encouraging the group to provide peer support for individuals who were experiencing learning difficulties with the demands of [examinations]' (op.cit.: 91).

Using drawings

Some action researchers have created unique visualisations which they have drawn to help them understand and communicate changes in their action research. A number of these are described in a paper by Lomax and Parker (1995). There are some exciting new ideas in this area like the use of a snake chart as part of a semi-structured interview. We explore this further in Chapter 7.

Using experiential techniques

Anne Fleischmann (1996; Fleischmann and McNiff, 1997—forthcoming) is using different forms of experience to support people in exploring different ways of knowing. She encourages practitioners to engage in varieties of experience, based on the idea of multiple intelligences, to work to their strengths and appreciate that traditional academic number and word skills are only part of the whole picture of 'coming to know'.

9 Validating action research claims

Validating action research claims involves:

- ➤ making claims
- → critically examining the claims against evidence
- → involving others in making judgements

Validity in traditional research depends on the belief that what is to be known can be objectively accessed. This traditional logic is inadequate in action research, which emphasises the importance of the person's interpretation and negotiation of events. In action research personal experience that can be meaningfully shared by a number of people is seen as a good basis for establishing validity. This happens on a number of levels:

- initial validation of action research depends on the sort of explanation of their practices that individuals are willing to accept them selves, or self-validation
- > a second level occurs where co-practitioners, persons who understand the context in which we operate, can vicariously struggle through the evidence we provide to understand the claims we make
- a third level is going public, convincing others who may be strangers, about the truth of our claims

Validation is an event that should be part of the ongoing, formative process of action research. This is obviously the case when it is part of the critical, self-reflective process. It operates when action researchers discuss their work with colleagues, critical friends and tutors. It can also be a more formal event and part of a summative process as indicated below. It can also be very formal as in the presentation of a paper to an audience at a conference or the publication of the research in a refereed journal.

Making claims

What sort of claims do action researchers make? It is important to make sure that claims are made about the research rather than the action alone. Presumably the action would have occurred irrespective of the research. What has the research added that makes the claim different from what it would have been as simply the outcome of good professional practice? A clue is provided by the sort of questions that action researchers ask: How can I improve...

...my personal practice? ...my understanding of this? ...the wider educational situation?

The answers to these questions can be framed as claims. For example:

Through the research I

- ...understand...what I did not know before
- ...have changed my practice...with results that are educational
- ...have brought about change...that is an improvement.
- Validation enables action researchers to test their claims to have improved and understood better their own professional practice, such as facilitating participation in the weekly meeting of year heads in a school or motivating the frequently absent pupils in their class to attend their lessons.
- Some action researchers will also be able to demonstrate how they have brought about institutional changes which represent real educa tional improvements such as successfully implementing a new special needs screening policy in a school or LEA.

The purpose of validation in action research

The purposes of the validation meetings established as part of the programmes for professional development that we (Jean, Pam, and Jack) support are:

- 1. to test out arguments with a critical audience who will challenge lack of clarity, help identify weaknesses and suggest modifications
- 2. to consider data and the way it is analysed and presented
- 3. to sharpen 'claims to knowledge' and make sure that data supports them
- 4. to develop new ideas
- 5. to generate enthusiasm for completing the research

Participants are advised that it is a working meeting and the researcher should be keen to learn from it. They are advised not to be defensive, but to use the group to move their research forward.

Some common pitfalls shown up at validation:

- → failure to separate description and explanation
- → failure to distinguish the action from the action research
- ➤ confusion between data and evidence
- → presentation of raw data rather than summarised data
- → failure to record the meeting
- failure to treat the validation event as part of the research process to be described

Involving others in the validation process

In some contexts validation groups are set up formally to help researchers examine their claims critically against their evidence (Forrest, 1983; Lomax, 1996). The intended outcome is for the researcher to develop an enhanced understanding of the research and to be able to formulate further plans for action. The composition of these validation groups is important. They should contain people who know the context of the work or are able to empathize with the context. They should contain people who come from outside the context and can provide an outsider view. They should contain people who are familiar with the methodology of action research but not necessarily with the situation in which it is practised.

We continue the discussion of these issues in Chapter 6.

10 Making public

Making research public is the best way of getting it validated. It indicates that you have nothing to hide and are willing for others to scrutinise what has happened to help you move your thinking forward. You can learn a great deal from listening to questions from people who are outside the research. These questions may lead to you strengthening your conviction about the claims you have made and seeking better evidence to convince others about them; they may lead you to modify your claims because you are able to identify gaps in your arguments that you had not seen before. We find that 'going public' is the most exciting part of action research because usually we discover that many other people share the concerns we have and we are able to go forward, strengthened by our new research 'friendships' and invigorated by new ideas and techniques.

Making public also has its difficulties. There are important ethical considerations if you intend to publish information that involves other people. It is particularly important to ensure confidentiality and anonymity

in action research and particularly difficult because action research by definition is about yourself and therefore others can identify themselves and each other. Being completely open about the research from the beginning pre-empts many problems that arise when action researchers have been less than open about what they are doing, and find themselves unable to report some of their work because it involves colleagues who have had no idea that they had been part of it.

Making public is part of the discipline of action research because it invites corroboration or criticism. You will have to consider how you want people to judge your research. Will you want them to judge it in terms of its relevance and usefulness to their own practice? Or do you want them to be convinced that you have found a way of improving your own practice? Do you want them to check out that you have behaved professionally and ethically? Whatever criteria you choose to focus on, you will need to provide good evidence to support what you are saying and this will depend on the quality of the data you have got. Making public means situating your research in its social context—that is, showing that the research is part of the real world—and then sharing the findings of the research with other people.

Making public does not necessarily mean publishing in a journal or giving a paper at a conference, although these are traditional academic ways. It means sharing the findings with other people, particularly colleagues in the work context, and checking with them whether your perceptions are reasonably fair and accurate. Going public is not something that should be left until the end of the project. We think it is important to go public throughout an action research enquiry in order to check your own perceptions about the outcomes and findings with other people. These ideas are developed in more detail in Chapter 7.

Now that you have finished reading this chapter you should be able to

- give a working definition of action research
- say why you are an action researcher or not
- distinguish action research from other kinds of research
- identify the main features of the action research process
- start with confidence on the next chapter which will help you begin to identify your own research concern.

Chapter 2

Starting your action research project

Before you can get your research underway, think about how you are going to tackle the whole project. This is a vital reconnaissance phase because action research is about people researching their own practice, and starting from where they are in their real world situation. In this chapter we ask you to take stock, to assess realistically where you are, what you hope to achieve, and how you think you might get there.

The sections in this chapter are:

- Working with other people
- Developing interpersonal skills
- Ethics
- Action Planning

Working with other people

Some organisations will fund practitioner-researchers, provided they work on an area that is commissioned by the organisation. In other cases you will be able to choose and address a particular issue that interests you. Either way, because action research invites us to improve things, there is often a tendency for researchers to want to change everything immediately. Be warned!

- You have to accept that you bring about change one small step at a time. Change does not usually happen overnight or on a large scale.
- You can aim to influence and change others, but you can't be sure that you will. You can aim to change yourself, however.
- You can hope to improve things, but institutional/organisational con straints might interfere. You must be realistic here. Make sure that you have the necessary permission to go ahead *when you start*.

Your work is likely to involve other people. Action research focuses on the 'I', the self studying the self, but it is done with and for other people. The aim of action research is personal improvement for social transformation, so it is essentially collaborative. You will need to cultivate ways of working with other people and you may find that your relationships vary.

The main groups of people with whom you are likely to work are:

The participants you are working with—employees, students, colleagues: these are the people who are going to be part of your research project. You are dependent on your participants, so never abuse their goodwill. Your research cannot happen without them. You will be depending on them for your data and evidence, to check how your changed practice might be influencing them and the situation you are all part of. Pay strict attention to all matters of access and confidentiality. Keep them informed about how your research is going. Invite their feedback, and let them know it is valued. Thank them frequently; affirmation goes further than any other incentive. You cannot afford not to let your participants know that they are valued.

Your critical friend(s) (also termed 'critical colleague' or 'critical companion'), who may be one or more of the people you are working with. These critical friends should be willing to discuss your work sympathetically. You and your critical friend(s) choose each other, so you need to negotiate the ground rules of your relationship. This person can be your best ally, and you must never take him or her for granted. As well as expecting support from your friend(s), you must also be prepared to support in return. This means being available, even in unsocial hours, being able to offer as well as receive advice, even if it is painful or unwelcome, and always aiming to praise and offer support.

Your tutor (or adviser, mentor, or supervisor, depending on whether you are a course member or on an adviser's professional development programme). You may have more than one tutor (or adviser, mentor, or supervisor). They are usually on your side, but their role is also to challenge

you in order to move your own thinking forward (and, hopefully, theirs). While you may know more about your subject area, they know more about the processes and procedures of research, so listen to what they say. Expect to receive critical feedback, as well as praise. Like medicine, it does you good even though it may be hard to take at the time. However, stick to your guns if you really do disagree. You are expected, in our view of action research, to be making an original claim to knowledge, so go ahead and make it—but be prepared to change your mind in the light of better arguments. Don't be defensive; the aim is not to score points. The aim is to improve practice and advance knowledge—primarily yours—so keep the atmosphere cordial, businesslike and positive. If things go wrong, don't immediately blame your tutor. Assess the situation sensibly, and if it really was you who was at fault, be open about it, look upon it as valuable learning, and start again.

Your fellow action researchers if you are on a taught course, or in a professional development programme. These people are key resources for sharing progress and information, offering feedback, and providing support and challenge. Aim to work collaboratively rather than competitively. You all want to do well. Aim to build an atmosphere of trust and mutual support. It is useful in any research exercise, and essential in action research, which is itself informed by a collaborative ethic.

Your validating group, made up of colleagues, participants, principals and managers, and any other sympathetic people who you feel would be able to comment fairly but critically on your action research. Look on them as you would someone who is assessing you. They want you to succeed, but they will not accept sloppy research. So, while you do not expect them to be hostile, equally you do not expect them instantly to agree with you. They will be expecting you to justify any claims that you make, so do not react negatively in the face of criticism or challenge. It is their role to ensure that your research is valid, authentic and supported by clear evidence.

Developing interpersonal skills

All these people are key resources, and you need to relate to them well. Good interpersonal skills are fundamental to good relations. Carry out some kind of audit on your own level of excellence in interpersonal skills. What are your strengths? Are there any areas where you need to improve? In particular, aim to develop the following areas:

Listening skills

Aim to listen more than you talk. If you are not sure how good you are at listening, make a videotape of yourself in conversation, and count the number of times you and your partner speak. (We suggest you watch the video by yourself to begin with. You might want to share it with your critical friend later.) Aim to say 'you' more often than 'I'. Watch your body language. Always try to look engaged, even if you are not. Being a good listener is far more essential in any walk of life, including research, than being a good talker.

Management skills

That is, management first of yourself, second of others. Aim to do whatever is required of you in your role—arrange meetings, carry out assignments, connect with other people. Make sure that you attend all meetings, meet deadlines. Be punctual. Maintain a professional and businesslike attitude throughout.

Collaborative skills

Action research demands that you work as part of a team. You need to be intellectually independent, but not isolationist. Do not aim to take over other people's minds. They have a right to their independence and space, as you do to yours. You might want to influence them, but you must be respectful of their opinions. You have a right to challenge but not to destroy, and they have the same responsibility towards you. While 'group-think' is out, so is imperialism. This is a pluralist society. You need to be able to accept diversity and handle conflict graciously; it is sure to come your way!

Intrapersonal skills

Your most precious resource is you. In *Lessons from the Art of Juggling*, Michael Gelb and Tony Buzan (1995) speak of 'relaxed concentration' as

'essential to high performance in any discipline'. Aim to develop harmony of mind and body so that 'I can't' becomes 'I can'. Doing research offers you a legitimate entrée into a world that many adults forget—the world of the learner. Life is a process of constant learning, in touch with our imagination and daring to do. Adults often become unnecessarily constrained in their thinking, and feel that they have to have the right answer all the time. It is OK not to know, to want to find out. Action research means finding out—mainly about you—in order to improve practice mainly yours.

Inclusive ways of researching

Inclusiveness means including everyone, not excluding people. You need to recognise that individuals think and act in different ways, hold different values, and come from different backgrounds. It is widely accepted now that people think in different ways (e.g. Belenky, *et al*, 1986). Current research on multiple intelligences (e.g. Gardner, 1983) emphasise that people are individuals, and society is made up of diverse individuals. You need to apply this understanding to yourself and others. You do not necessarily think in the same way as your tutor or your colleagues. The participants you are working with may see things differently from you. You need to ensure that everyone in your research is treated with justice. Will you include as many men as women? Will you give as much weight to the voices of children as to adults? Will you ensure that the voices of other people come through, as well as your own? You need constantly to be aware of these issues.

Style of language

You need to adopt an inclusive style of language in speaking and writing that has a clear sense of audience. Avoid language that is heavily biased towards any group—towards academics, females, whites, and so on. Clearly you expect your audience to be 'educated', that they are familiar with the traditions of educational enquiry, but you should avoid jargon and densely packed ideas. Aim to lead your audience easily and without fuss. Do not make great conceptual leaps, or use difficult words. Equally, do not underpitch and avoid using a professional style. Regard your audience as a person whom you are partnering, and walk with them through your work, always checking that they are where you hope them to be. It is your responsibility, as a good teacher, to explain clearly, not theirs to try to interpret what is in your mind.

Ethics

You must have a good grasp of the ethical considerations of action research. Colin Robson (1993) reproduces the guidelines on the ethical principles for conducting research with human participants from the British Psychological Society, and the guidelines on anti-sexist language from the British Sociological Association, as well as summarising the work of Kemmis and McTaggart (1982) about ethical principles in action research. Another set of ethical guidelines for conducting educational research can be obtained from the British Educational Research Association.

Use the following as a basic check-list.

(a) Negotiate access

With authorities

Check with principals and managers before undertaking research that is connected with their organisation. Establish boundaries about what you may and may not do. Get this agreement in writing. Be absolutely honest about what you plan to do. If during the course of the project your plans change, let the principal or manager know.

With participants

Get permission from the people you hope to work with to involve them in your research. Keep them involved and informed. Invite them to do their own action research. Make it clear from the start that they are participants and co-researchers; they are not 'subjects' that you are studying. You are studying yourself in relation to them. They are central to your research.

With parents, guardians and supervisors

If you are working with children or other people who are under supervision, make sure you get permission from parents or other supervisors to involve those people in your research. Send a letter home, explaining what you are doing, or call an information meeting. Get people on your side from the start, and keep faith with them.

(b) Promise confidentiality

Confidentiality of information

Give a firm undertaking that you will only report information that is in the public domain and within the law. You will not reveal anything of a personal or compromising nature. If you intend to use information that is in any way sensitive, seek permission from the originator to use it.

Confidentiality of identity

Do not reveal the real names of people or places unless you have specific permission to do so. Do not give participants fictitious names: those names may belong to other people somewhere. Allocate initials, numbers or other symbols to identify the participants. If the organisation gives full permission to use its real name (and most organisations are very happy for this to happen) that is fine, but you must obtain permission first.

Confidentiality of data

If you intend to use firsthand data, such as transcripts, or excerpts from video recordings, always check that this is acceptable to the originators. Check that your perceptions of the data are accurate; always ask the originator to check and approve transcripts, and edit their contribution as they wish. Encourage others to read your perceptions of events before you publish them.

(c) Ensure participants' right to withdraw from the research

You must check continually to ensure that participants are comfortable with procedures and are always in full command of their own involvement in your research. You must let your participants know that their rights are protected and that if they wish to withdraw they may do so.

(d) Keep others informed

You need to let all interested parties know what you are doing from the start. Produce a plan at the beginning, and make it available for research participants. Produce regular progress reports, and let people know that these reports exist. Make them easily available to research participants, but maintain the right to limit distribution only to those people who are involved.

(e) Maintain your own intellectual property rights

This is research that is important for your own professional development, and you should retain the right to report, provided you have observed all the matters of protocol above.

(f) Keep good faith

Establish right from the beginning that you are a person to be trusted, and that you will keep your promises about negotiation, confidentiality and reporting. Never take anything for granted, however. Always check back with people if there is any doubt, and, in matters where there is some possibility of misunderstanding, write down what you are hoping to do and get that approved. While you have a duty to protect others, you also need to protect yourself.

Action planning

Once you have considered how you will work with other people and have taken care to think through the personal skills you will need and the rights of the others involved, you can begin your action planning.

As a preliminary to your action planning you might try to answer some key questions that we have found useful (McNiff and Collins, 1994; Whitehead, 1989). Below, we have listed the questions and suggested some ideas to help you imagine concrete answers to the questions. Try to paraphrase some of our answers to see if they apply in your own situation. If they do not apply, put in your own answers or change the questions. This way you can begin to generate your own personal approach to action research. Our lists are helpful to us, and may provide a starting point for you, but you should aim to find your own questions and answers that suit your own working context and personal value position. A word of warning, though-action research, like all research, is about finding out something we don't know already. It is not an excuse to confirm prejudices, so you need good listening skills to understand other points of view, and you need to be proactive in finding alternative explanations to challenge your own assumptions. In this way you can make your position more explicit and argue a clearer case for practices that enable you to live your values more openly.

Our key questions are:

What is your research focus? Why have you chosen this issue as a focus? What kind of evidence can you produce to show what is happening? ('Evidence 1') What can you do about what you find? What kind of evidence can you produce to show that what you are doing is having an impact? ('Evidence 2') How will you evaluate that impact? How will you ensure that any judgements you might make are reasonably fair and accurate? What will you do then?

What is your research focus?

Ask yourself, 'What is particularly high in my mind at the moment in regard to my work? What is claiming a lot of my attention?' Your answer could vary enormously in range, from the state of the economy and provision for your work to a very focused issue concerning one aspect of your work. The idea of research focus can be usefully expressed by, 'What is my concern?' Often what you might wish to investigate is a concern, or even a problem, but this is not necessarily so. You might want to investigate what is happening, to see if it satisfactory or if it needs changing—an evaluation of current practice. The main thing is to identify an area that you want to investigate, and to make sure that you can do something about it.

Beginning from where you are

All research begins with a latent hypothesis—'I think that if I do this, such and such might happen.' In action research it is important to begin from where you are, and to keep focused. You need to be practical and ask, 'Can I actually do something about this issue? Can I hope to bring about change, or am I out of my depth?' If it really is too much, be realistic. You cannot change the world, but you can change your bit of it. For example, you might want to investigate and challenge reductions of funding for the adult education service in your community. This is probably connected with the economic situation, so you can do nothing on a large scale. However, you could mobilise the adult learners in your institution to lobby the local policy makers in order to present their view about the importance of adult learning. This is a small step but could contribute to a better understanding by politicians.

In this example, you could formulate your concern as, 'I am concerned that the level of funding for adult education is falling.' Then you could ask, 'How can I work towards raising the level of funding?' or, if you are working collaboratively with others, 'How can we work towards raising the level of funding?'

Here are some more examples:

'How can I persuade management to introduce new consultation procedures in this organisation?'

'How can I help Susan to improve her self-confidence?'

'How can I manage my work schedule better?'

'How can we make sure that what we are doing in our tutorial and pastoral care programmes is working for the benefit of our students?'

Central ideas

I am the central person in my research.

I am asking a real question about a real issue, and I am hoping to move towards a possible solution.

I am starting from where I am.

I am trying to bring about some improvement (remember—any improvement is still improvement, no matter how small).

Why have you chosen this issue as your focus?

As a responsible researcher, you need to be reasonably clear why you want to get involved in this issue. Action researchers have the social intent of improving the quality of life for themselves and others, and this is deeply value-laden. You need to be aware of your own value position. This is more difficult than it might seem. As people living in a social context, we need to acknowledge that we already hold certain values which will influence our actions and also the way we judge other people's actions. Our thinking is already conditioned by what we believe in. As action researchers we are aiming to live our values in our work.

Unfortunately, we often experience ourselves as contradictions. A teacher for example might deny his students the right to develop their own ideas. Or a manager might say she believes in collaborative leadership, but then not involve others in decision making. These are examples of how we might deny our values in our practice by behaving in an unreflective way. One of the aims of action research is to develop reflective practice so that we are clearer about our own motives and can live our values more fully in our personal, social and professional lives.

Sometimes institutional and organisational constraints prevent us from acting in a desired way. A doctor for example might like to pay more attention to the underprivileged people on her list. Given her workload, there simply is not time to do this, and stay true to all her patients. A community centre leader might like to accommodate more people, but policy decisions restrict numbers.

We cannot solve these kinds of broad issues by ourselves, but we can take steps toward improvement. Mountains are climbed one step at a time. It is always possible to reach the top, even if it means taking a variety of pathways, using different techniques, and resting at frequent intervals. Often it means working as a team, with one person picking up where another left off. Action research is a way of working that helps us to identify the things we believe in and then work systematically and collaboratively, one step at a time, to making them come true.

'One step at a time' applies to you and your project. Each piece of each cycle is a step, and each cycle is a bigger step in the overall aim of improving the quality of your work.

What kind of evidence can you produce to show what is happening? ('Evidence 1')

How can other people see your particular situation through your eyes perhaps in terms of improving unsatisfactory elements, or as a general evaluation? How can you show things as they are now, before your intervention?

Gathering data and producing evidence

At the start of a project there can be a problem about which data to gather. Before you have focused down to your main issue, it may be necessary to gather large amounts of data. The difficult choice is about selecting small parts of it to use for particular purposes. A useful strategy is to sort your data at frequent intervals and discard to an archive box what does not seem relevant at the time.

For example, if you are working with a whole group of people, perhaps you could identify a small group of them—say between one and four who would be representative of what you were trying to show. In her original research, Jean was evaluating the impact of the programmes of personal and social education that she was introducing into her school. She worked with different groups of students over time. She selected about three students in any one group of twenty, and asked them to keep careful records of their progress over time; and she kept records of her progress in relation to them. You do not have to capture every word spoken, and you might choose representative times. Jean chose Friday afternoons as a real litmus test, and did mini- tape and video recordings with her students, as one kind of data gathering, to gauge if she was being effective.

When gathering your data, always keep the initial research concern in mind. Keep asking, 'How can I...?' Your data needs to be representative of that issue whenever possible.

Which data?

The main focus of your research is you. You are not aiming to show a cause and effect relationship between you and others in the sense of 'If I do X, then Y will happen', but you are aiming to show an improvement in your practice. The evidence for this may be in the way you are having an influence on others. The purpose of your enquiry is to change what you are doing in the light of how you see yourself influencing your situation. You therefore need to keep careful records of (a) yourself, and how your behaviour and thinking are changing, and (b) representative or significant others, and how you feel their behaviour and thinking is changing. You will have to square your perceptions with theirs, so if possible get them to do their own action research, and produce evidence for their progress. Start a data pool; collate your findings and make them available to all participants in the research. Remember this needs extreme sensitivity, trust and generally good ethical practice.

Which criteria?

You need to identify criteria and standards for you and others to judge if you are being effective—for example, improved relationships, or good communications. Pull out of the data critical incidents which you think show these criteria and standards in action—for example, instances when good relationships were evident, or people were communicating effectively. These could also be regarded as performance indicators—instances of the criteria in action.

For example, imagine you are aiming to improve your communication skills. First check how well you already communicate. You could make a videotape recording of yourself in conversation with someone else, and then identify (a) the criteria by which you judge yourself to be communicating effectively and (b) whether you fulfil those criteria. Your criteria would include aspects such as ability to listen, supportive intervention, and mutuality. Look at the tape. How often do you listen? Do you intervene in a supportive way? Do you talk at the other person? Later in your research, when you come to saying that you have improved your practice, and providing evidence to support that claim, you would produce a report containing identified criteria, refer to your videotape, with annotated instances of where these criteria were lived out.

What can you do about what you find?

First, you should question your own interpretation of your data. Imagine different ways in which it could be interpreted, and share your ideas about what might now be done with other people. Remember however that the possible solutions should be your solutions. You are committed to investigating your own work. Also remember to keep possible solutions manageable.

Having decided on a possible strategy, try it out. It might work and it might not. If it does, continue developing it. If it doesn't, try something else.

Many researchers feel they have failed if a solution doesn't work, or doesn't have the anticipated result. This is not so. Individual practitioners are entitled to say what might be achieved, what might count as improvement, and then to present the evidence of improvement. It is not a question of failure, so much as new beginnings and creative practices.

It is important to distinguish between the 'action' which might not always achieve a clear and successful outcome and the 'action research' which can demonstrate the 'meaning' of a particular educational practice so that other people can learn from it. You can show that you have undertaken rigorous research, and you can make a claim to know the particular practice upon which you have focused in such a way that your knowledge is useful to others. We are always trying out new ways of working, some of which are more successful than others. We don't always get it right first time. That is acceptable, as long as we learn from our mistakes so that in the future we can move things forward in better ways. Because too little knowledge is available about the process of people trying to improve practice, we continually have to reinvent wheels.

Be prepared for the unexpected. You might find that you unearth other issues which were existing at a deeper level than the issue you originally decided to investigate. For example, in aiming to improve your own communication skills, you might see on your videotape that you tend to fidget or not look people in the eye. Perhaps you need to look at your own self-presentation, or your self-confidence, as well as communication. This is true of any area. An initial concern like 'How can I improve the way in which women are perceived in this organisation?' could show that there is a policy that marginalises minority groups; or aiming to improve the quality of relationships among carers and patients in a hospital could reveal that the quality of relationships between the carers themselves needs attention. It is very common for this kind of 'explosion' to happen when we begin researching our own work and workplace. Always be careful, however, not to let the enquiry get out of hand. Stay disciplined, and concentrate on one area at a time.

What kind of evidence can you produce to show that what you are doing is having an impact? ('Evidence 2')

Data is not the same as evidence. You use data as evidence of particular interpretations and explanations of the action.

As each action research cycle is completed you will have records of the way in which you have monitored and evaluated that cycle. These case records are the data you can use to show the 'improvements' that have taken place. It is not quite the same as 'before' and 'after' data, as you should be able to show a progression of events which include your own changing understanding of the situation and a re-evaluation of the position you held at the start of your research.

For example, Eileen Brennan (1994:54–68) wanted to investigate how she could improve her practice of teaching German to a poorly motivated first year class. She followed through a number of action-reflection cycles, tackling separate issues one at a time: first an over-emphasis on writing; second how to present the material in a stimulating way; third a focus on improving the accuracy of written work; and fourth a concentration on vocabulary building. For all these activities she kept a research diary, and gathered substantial data which she produces as clear evidence. She writes:

At the beginning of the school year I found my class so undisciplined and unmotivated that I was driven to giving them lots of written work to keep them quiet and busy. This went against my values as a language teacher. As a preliminary to deciding what I might do to remedy the situation, I discussed with them their experience of the German class to date. Subsequently I asked them to write me a letter telling me why they had chosen to learn German and what they hoped to do with it.

On the basis of their comments...I devised strategies to make the learning process attractive and fulfilling for the class. These included tapes, role-playing

in pairs, reading advertising materials (we exchange materials with a partner school), playing language-based games, singing German songs and writing to penpals in Austria and Germany.

I believe I can show, from videotapes, audiotapes, oral and written tests, written work and questionnaires, that discipline has considerably improved and that together, my pupils and I have developed a class environment conducive to language learning in a relaxed and enjoyable mode, and yet productive of the standards required by the Junior Certificate syllabus (p.54).

Monitoring the research and generating data are technical activities that should improve as your research goes on. Good researchers develop monitoring skills that enable them to triangulate their data—that is, get data from more than one source to use as evidence to support a particular explanation.

The question of evidence is crucial in action research. The evidence will finally decide whether or not your explanations can be regarded as valid i.e. that you have done what you claim to have done. Purely subjective explanations that lack supporting evidence do not give other people confidence enough to try them, so they are not very useful. Because action research is case study research its usefulness is for others who can see its implications to their work. It is important that the effectiveness of action research is demonstrated in terms of an improvement in the quality of the lives of people whom it is supposed to be affecting. Case studies to show this are only just appearing in the public domain which show the effectiveness of action research approaches in concrete terms (Lomax, 1989, 1990, 1991; Lomax and Jones, 1993; McNiff and Collins, 1994; Pinnegar and Russell, 1995; Russell and Korthagan, 1995).

How will you evaluate that impact?

Remember that the focus of the enquiry is mainly you. You are aiming to bring about change in yourself, so that you can try to have a positive influence on your situation. In order to gauge the impact that such change is having on other people, you need to check their reactions to you. As we said before, this is not a cause and effect relationship. You are not saying, 'These changes are happening because I did such and such.' You are saying, 'I can show that certain changes took place, particularly in myself, and different relationships evolved.' An anecdote that we have shared and enjoyed was when one of us was asked, 'How can you be sure that all these changes you are describing wouldn't have happened anyway without you?' The response was, 'I can't, but I *can* show that they are happening *with* me.' We think this is the right attitude to have in action research. You cannot be held responsible for what might or might not have been, but you have to accept responsibility that you are probably going to influence what might be.

To evaluate your research (was it worthwhile and effective?), you need to consider whether or not you have brought about the improvement you claim.

This happens by

(a) gathering the data

- (b) identifying criteria for improvement
- (c) selecting pieces of data to act as evidence of improvement
- (d) matching that evidence with your initial research concern
- (e) presenting your work for others to judge whether you have brought about the stated improvement

An individual practitioner cannot make a final judgement about her or his effectiveness in relation to the educational development of another. That comes from the people who are influenced by the practitioner. The outcomes of the research are in the lives of the research participants. If their lives are better, the research may be evaluated as effective. Only they can say what they mean by 'better'. The negotiation of the meaning of their values between participants is a fundamental part of educational action research.

This is why it is very important to secure firsthand data from other people, and to be very careful about using it as evidence. For every piece of evidence, make sure that you put in dates, places, people who were present, and so on. Your data needs to be authenticated, so aim to get signatures on documents and transcripts, show the authorisation for the use of data, and get authentication from, say, critical friends for your field notes. These kinds of verification procedures show your responsibility as a researcher.

How will you ensure that any judgements you might make are reasonably fair and accurate?

If you say, 'I think such and such has happened,' you can expect someone to say, 'Prove it.' It is important that you can produce reasonable evidence to suggest that what you feel has happened really has happened, and you are not just making it up—not quite the same as 'proving it'.

You are aiming to say something about your improved understanding of your practice; to say that you have tried something new, and you can show the processes and outcomes of this. This is a very bold claim. If you say, 'My work is better today than it was yesterday,' you are saying something significant. Equally you are claiming that you understand the processes and the significance of the 'improvement' to the context. But it is not enough just to assert that claim. Other people need to agree that you have done what you claim to have done. The claim that Brand X washes whiter than Brand Y is meaningless, unless the users of Brands X and Y also agree. That is why consumers appear in adverts, to back up the claims of manufacturers. They also need to decide what constitutes white, and therefore whiter; and also how they will test that out. The same procedure applies to your claim about improvement. You and others need to agree about what constitutes good practice (the standards and criteria), so that they will agree whether or not your practice has improved (it is not only good, but also better), and whether the evidence you have supports your claim.

People usually decide what constitutes good (and therefore better) by revisiting their values base. In questions about patient care, for example, what constitutes good quality patient care? Does it involve patient information control, or patient compliance? Do we view patient care as patient dependence or independence? From what we agree to be good practice, how do we judge whether the work is better now than it was; and how do we test that out?

The most reasonable way to test it out is to see if the patients benefit. Therefore a procedure has to be agreed, something along these lines: As long as I am confident that you share my view of 'good' practice I can present my work to you, with specific criteria and accompanying evidence. You scrutinise all aspects of my work. You say that you are satisfied that I have brought about improvement, or you require me to go back and revise what I have presented, according to where you find my case lacking. If I trust your judgements, I will do as you ask, and resubmit my case. How we then test out our collective judgement is by putting my work (and possibly your judgement of it) into the wider world, and seeing if it is taken up by more people.

This kind of validation is essential in action research. To be reasonably sure that we have something of worth, we have to check with 'significant' others, to see if they accept it for its intrinsic worth.

What will you do then?

You will probably carry on working in the new way because it seems to be more effective than the way you were working before, and you are closer to living out your values in your work. If this way does not seem to be the best way forward, try something else.

However, things may not yet be as you would like, although you have made progress. Other issues may have arisen, and changes might have happened in your own thinking. We live constantly with the paradox of the ideal: we imagine the way things could be, but as soon as we think we have an answer, we simply find more questions. The current situation is always short of the ideal. Yet the current situation is the best yet; and this is the excitement of living in the now. Now is the best yet. Your present thinking is your best yet thinking, but you know it is going to change and get better. Each day that you have is the best, and you know that tomorrow will be even better. Life is always progressive and dynamic, even to the moment we die. It is what we do with that life that counts.

This is what makes an action research approach such a dynamic way for ensuring personal renewal. We are thinking and searching all the time. We are never complacent or content to let things be as they are—not from any sense of dissatisfaction, but simply from the sense that life does change, we change, and others change. Nothing stands still. If we once accept that we have arrived, we rest and fall asleep. As long as we are aware, alert, constantly open to all our new beginnings, we will continue to become more than we are. But it is not just ensuring personal renewal that most of us seek as professionals. Particularly in education, we are seeking social transformation so that we have a significant impact on institutions and society to produce a better context in which we and our children can have better opportunities of learning and developing to reach their full potential.

Now that you have finished reading this chapter you should be able to

- evaluate your own working practices with other people
- identify the interpersonal skills you need in doing your action research
- show that you appreciate ethical considerations
- draw up an action plan for your project

Chapter 3

Doing your action research project

This chapter provides practical guidance about doing your action research. It gives you a working plan that you can use to keep you on task throughout your project. The chapter is divided into two sections.

- Reflecting on the action research cycle
- Implementing the action plan

Reflecting on the action research cycle

Before you start your action, reflect on the following nine points which describe the basic action research cycle. Then reflect on our arguments below. You will see that there are a number of pitfalls that you need to be aware of.

- 1. We review our current practice,
- 2. identify an aspect we want to improve,
- 3. imagine a way forward,
- 4. try it out, and
- 5. take stock of what happens.
- 6. We modify our plan in the light of what we have found and con tinue with the 'action',
- 7. monitor what we do,
- 8. evaluate the modified action,
- 9. and so on until we are satisfied with that aspect of our work.

This is a basic problem-solving procedure that is similar to a scientific method. Different action researchers have described it in different ways—some as cycles of reflective action (Lewin, 1946; Griffiths, 1990); some as flow diagrams (Elliott, 1991; Evans, 1993a); some as spirals of action (Kemmis and McTaggart, 1982; McNiff, 1988). The best models represent the idea of practice as non-linear, accepting that people are unpredictable, and life (even at work) does not follow a straightforward pattern.

However, the basic problem-solving procedure we have described is not as simple as it looks. For example, how do we identify an aspect of practice we want to improve? One way could be to experience ourselves as living contradictions (Whitehead, 1993); that is to feel the discomfort of knowing that we are not acting in accordance with our values and beliefs. For example, we might say that we value the opportunity every child has to express herself and be heard in class; yet perhaps because of the dynamics of the classroom, we allow the boys a greater say than the girls. We might believe that it is important to cite the work of men and women in our texts; yet we might find that we cite the work only of men. If we find that we are not living out our values in our practice, this is a great incentive to action.

From being a living contradiction

A useful way of understanding the idea of a living contradiction is this:

I experience a concern when some of my educational values are denied in my practice;

I imagine a solution to that concern;

I act in the direction of the imagined solution;

I evaluate the outcome of the solution;

I modify my practice, plans and ideas in the light of the evaluation.

(Whitehead, 1989)

The 'I' exists as a living contradiction in the sense that values which we hold are not being lived fully in our practice. Another important thing about the nine points described earlier is that points 1–5 are rather different from points 6–9. This is because action research often starts with a 'hunch' or 'suspicion' that something is wrong, without us being able to put our finger on it. It is not very easy to be able to see ourselves as living contradictions. We use all sorts of 'defences' or 'excuses' to hide from ourselves the fact that we are not living out our values. So our first attempts to imagine a way forward are often tentative and therefore difficult to monitor. Points 1–5 represent what many writers call 'a reconnaissance period', when we are trying to clarify our concern, and might go up a few blind alleys. It is also a period when our monitoring procedures are less rigorous, and therefore the data we gather about our practice is often less convincing than the data we collect later in

the research. As we continue our investigations, reconnaissance turns into proper action planning, with clear intentions and envisaged outcomes, and the more systematic stages of the research begin.

It might be worth you pausing here and taking stock of what you learned from the last chapter about action planning. Below is an example of a forward planner that might be useful for you to complete.

Example of a forward planner		
Schedule for Action Research Pr	roject	
Your name		
Task undertaken	Timing	
Preparation		
Identification of research area	weeks	1–3
Initial reading undertaken	weeks	1–5
Consideration of ethical issues—		
written statement of intent	weeks	1–5
Resourcing		
Budget drawn up	weeks	1–3
Budget submitted: request for funding	weeks	1-3
budget bubilitieal request for funding	weekb	10
Working with other people		
Discussions with management and		
policy makers	weeks	1–2
Invitations to potential groups of participants	weeks	3–5
Invitations to potential validating group	weeks	3–5
Doing the project		
Identification of concern	weeks	3–5
Production of values/mission statement	weeks	3–5
Gathering of Evidence 1	weeks	5–7
Identification of indicators	weeks	5–7
Imagined solutions	weeks	5–7
Implementing the solutions	weeks	5–12
Gathering of Evidence 2	weeks	5–12
Evaluation of Evidence 2	weeks	10–12
Convening of validation group	week	13
Production of report (claim to knowledge)	weeks	13–16
Evaluation of project	weeks	20–22

You will probably draw up much more detailed action plans than this. You would probably identify the groups you hope to work with, the names of your critical friends and your validating group, and so on. The more detail you can put in at this stage, the more ideas you will have to play with. Also, if you can give this kind of information to principals or managers, the more they are likely to endorse it. Time spent in planning is time well invested.

Implementing the action plan

This section gives practical advice about actually doing the project. Remember that these are guidelines only.

WARNING!

In writing things down like this, we appear to give the impression that doing action research is neat and tidy. It is not! This kind of analysis is necessary in trying to make sense of undertaking action research. When we do action research, however, we often find that it does not fall into neat sections as it appears on the printed page. In reality there is a lot of overlap, retracing of steps, review, redirection and refocusing. It is anything but sequential. However, in what might appear to be chaotic circumstances to begin with, you need to be very methodical and on task. This is where your tutor and critical colleagues can be supportive. They can keep you focused, and help you make sense of what you are doing. Many people experience turmoil and instability when they first start doing their research, and often things do not start falling into place until the project is fairly well progressed.

Use the following pro forma to help you check aspects of your project as you work. You should aim to develop it to suit your own situation. The boxes will help you to check whether you have done things, or when they will get done.

Getting started

Finding a research focus

What aspect of your practice are you going to investigate?

Have you	Yes!	When?
identified an area you wish to investigate?		
related it to your work?		
kept it small, focused and manageable?		
made sure you are reasonably confident that you will be able to show an improvement in your practice?		
made sure you are reasonably confident that you will be able to show an improvement in your situation?		
Anything else?		

Tips

Aim to complete the questions 'How can I (or we) improve...?' as the starting point for your research.

Don't worry if you can't formulate your question precisely to begin with. The question often clarifies itself as we go through the project. Researchers tend to have an intuitive idea about what they want to investigate and the idea begins to tighten up as new insights develop through action and reflection. Sometimes this can take quite a long time, and sometimes a new question, or several new questions, will emerge.

Task

In your working file, write out:

The area you wish to investigate. Put this in terms of your question, 'How can I improve...?' Show how this is related to your work. Give a brief outline of the context. State how you are hopeful that you can bring about some improvement in your situation.

Background reading

Have you	Yes!	When?
read enough subject-focused literature to give you a reasonable foundation?		
read enough methodology literature to give you a reasonable foundation?		
identified which books/papers you still need to read?		
identified where you will get them?		
identified who can advise?		
Anything else?		

Tips

Ask your tutor for reading lists to guide you.

Use the library; ask the librarian for advice on conducting literature searches. Find out the necessary computer databases and abstracting and indexing services.

Buy essential texts for yourself.

Don't feel you have to read a book from cover to cover; be selective.

Task

Read actively; keep notes as you read.

Write on your own books if you wish; never deface borrowed books. Keep a computer database or a card index system of books and papers; under authors' names, jot down key sentences from their work as you read. Use your database to build up your bibliography in a systematic way. When you come to writing up you must get your references accurate.

Keep a file of important photocopied papers. Be aware of copyright laws, though.

Ethics

Have you negotiated access with	Yes!	When?
principals/managers/others in authority?		
your research participants?		
parents/supervisors?		
colleagues?		
others? Who?		
Have you produced your own written ethics statement?		
Anything else?		

Tips

Never skip this stage. You might find that you cannot complete your project if you do not have the necessary permissions. Read the ethics statements of other people to get an idea of how to write one.

Task

Keep all letters in a file to show that you have negotiated issues of access and confidentiality. You can refer to this (a) to show that you paid attention to these matters; (b) if anyone queries permissions. Write out an ethics statement, and include a copy with every letter requesting access.

Resourcing

Have you	Yes!	When?
planned the budget for doing your project?		•••••
secured the necessary funding?		
catered on a shortfall of funds, and allowed a safety margin?		
considered aspects like printing and other logistical factors?		
checked that all necessary technology is available?		•••••
negotiated its use with others?		
Have you worked out a time-line for your project?		•••••
Anything else?		

Tips

If you are looking for funding you will need to apply well in advance. Make sure that you have budgeted for the duration of your project. There is little worse than running out of money!

Get quotes from reputable typists/printers well in advance for reproduction facilities.

You can save a lot of money by investing in a good computer and software package. Also try to learn to type using all your fingers. Touch-typing is quite easy, and an invaluable lifelong skill.

Task

Draw up as detailed a budget as possible. Aim to stick to it. Keep a file of correspondence to do with finance. Keep a monthly record of accounts. For some of us this is boring, but oh so essential!

Working with others

Have you	Yes!	When?
established a working plan with your tutor?		•••••
agreed a schedule and plan with your critical friend(s)		
established who your research participants will be?		•••••
talked through your ideas with your participants?		•••••
identified your validation group, and agreed a schedule of meetings with them?		
Anything else?		

Tips

You need to do most of this in advance, although some aspects can be done as the project develops. Never assume that people will do as you want them to do. Ask in advance. Like you, others have busy diaries. Aim to keep your participants involved by producing regular mini- progress reports.

You must produce formal progress reports for your supervisor and your validation group, to let them see the steps in your project and how you are working towards achieving your overall aims. At the end of the project, send a copy of the final report to the group out of courtesy, and thank them for their involvement. It is the least you can do—and you might need them later!

Task

Negotiate a working plan with your tutor, and write it down. This is your responsibility, not your tutor's. Give him or her a copy, and refer to it throughout the duration of the project.

Once you have identified all your parties, write to them inviting them to be part of your research. Let them know what will be involved—e.g. how many meetings, what their responsibilities are.

Draw up a list of necessary meetings. Write to the different parties, with clear information about meeting times, dates, and venues.

For your validation group, draw up a schedule of meetings. How many will depend on the length and duration of the project. Aim to meet at critical points in your research, such as when you are presenting the data, or outlining a turning point in the research. (This means having a clear research schedule yourself that you are working to.)

Produce regular progress reports and send them in advance of any meetings. Draw up a list of key questions you would like your group to answer. Keep all these records as part of the data archive.

Doing the project

Identification of concern

Have you	Yes!	When?
identified an area that you can do something about?		
cleared it with your tutor?		
cleared it with other colleagues?		
ensured that it is an area of practice in which you can show possible improvement?		
identified how the situation is not in keeping with your own values?		
Anything else?		

Tips

Refer back to 'Finding a focus'. Also, check with your tutor that this is an acceptable research issue.

When you carry out your literature search, choose one or two key words and check who else is doing research in your area. Perhaps no one else is, or there might be some valuable research that you can draw on. It looks good in your final report to let your examiners see that you are up to date in your field.

Task

Write out your concern, in terms of 'How can I...?' Give a brief description of your context or situation to show why you are concerned, and how you hope you might be able to improve things.

Values statement

Have you	Yes!	When?
identified the values you hold as a professional that are being denied in this situation?		
imagined how you might like the situation to be so that it is in keeping with your values?		
checked your own perception of what is happening; are you justified in intervening in this situation?		
made a record of your values statement for future reference?		
Anything else?		

Tips

Think about why you have chosen this particular area. What are your professional values—that is, the things that drive you to do the job that you do?

To what extent are you working in the way that you wish? What do you need to change in order to improve the situation?

Task

Write out your professional values. You could write this in terms of your personal mission statement.

Give a brief description of your work situation, and say whether or not you are living out your values in your practice.

Say why you feel you are justified in intervening in the specific area you have identified. If possible, show that you have checked your perception with someone else. You are not just interfering; you really have a reasoned foundation for your intervention.

Gathering the data ('Evidence 1')

Have you	Yes!	When?
decided what kind of data you might gather?		•••••
decided on possible data-gathering methods and instruments?		
decided on initial categories for the data?		•••••
made sure that any necessary technology is available?		•••••
discussed with others the kinds of indicators you might be looking for?		
Anything else?		•••••

Tips

Gathering

There is always a temptation to gather any and all data. Be careful. You should identify key areas that will help you to show that you are bringing about improvement in the situation.

Remember that data is not evidence.

Keep data boxes. If you are gathering data for several different areas, get different coloured files or boxes, and put all your bits of data into these boxes.

Never throw away any data until the project is finished, and even then be selective.

Make a list of the possible data-gathering techniques you could use, and number them 1–5 in order of preference. This will help you identify what you would be most comfortable with. Choose from field notes, journals, diaries, case studies, questionnaires, interviews, observation (check Chapter 5).

You can mix and match any or all of these techniques. However, don't feel you have to use them all, and certainly not all at once.

Storage

Don't anticipate that technology will be readily available. Check beforehand. Make sure you liaise with other colleagues about use of technology. If you are keeping your data on computer disk, make backup copies, and backups of backups. We have all experienced losing material because of power failures. Also save your work at frequent intervals.

Ethics

Always ask permission before you do any kind of taping or distribute questionnaires. If people refuse permission, you must not go ahead. Remember the ethics!

Evidence

Discuss with colleagues what kind of indicators would show any changes that you want to bring about. The situation incorporating those features will be your evidence.

Task

Identify the group that you are going to work with. Ask and obtain their permission before your begin your project.

Choose your data-gathering methods and instruments. Make sure that necessary hardware is available. Negotiate its use with colleagues.

Identify and write down your initial categories for the data. Put this information on your data files or boxes. Use sticky labels or other devices that can be changed (you might need to change your categories as the project develops).

Set about gathering the data, and put it into your data files or boxes. Keep in touch with your supervisor and other course members at this stage. Get their feedback on what you are doing, and let them see your categories and data. Work out with them the criteria and performance indicators you are looking for.

Try to visualise what the evidence might look like.

Imagining possible solutions

Have you	Yes!	When?
imagined at least one possible solution to your concern?		•••••
written down ideas for other possible solutions?		•••••
planned a systematic strategy for implementing the solution?		
checked with colleagues that your action plan will not interfere with their schedules?		
invited them to talk through your ideas?		
Anything else?		

Tips

Think about possible action plans. Think in terms of 'Plan A, provided (x) and (y)', or 'Plan B, if (i) and (ii)'.

Imagine possible future scenarios. What will be happening in two months' time (or whatever timeline you choose)? How will it be different?

Task

Write down your possible solutions, in response to your general question, 'What can I do about this situation?'

Make these solutions available to any of your participating groups that might be able to help at this stage. Ask their advice. Ask them for their solutions.

Draw up a route map to get to this situation. Brainstorm ideas with colleagues; produce spider diagrams or other visuals about possible maps and strategies.

Check with colleagues that your plans will not cut across theirs. Remember the ethics!

Gathering the data ('Evidence 2')

Have you	Yes!	When?
decided on the kind of data you hope to collect for your second round?		
decided on data-gathering methods and instruments?		
decided on categories for your data?		
decided on the kind of indicators and critical incidents you are going to use to show improvement?		
talked through these ideas with critical colleagues and friends?		
Anything else?		

Tips

This is your second set of data. You can use the same methods and instruments as you did when you gathered your first set, or they can be different.

You might want to have a second set of colour-coded data files or boxes, to compare 'Evidence 1' files with 'Evidence 2' files.

Task

In the same way as for 'Evidence 1', allocate data to different files or boxes. Focus on the indicators that you feel provide clear evidence to show that you have brought about change in the situation. Discuss these with critical colleagues. Write them down.

Ask colleagues how they would judge the change in your behaviour, as well as in that of your participants. If possible, tape-record some of these conversations. When you go through the transcript, highlight those pieces of the conversation that could be real indicators that progress has been made. These pieces will constitute your evidence. The rest of the transcript can go into the data archive.

Evaluating the impact and its significance

Have you	Yes!	When?
identified indicators that you believe will show the process of change?		••••••
highlighted critical incidents in your practice which will show the action of improvement?		
pulled these incidents out of the data, and shared them with your critical colleagues?		
Anything else?		

Tips

This is your evidence stage.

Keep these questions in mind: How can you show that things *are* happening *with* you? How can you show that your influence really is bringing about this change? Who will be the people who will endorse what you are saying? What will be your key evidence? How will you show that?

Think 'highlighting' —use a mental highlighter pen that picks out those significant pieces that constitute clear evidence of change. Keep a record of these significant pieces as you work through your project.

Task

Decide what counts as evidence, and think about how you might present it.

Extracting from your data, write out the significant features and critical incidents of your situation that would act as clear indicators.

Pay particular attention to transcript material. This can be very powerful, particularly if you ask the participants to reflect on the process of your work together, and invite them to say whether or not they feel that the situation has improved. A few lines of transcript is often all that is needed. (Remember that the full transcript of the conversation would go into an appendix at the end of your report.)

Begin compiling a systematic record of evidence. Build up an 'evidence box' —this can be any container which will take your various bits of crucial data. Make sure each piece is dated and coded to show where it features in the time-line of your project.

Validating the claim to improvement

Have you	Yes!	When?
identified your validating group, and organised a schedule of meetings with them?		
organised your data so that you can produce clear evidence to support your claim that you have improved your practice?		
identified possible criteria by which that claim may be established?		
considered other possible criteria for negotiation?		
Anything else?		

Tips

Now you are aiming to present the evidence to show that you have brought about improvement, and you are going to ask people to agree or disagree with you. Questions you need to remember are:

What are you going to claim to have achieved? What improvement do you think you have brought about? How are you going to justify this claim? By what criteria do you hope your work is going to be judged? Who will set those criteria? Will you be able to negotiate the criteria?

Task

Organise your evidence. Collate your data so that you can identify and show what you think you have achieved.

Extract evidence of critical incidents. Say how you can show improvement. Say how you feel justified in making your claim.

Arrange a meeting of your validation group. Send them a progress report, referring to your evidence.

At the meeting, invite your validating group to offer feedback.

Modification of practice

Have you	Yes!	When?
reflected on the feedback from the validation group?		
considered whether your new form of practice is more appropriate to your values?		
imagined ways in which you might share your new insights with others?		
imagined ways in which this might be of benefit to your organisation, and shared those ideas with others?		
identified aspects of your new practice that need attention?		
Anything else?		

Tips

Now you are moving into the final phases of the project and will be publishing the findings. Check with significant others if this is still all right. Renegotiate, if necessary, anything that they are uncomfortable about.

Task

Write down how your practice has changed.

Reflect on the response of your validation group, and aim to incorporate that into the verbal and written reports.

Arrange discussions with any significant others before writing up. Ask them to comment on how your work might impact on the organisation.

Evaluation of doing the project

Have you	Yes!	When?
considered what doing the project has meant for your own learning?		
considered how your learning will affect others?		
asked the opinions of your research participants?		•••••
asked the opinions of others in your organisation?		
thought about how you might have done things differently?		
- and how you might do things differently in the future	e? 🗖	

Tips

It is important to consider two kinds of learning: (a) what you learned about the area you were researching; and (b) what you learned about yourself while you were doing the project.

Was it worthwhile? How can others learn from your experience? You need to make these issues explicit when you write the report.

Task

Write out how the experience of doing the project helped you to understand your own practice better.

Reflect on the responses of others, and incorporate these into your report. Be very clear about what you learned, both about the subject area, and about your own learning.

Say how you intend to share your learning, so that others can learn from you.

Writing up

Have you	Yes!	When?
set aside enough time to get the project written up?		
organised a writing schedule?		
arranged for typing if the work is going out?		
arranged for binding and other reprographics matters?		
organised your work folders, disks, index boxes and data archives so that you can access material quickly?		

Tips

People approach writing tasks in different ways. Some have to be disciplined, putting in so many hours a day. Some go on inspiration, working when they are in the mood. You need to decide what is your style. Be honest, though.

Don't put off writing up. It can take a long time, and you don't want to rush at the last minute.

If you find writing difficult, tell your story, possibly to a friend or to yourself, using a tape recorder. Talk it through, and then transcribe the talk.

Explore with your tutor if there are ways other than (or as well as) writing that you can use to present your work. Would the examiners accept videos instead of a written report?

Task

Organise a work schedule. Write it down, and put it in a place so that the family can see when you will be working. Be ruthless about your time (well, almost ruthless).

Arrange your workstation so that it is friendly. Have everything you need to hand.

Write up the report along the lines in Chapter 7.

Expect to draft and redraft several times. First drafts tend to be wordy. Each time focus more, until you have a concise, professional document. Think in terms of who gets a copy of the work, and how you can get it (or pieces of it) published more widely. This now marks the completion of your first action reflection cycle. You have come full circle, but you have not closed the circle. You have moved beyond, and are now set to undertake another action reflection cycle.

If you feel that the way you are now working is better than before, you will probably stay with this new way of working. However, there is still probably room for improvement; or perhaps there are other aspects that you now need to address. You can say with justification that you have improved an aspect of your practice; you have brought about improvement, and that is a tremendous spur to further investigation.

Now that you have finished reading this chapter you should be able to

- reflect on your own action enquiry
- draw up a detailed action planner
- monitor the progress of your project

Chapter 4

Monitoring and documenting the action

This chapter provides a guide to monitoring action and ways of documenting the process of action research. It includes sections on:

- How to monitor and document your action research: general principles
- How to collect data: the choices available Some ideas about data and data sources
- How to manage data: general principles
- How to involve critical friends in the monitoring process

How to monitor and document your action research: general principles

Collecting, interpreting and evaluating data

Your action is at the centre of your action research. Remember, it is not any kind of action but action to which you, the researcher are *committed* by your personal and professional values, action that is *informed* by your careful considerations about its appropriateness, and action that is *intentional* and undertaken by you to achieve the objectives you have set. Monitoring the action should help you to meet these high principles.

Monitoring the action is more complicated than simply collecting data about how you perform an aspect of your work. It involves three distinct operations:

- 1. Collecting data about the action so that it documents the clearest pos sible description of what happened.
- 2. Interpreting the data you have collected so that you can develop a tentative explanation of what happened.
- 3. Evaluating what you have done so that you can replan further action.

Monitoring the action means generating data to use as a basis to reflect on and evaluate what has happened, and replan further action. This is the basis of the action research cycle that we introduced earlier.

Some of the action will be your own personal action and some will be action carried out by other people. For example, if you are a mentor, you might be answering the question, 'How can I improve the feedback I give to a student teacher after I have observed his lesson?'.

- → This will involve monitoring your own action in providing feedback.
- It will also involve monitoring the student's lessons before and after the feedback session.
- It might also involve monitoring your discussion of this whole se quence with a critical friend.

What kind of data might you generate?

1 Monitoring your own action

To monitor your own action you would need to identify your intentions and motives before the event and your subsequent reflections as well as what you actually did in the feedback session. This aspect of action research has very strong self-study elements.

- > Your intentions and motives might be recorded in your research diary together with your plans for the session.
- You could generate data about your action by audio or video taping the feedback session or by making notes yourself or asking your student to make notes. You could be more formal and ask a colleague to observe the session using one of the observation techniques that we describe later. You could ask your student to complete a short questionnaire about what happened or interview him subsequently. This will provide you with data about your action from various perspectives.
- The next task will be to make sense of your data so that you can evaluate the action. Evaluation is part of the monitoring process. Making sense of the data and testing out your interpretation will mean that you need to involve other people such as your critical friend or other colleagues from your workplace or elsewhere.

2 Monitoring other people's action

As an action researcher you will be aiming to persuade the other people involved in your action to become collaborators. In the example we are using, this would involve monitoring the student's lessons before and after the feedback session. This would seem to be a reasonable expectation, although the unequal power relationship that often exists between student teachers and mentors often means that the 'collaborative relationship' might require some effort. You should aim to involve people as fully as possible in documenting their own practice and in explaining, interpreting and evaluating what happens. In the example:

- You might ask the student teacher to record his intentions and motives as well as providing a formal lesson plan before he gives the lesson.
- You could record the lesson by video taping as well as making notes yourself and asking the student to make notes. You could help the student to get feedback from the pupils, but you should be sensitive to any insecurities the student might feel.
- > The next task will be to make sense of the data. This should be done in collaboration with the student, not only because that would be the best tactic in the normal run of things but because the principle of looking at one's own practice is at the heart of action research. Your hidden agenda would be to enable your student to develop action research skills himself.

3 Monitoring critical conversations about the research

Critical conversations about the research should take place at all stages of the process. In the example of you as mentor working with the student teacher there are three obvious places for you to engage in critical conversations:

- > you could talk about your plans and intentions;
- > you could share your data about the action;
- > you could invite criticism of your interpretations and evaluations and your subsequent plans.

It is very important to document the critical conversations that occur at all these points for a number of reasons. Recording such conversations:

> celebrates and records significant moments of change in practice;

- > enables you to show changes in your own thinking over time;
- provides evidence that the validation process has been continuous and formative.

You need to be confident that you are encouraging others to become coresearchers who contribute a critical perspective that informs your research, otherwise they may become mere respondents who supply answers to questions you have framed that will not move you beyond your existing way of seeing things. You therefore need to document others' contributions to your project so that you can monitor the nature of their participation and ensure that they are not relegated to being mere providers of data.

Data, evidence and audience

Monitoring the action should provide you with data about the action that when analysed and evaluated can be used as evidence to support your claims about what you have learned as a result of the research (Chapter 6). Remember that data is not evidence—it becomes evidence when it is used to support a claim that has been made.

Records can also provide you with the raw material from which you can write reports and articles about your research (Chapter 7). The different audiences for whom you write will require different sorts of descriptive material and you need to take this into consideration when you are planning how to monitor and document your action research—this is particularly true when providing data to support different kinds of claims you will make about it.

For example, let us suppose that your action research has been in response to the question, 'How can I improve my practice as head of the Maths Department?'. As a result of your enquiry you have been able to make the claim that the students are doing better at mathematics.

- Your headteacher may want evidence that changes have been brought about that result in specific outcomes such as improved examination results. If this has happened you might be required to provide test data based on before and after results.
- Other teachers might require evidence of the processes. For example, you may have led a departmental team that had developed ways of working in the classroom that had made the mathematics curriculum more pupil-centred. To show this you would require evidence of changing teacher-pupil interaction; video recordings might provide this.
- If you are engaged in a higher degree programme you might be asked to support claims about your contribution to an epistemology of edu-

cational practice by demonstrating your success in terms of the personal learning outcome of your research process. This might require you to present evidence of personal reflection and learning that could be shown from your diary and taped conversations with relevant others.

There are a number of different tasks involved in monitoring the action but there is a great deal of choice in how you perform these tasks and which techniques you use to generate data. You should draw wherever possible on your own expertise. Remember in Chapter 1 we emphasised that most data-gathering techniques (qualitative or quantitative) can be incorporated into action research.

How to collect data: the choices available

Colin Robson (1993:187), writing about traditional forms of research, suggested that there were three ways of finding out what was going on. He suggested that

'We can watch people and try to work out what is going on; we can ask them about it; and we can look out for fingerprints (as well as any other evidence they leave behind them)'.

Robson's ideas can be **adapted** to suit a situation where the researcher is investigating her own practice. As action researchers:

- We can observe the effect of our action on others and we can ask others to observe us.
- We can ask other people for their views. Their feedback would be quite essential if we were evaluating action that involved other people. We also ask other people to contribute to our action research by helping us to see other points of view—what Richard Winter (1989) calls 'dialectical critique'.
- The idea of looking out for fingerprints is particularly attractive. This could include a range of data including audio and video tapes, photographs, children's work, test results, written records and all sorts of documentary information.

Robson's comment is limited in regard to action research, because there is no reference to the important self-study techniques that are so essential to a research approach that centres on informed, committed, intentional action.

The following publications contain examples of research studies that emphasise self-study.

Dadds, M. (1995) *Passionate Enquiry*, London: Falmer Press. Pinnegar, S. and Russell, T. (1995) 'Self study and living educational theory', *Teacher Education Quarterly*, 22 (3). Rowland, S. (1994) *The Enquiring Tutor*, London: Falmer Press. Russell, T. and Korthagan, F. (1995) *Teachers Who Teach Teachers*, London: Falmer Press.

Some further ideas about data and data sources

Below we have listed some ideas about data and data sources in relation to some of the key questions to which you have already been introduced.

What is your research focus? Evidence can be found in—

- journal in which you recorded your initial thinking;
- tape recorded conversation (and transcript) when you talked through with your colleagues your wish to engage in a study;
- note of complaint to your manager, pointing out that a particular issue needed addressing; letter from manager in reply, suggesting that you do something about it yourself first.

Why are you interested in this area? Evidence can be found in—

- audio/videotape recorded conversation with sympathetic colleague (and transcript), talking through the values that you hold that make you want to undertake the investigation;
- letter to a friend, saying that you are dissatisfied with the present situation because...;
- written report to yourself, commenting on how much you have enjoyed reading a book that spells out exactly what you are feeling in regard to your situation.

Where is your evidence around that? Evidence can be found in—

- questionnaire to colleagues to get their reaction to present (possibly unsatisfactory) situation;
- invitation to students asking them to comment on their perception of the present situation (be aware that if you ask them to comment on your performance, they will, and you might find that uncomfortable);
- video-recording of current situation (again, be prepared to face up to reality when you view the video; view it alone to begin with, and then invite a sympathetic colleague to view it with you).

What can you do? Evidence can be found in—

- written action plans about how you might tackle the matter;
- journal to show how you gave it thought and imagined possible strategies;
- illustrations of your own depicting possible future scenarios once you had intervened in your practice.

What kind of evidence can you gather to show that what you are doing is having an impact? Evidence can be found in—

- second questionnaire to students asking them to comment on how the situation might have changed and if it is better;
- video-recorded group discussion of how the situation might be better;
- questionnaire to parents of students to ask whether there is a difference at home.

How will you explain that impact? Evidence can be found in—

- audio/videotape recorded conversation with validation group in which specific criteria, indicators and categories were discussed;
- journal to show reflection on categories and indicators;
- field notes from participants referring to group discussion when categories and indicators were discussed.

How can you be sure that the judgements you have arrived at are reasonably fair and accurate? Evidence can be found in—

- audio/videotape recorded conversation (and transcript) with validation group on viewing of critical incidents;
- written feedback from validating group to say that they agree that you really have done what you claim to have done—i.e. validating your claim to knowledge; alternatively, suggesting other things you could have done, or ways in which you could improve on what you have done;
- written feedback from participants to say that they agree with your report—i.e. validating your claim to knowledge.

How to manage the data

Your working materials

To do your project you will need

a working file (possibly more than one) data boxes a computer, ideally an index box and cards, if you haven't got a computer a journal your own workspace several small notebooks

Your working file will hold all your rough jottings and material that you might need at a later stage in the project.

Your data boxes will hold all your pieces of data. Get several coloured or otherwise identifiable boxes—box files, or copy-paper boxes. Label each box with the categories for your data, and put the pieces of data into the appropriate boxes. These boxes could be regarded as your data archive.

Your computer is an excellent investment, and will take over a lot of jobs that previously involved sorting and categorising, including the compilation of databases, bibliographies and indexes.

Index boxes and cards (if you haven't got a computer) are ideal for noting the titles of books, together with author, publisher, date and place of publication. Put this information at the top. On the card, note down important sentences from the book you have read. Keep your bibliography from the start. When you write up the report, you must get your references right, and remember that it takes ages to find a missing reference, particularly if the book is back in the library.

Your journal (or log, or diary) acts as a record of events, and also a record of your thinking about those events. You can use a notebook or loose-leaf file for your journal. This can act as a piece of evidence, to show how your actions and thinking changed over time. Aim to write up your journal regularly. You don't need to do this every day, but you should set a pattern for yourself, and stick to it. Detailed advice on diary keeping appears in Chapter 6.

Your own workplace is vital. Good lighting, space, and ventilation are important. Good equipment is important but not essential; your own

computer and printer will save you hours of time and a lot of money in the long run. Other people (such as family) should not invade your space. If necessary, put a note on the table.

Small notebooks are important. Important ideas can hit us at any time. If you have a notebook with you whenever possible, you can jot down the idea. Leave your notebooks in key places—in the home, at work, in your pockets. You never know when they will come in handy. You will find that you get into the habit of writing things down, and this itself generates more ideas.

Finally—

Yourself: The most important thing is your own sense of well-being. Sometimes the best thinking is done at unplanned times, and the best writing is done on the back of envelopes, on a bus, in the middle of the night. If you feel good about yourself, your work will be good. All the equipment in the world cannot substitute for your own sense that you have something worthwhile to contribute. Be sure that you have, and enjoy doing the project.

Managing the data

We have suggested that your data emerges as a result of monitoring the action research cycle. That is, data emerges as records of plans, actions and the steps taken to reflect upon and evaluate these were created. Managing these records efficiently is part of the requirement to be systematic in your research. Organise and index your data. It does not matter which system you adopt, as long as there is a comprehensible system that you can follow.

The management of data is like the organisation of memory, consisting of three parts: storage, encoding and retrieval.

- Storage refers to the system of organising the data in a physical space.
- Encoding refers to the process of sorting and labelling the data.
- Retrieval refers to the methods we use in pulling it out of the store and using it in a meaningful way.

Storage

How should you store the data? It is not useful to keep all the data in one large box under the bed and label it 'My archive'. You will probably need to store your data in terms of the form in which it exists.

Data can take a variety of forms, for example:

Video tapes Audio tapes Children's work Documents Text—raw data in field notes, diaries, completed questionnaires, etc. Computer disks—analysed data in written accounts, tables, etc. Record cards

Encoding

Within each of these storage systems you will need to label and sort the data.

Labelling

Each item of data needs labelling so that you know what it is. Your label should indicate:

- when it happened
- where it happened
- what it was about
- who was involved

Sorting

There are two main ways of sorting, which can also usefully be cross-referenced:

- Types of data distinguished in terms of the chronology of the project data generated at different stages of an action research cycle or from different cycles of action that have occurred over time.
- Types of data about different fields of the project such as library research, reflective self-study, the classroom context, the staff room context, conversations with critical friends.

You might find different files or colour-coded boxes are helpful here.

Sorting the data should provide an archive of case records that can be used as primary source material (Stenhouse, 1978:36). You will need a system for labelling and indexing this so that you can refer to it in your reports as well as find material when you want it.

Retrieval

The main criteria used by Stenhouse for the production of a case record were that it should be accessible for critical assessment by others. When you are preparing your data archive remember that it is for other people to see. You will be familiar with it; they will not be. They will need leading carefully through the field; so always organise and present your work with this in mind.

It is important for you to be able to retrieve the data in order to provide evidence for the claims that you make about the research. However, Stenhouse recognised that much of the data in an archive was too bulky and detailed to present to others, and therefore he argued that the case record should have two aspects, the case data and the case record (op.cit:37).

The case data was all the materials assembled by the researcher. These would be too bulky to make generally public, but would be available if required.

The case record was what he called 'a parsimonious condensation of the case data' or 'an edited primary source'.

When planning a data archive always be aware of the ethics of using data that involves other people (see Chapter 2). Have you cleared everything with your sources? Have you got their approval to use their real words? Are individual identities well hidden?

Using the data

You are going to draw your evidence from the data to back up any statements and claims that you might make. Consider how many times we all make very substantial claims without a shred of evidence:

'My clients are much happier with this product.'

'Children should be seen and not heard.'

'Things have improved since the new boss took over.'

'Don't tell me how to bring up my children. I am doing a very good job myself.'

Where is the evidence? Whose opinion is being expressed here? Who judges the truth value of the statements?

This is in fact a major gap in much of the literature of qualitative research, case study, action research, life history, and other new paradigm research methodologies. Researchers sometimes make very substantial claims

without producing backup evidence to show connections. Make sure that you do not fall into the same trap. When your reader comes across a statement such as, 'My patients all said that they were happier with the new service,' they will want evidence from the patients. When reading your claim that, 'My student nurses learned the material more effectively through interaction with the videopack than from other resource material,' your reader will want to hear the voices of the student nurses giving their perspective. As a researcher, you may not speak on behalf of your research participants, otherwise you are potentially distorting the data and its analysis. You must allow them to speak for themselves.

You can of course produce various forms of evidence to back up your claims. It may be in quantitative form, or in documentary or any other appropriate form. You might want to produce still photos to underscore your interpretation of what was happening. You might refer to audio or videotaped evidence that corroborates what you are saying. You could cross-reference your field notes with your participants' field notes, and submit those as evidence. Whatever form your evidence takes, it must be there. Advice about techniques for dealing with the data appears in Chapter 6.

How to involve critical friends in the monitoring process

At the beginning of this chapter we argued that monitoring the action is more complicated than simply collecting data about how you perform an aspect of your work. We suggested that it involved three distinct operations:

- 1. collecting data about the action so that it documents the clearest possible description of what happened;
- 2. interpreting the data you have collected so that you can develop a tentative explanation of what happened;
- 3. evaluating what you have done so that you can replan further action.

Other people can help you make a disciplined and critical study of your practices in relation to each of these operations. Co-operation and collaboration are integral to action research because of its nature as an educational activity. We think that the following two ideas, which are drawn from Pam Lomax's six principles of action research, are essential (Lomax, 1995):

- that action research is participatory and others are involved as coresearchers rather than informants, so that critical communities of people are formed;
- that action research is about sharing ideas, interpretations and conclusions with an 'educated' audience who are able and willing to judge the authenticity and relevance of the work to a particular professional context.

In line with these principles, you need to develop relationships with others in which you:

- ask colleagues to give critical feedback about your action;
- encourage them to share the educational experience of being an action researcher;
- persuade them to become co-researchers;
- are prepared to relinquish ownership of action if your colleagues are ready to take it over.

You will be most successful in these endeavours if:

- you are open and avoid manipulating others;
- you are prepared to take risks and sometimes expose others to risk;
- your research is made transparent;
- you are clear about the ethical principles that govern your collaboration.

Where do you start?

Start small and establish a working relationship with one work colleague who is willing to provide critical but supportive friendship. We call these colleagues critical friends. We use the term differently to Bayne-Jardine and Holly (1994) who see the critical friend as an outsider process consultant. In our model, the critical friend is expected to act as a confidant(e) or mentor and talk through the research at regular intervals, preferably from an insider perspective. Because critical friends are assumed to know the research context well, they can help the researcher deal with the micro-politics of work. They may be chosen because their position in their organisation empowers the researcher and adds support to bringing about change. This is seen as a perfectly acceptable situation because we expect researchers to negotiate the focus of their research with senior colleagues so that the work has organisational as well as personal benefit. The critical friend, regardless of status or role, is expected to help the researcher achieve a critical perspective even though this may challenge the normal assumptions underlying the researcher's work. We recognise that such a critical stance is more difficult when the researcher and critical friend share the same values and assumptions.

What part do they play in validating the research?

We introduced the idea of validation in Chapter 1 and explore it in more detail in Chapter 6. A common procedure in institutionalised forms of action research is to to ask critical friends to join validation groups that have been set up to validate a colleague's action research. The following ideas about their role in validation meetings come from a diverse group of critical friends who attended their colleagues' validation meetings at Kingston University (Lomax, Woodward and Parker, 1996). The critical friends perceived their roles in the following ways:

- as witnesses, confirming and verifying that the research had taken place in the way in which it was described;
- as helping the researcher give a good account of the research;

- as offering an evaluation—'critical partnerships';
- as giving moral support for the researcher in terms of encouragement, positive feedback and sympathetic support.

Who can act as a critical friend?

Some recent research on critical friends to teachers undertaking a masters programme (Lomax, 1994a) shows that they were mainly full-time work colleagues, mainly women and mainly main-grade teachers. A number of critical friends were from the senior management team. Other critical friends were heads of department, part-time teachers, school governors and people from outside the workplace (mainly other teachers). When asked why these people were chosen the following responses were given:

- compatibility and shared values
- interest or involvement in the research
- ability to provide challenging but critical feedback
- availability

Sometimes the critical friendship relationship is seen as one of potential collusion. Collusion is obviously unfortunate if it impedes the proper validation of your research claims, but we would expect there to be a variety of professionals involved in your validation process, only one of whom is your critical friend. Your relationship with a critical friend is a formative one and we would suggest that collusion would not impair the educational potential of such a relationship as it could be an important aspect of the relationship, enabling a trust that could be a key motivator in helping you to move forward. Indeed one could argue that the role of the critical friend at the validation meeting is evidential and supportive rather than critical. However, this does not exclude them from a more critical role in fulfilment of their purpose elsewhere in the research process.

Now that you have a good idea about the main ideas underpinning monitoring, and you have given thought to how to involve others in your research, you can begin to think about how you will deal with your data.

Chapter 5

Techniques for dealing with data

This chapter provides a guide to techniques for building an archive of data which can be used as evidence within action research case studies. Each section will deal with a specific technique. The chapter includes sections on:

- using a research diary
- observation methods
- questionnaires
- interviews
- photography, tape recordings and video

Using a research diary

People who keep diaries often use them to record their thoughts and feelings about the daily events of their own lives. It is a favourite pastime for teenagers. Perhaps the most famous diary of this sort is that written by Anne Frank. Such diaries, found by a later generation, provide remarkable insights into bygone lives and times. There is a tradition amongst politicians and other people in public life of keeping journals and letters that later form the substance of their autobiographies. Many people also keep diaries so that they can remember appointments they have made and so that they have a record of these. These commonsense reasons for diary keeping can throw a lot of light on their purpose within an action research framework.

Let us consider:

- types of individual diary, their purpose and the diary entries to which they give rise;
- ➤ collaborative diary keeping and diaries kept by other people;
- → ways of setting out a research diary.

Types of individual diary, their purpose and the diary entries to which they give rise

Before you start to organise a diary you should consider what you can do with the data once it has been entered. The purposes to which entries can be put may require different ways of organising the diary. Here are some ideas:

- ➤ It can be used to make a **time-line**. It is worth noting here that keeping a clear time-line is vital: aim to log everything with a date and time, and a note about the context where appropriate.
- It can be used to illustrate general points. Of particular importance to this are 'thick descriptions' which enable a reader to empathize with a situation.
- ➤ It can be used as raw data and subjected to analysis. This means prioritising items and making clear the criteria for selecting them.
- It can be used to chart the progress of your action research including successful and unsuccessful action and the personal learning that emerges from reflection on this.

Some writers distinguish the terms 'log', 'journal' and 'diary', suggesting that each should be a record of a different kind of data. Others suggest that different kinds of journal writing should be used for different kinds of thinking. We do not make these distinctions. It is up to you to decide what you want to call your diary, but you must be clear about its purpose and the sort of entries that you want to make in it.

Diary writing should happen throughout your action research project. In the early stages when many people lack confidence about writing, diary writing may be easier than writing a formal report. Even if it is less than rigorous, the diary should provide you with some documentation to return to and reflect on. Be warned though: at some later stage you could seriously regret not making your entries as inclusive and rigorous as possible, so get into good habits from the start. Your diary might be one or several of the following:

- A regularly kept and systematic record of factual information about events, dates and people. It might be organised under headings such as: When? Where? What? and Who? The data you record should help you construct a chronological time-line or reconstruct events as a clear description of what has happened.
- An *aide-mémoire* to record short notes and ideas about your research for later reflection.
- A detailed portrait of particular events and situations which will provide richly descriptive data to be used later in written accounts.
- A record of anecdotes and passing observations, informal conversations and subjective impressions that are largely unplanned. In this sort of diary it would be important to log exact words in order to quote them in later accounts.
- > An introspective and self-evaluative account in which you record your personal experiences, thoughts and feelings with a view to trying to understand your own action. This might provide convincing evidence of the processes of your own learning and indicate connections between actions and outcomes that are not so easily explainable in the logical sequence of an action research cycle.
- A comforting companion, particularly at times of stress when one needs to 'dump' negative experiences with which one cannot deal directly at the time. In this way you are able to record events and feelings and leave them until a later date when you are emotionally more capable of dealing with them.
- A reflective account. The purpose of this would be to examine experience in order to understand it better by writing about it. This would include your own tentative observations and interpretations of events. A reflective account could be quite therapeutic as you could deal with all sorts of personal interpretations that you did not want to make public. It could also be quite creative, containing new ways of viewing experience that were too tentative to make public.
- An analytical tool in which you examine your data and deal with problems of analysis. This would be a systematic record of plans, actions, evaluations and replanning, and the links between them. You could include the questions you use to orientate your project at different times. You could record different representations of your action research, which might be diagrams, models or even drawings, that change over time.

- A document of your progress which includes description, analysis and judgement. You might develop a set of criteria against which you could assess your progress periodically.
- ➤ As a way of distancing yourself from your action in order to interrogate it. You could use your diary entries as texts that could be subject to different sorts of textual analysis. For example, if you were concerned about possible gender bias in your work you could look at the sorts of metaphor you use to describe events and people, or at the entries you have made concerning people of different genders.

Collaborative diary keeping and diaries kept by other people

Collaborating on diary keeping

If you are engaged in a collaborative project with one or more other people you may decide to 'triangulate' your diary entries. Triangulation is where you use data about an event from more than one source. For example:

- You and your partner may be working together but keeping separate diaries in order to check out your different interpretations of events.
- You and your partner may be working in separate contexts on a shared concern and use your diary entries to compare the different situations and responses.

Some researchers use an interactive diary in which they write comments in response to each other's reflections.

Diaries kept by other participants

You, as the main researcher, might keep a diary or log of events and ask other participants in the action to keep similar diaries which you could use to check out your own interpretations.

You might ask participants to keep diaries of what they are doing, and you might get their permission to use these records as data. For example, this might have been a good way of finding out about the effectiveness of the mentor's advice to the student teacher in the example given in Chapter 4. Although in such cases you would be on the outside of the diary keeper's action, the data might be needed in order to evaluate the outcome of action that you had facilitated. If you are an outsider to the action you need to take special care to reflect on the nature of your relationship with the insider and you would have to be careful to make your use of their responses as transparent and open as possible, making sure that they agreed with your use of the data. This highlights the need for strict ethical conduct on the part of the action researcher. If you have permission to use people's diaries, you must check out that you have used the work in a way that is acceptable. This means submitting your reports to the people concerned to check and agree. You also need to ascertain if anonymity is appropriate or whether the diarist would wish to be acknowledged and thanked.

Establishing and maintaining a research diary

Diary writing is not a natural activity for some people and therefore you might have to discipline yourself to begin. Make sure that you write regularly and that you put aside a specific time for this. You might combine it with the time you set aside for reflecting on your day's action. You do not, however, need to write up every day—every two or three days will do —but a regular schedule is essential.

Before you start you should make decisions about the following:

- Will you need to keep more than one diary to cope with the different purposes to which it will be put?
- Should you divide your diary into sections in which you can make different types of entry?
- Do you need to develop a system of cross-referencing between parts of your single diary or between diaries kept for different purposes?
- Should you keep your diary in a loose-leaf folder with sections that can be used for specific material, rather like a personal organiser?
- Could your diary take a completely different form such as a card index system in which items are sorted, or a 'talking diary' —a tape recorder in which brief notes can be made for later digestion or expansion.
- How will you design each page? Will there be space for additional notes made at a later date?
- Will you keep some parts of your diary for private reflections and other parts for writing that you could make public?
- Will you use your diary to record data collected by other research methods such as observation or interview?
- When will you write your diary? It is a good idea to view your diary writing as a contract with yourself and set aside a specific time for this. Remember, diary writers also need time out to reflect upon what has been written and periodic time to review and rewrite.

Some final ideas

- Keep a small notebook for quick notes that can be transferred to your main diary later.
- Periodically review and summarise your diary. This is important for identifying connections and patterns in your data.
- Get into the habit of reading some of your diary entries to a critical friend and inviting discussion.

Some further reading about diaries

Altrichter, H., Posch, P. and Somekh, B. (1993), 'The research diary' in *Teachers Investigate Their Work*, London: Routledge, 10–32.

Burgess, R. (1985) 'Keeping a research diary' in J.Bell (Ed.) Conducting Small-Scale Investigations, London: Harper Row.

Holly, M. (1989) 'Reflective writing and the spirit of enquiry' in *Cambridge Journal of Education* 19 (1) 77–80.

Walker, D. (1985) 'Writing and reflection' in D.Boud, R.Keogh and D. Walker (Eds.) *Reflection: Turning Experience into Learning*, London: Kogan Page, 52–68.

Observation methods

If you systematically watch what happens, you will be using an observation technique. Action researchers will normally be at the centre of the action and therefore not in a good position to do this themselves. However, the collaborative principles of action research encourage you to seek help and there are many encouraging stories about colleagues being invited and willing to observe each other.

For example, Rod Linter made video recordings of his lessons and then used the Flanders Interaction Analysis Chart (FIAC) to analyse classroom interaction. He did this as part of an action research design in which he wanted to know if a modification to his teaching had been successful in increasing students' participation in his lessons. His research is interesting because he persuaded a colleague to help him apply the FIAC instrument to the videoed lesson in order to strengthen his confidence in the analysis. The results of the initial analysis enabled him to reflect on what was happening in the classroom and take action to modify it. His first analysis revealed

'...a high level of teacher direction and limited opportunity for pupils to express their ideas...equally alarming was the revelation that out of a class of 24 students, 12 remained silent, nine of them girls!' (Linter, 1989:91)

If you are a member of a team, it is even more likely that your colleagues will be willing either to observe you or to give you 'time out' to observe them. For example, because Marian Nicholas was team teaching she was able to observe her colleague in four humanities lessons. She used the simple count method described below to count the pupil-initiated and teacherinitiated interactions of different categories of children. She writes:

'As a non-participant observer I counted the interactions in four humanities lessons. The categories I used as a basis for my analysis of these interactions were gender, high ability, learning difficulties (LD), and English as a second language (ESL). For pupil-initiated interactions, the highest score was with boys and the lowest score was with ESL boys. For teacher-initiated interactions, the highest score was with girls and the lowest score was with able boys. We saw that boys dominated conversation when they were the ones initiating the interactions, but in teacher-led interactions Jo (the teacher) was successful in making a positive effort to interact with girls. We also noted that although ESL boys had the lowest pupil-led interaction scores, the ESL girls only initiated two remarks to Jo in four lessons, thus substantiating the point that our problem was not simply one of gender dynamics but of a breakdown in successful mixed ability teaching.' (Nicholas, 1996:97–108) Another example of teachers collaborating to create opportunities to use traditional observation techniques comes from Margaret Follows' account of how she developed her own observation schedule to assess whether she and two co-operating teachers had established flexible teaching groups in an infant school. The idea was that children working with the three teachers should be encouraged to use a shared teaching area which contained a number of activities.

'The children were observed for a period of five weeks. Each activity was observed twice a day, once in the morning and once in the afternoon. The number of children from each class unit engaged in the activity was recorded on the checklist, the letters (R), (A) and (I) denoting the class unit...over the five week period there was a decrease in the use of resources by children from one class unit, a variation in the use of resources by children from two class units and an increase in the use of resources by children from three class units.' (Follows, 1989:82)

Like Nicholas and Follows, devising your own observation schedule may suit your purpose better than an off-the-peg version. If you decide to design your own there are certain principles to be taken into account.

- What is the purpose of the observation? What do you want to find out?
- Which crucial bits of the action are you observing? Is it all equally important?
- → How will the data be used? Is it appropriate?

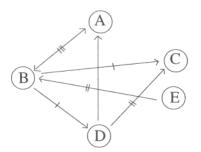
(a) Headcounting

This is a very straightforward procedure, and used simply to count the number of times a particular event happens. It is impossible to watch all the action in a particular situation, so you have to be selective and watch certain bits for a small amount of time. For example, Follows broke her observations down into time blocks that occurred daily for a specified period each morning and afternoon. During these times she observed whether the children engaged in each of eight activities in the red play area came from one class, two classes or three classes. After five weeks she was able to produce the following chart. The class unit composition of pupils engaged in observed activities in the red teaching area each week

	Week 1	Week 2	Week 3	Week 4	Week 5
From one class	77%	31%	51%	32%	37%
From two classes	20%	64%	20%	46%	25%
From three classes	3%	4%	20%	22%	37%
No. of activities	35	45	35	41	51

(b) Interaction charting

The idea of charting is to draw a graphic that indicates what is going on. For example, the graphic below shows how you could chart interactions between people. The small cross-lines indicate the number of times different people interact. The arrows show who speaks to whom.



(c) Procedural analysis

This kind of exercise requires you to draw up an agenda, or time plan of a specific event, and then to plot the actions and interactions within the frame. For example, McTaggart wanted to find out who spoke most in a staff meeting. He used a frame in which he listed the names of the people in the

meeting along one axis and the amount of time they spoke along another. From this he was able to identify the number of contributions that individuals made in the meeting and the length of time for which they spoke. Because he participated in the meeting himself, he tape recorded the meeting and used the tape to check his findings. The table below records the results of his observations.

Participation	analysis.	Staff	meeting	1/3/89	(McTaggart,	1990:75)

Participant	Number of contributions	Length of Time (m.s.)	% of total talk time
Mr M	42	18.41	49.7
Head	36	9.29	25.2
Mrs S	14	2.25	6.4
Mr B1	21	3.35	9.5
Mrs M	13	1.19	3.5
Mr A	6	1.10	3.1
Mrs B	6	0.13	0.5
Mrs A	1	0.02	0
Mrs R	6	0.23	1.0
Miss C	5	0.17	0.7
Mrs C	0	0.00	0
Total	150	37.34	100%

(d) Interaction-process analysis

This kind of charting analysis can be used in a variety of ways. For example, the Flanders Interaction Analysis Chart was used by Linter (op.cit). It operates by way of a grid, and is used to capture the number and type of

interpersonal interactions. This technique can be used to capture quite sophisticated interactions, but it is very demanding in concentration. You need to be familiar with the categories of behaviour that you have devised as indicators of the action that you are watching. For example, below is the kind of schedule you could use if you wanted to see the kinds of interactions that take place in a conversation:

Categories	1-minute intervals					
of behaviour	1	2	3	4	5	
smiles		1111	I	I	11	
touches	11			I NYL	111	
nods	IHL	J#1 I		1111 I	JH1 II	
initiates conversation	I	I	111	II		
listens	111	Ш		11	I	
is empathic	I	11	I		II	

Record sheet to observe conversation interactions

Observation data of the kind described in this section is useful for tracking changes over time in the relationships between yourself and a group of students, or between the students themselves. You could use the same observation schedule at regular intervals for a term. As we have seen, observation techniques can be enhanced when they are supported by audio and video records or where they are used co-operatively by more than one person.

Questionnaires

New researchers often rush into questionnaire design without considering the issues sufficiently. This is dangerous. Issuing a questionnaire is a political act because questionnaires are not neutral. They influence their respondents and alert them to ideas not thought about before.

Do you want to give your respondents the ideas that underpin your questionnaire? For example if you send a questionnaire to parents asking if their children are being bullied at school, they may get the idea that bullying is occurring!

The responses from questionnaires can sometimes be misleading. For example, Moira Cluskey points out that respondents are unreliable sources: 'If I ask my students today if they enjoy school I might get a 60% answer in the affirmative. If I ask the same question tomorrow the result may have dropped to 50%. This reduction might be caused by a variety of factors' (Cluskey, 1996:1–4).

In this section we want to offer some basic common sense ideas about questionnaire construction and use. If you choose to use one, do some further reading.

Do not use a questionnaire unless you have a very good reason for doing so.

There are two good reasons for using a questionnaire within an action research design:

- → to find out basic information that cannot be ascertained otherwise
- to evaluate the effect of an intervention when it is inappropriate to get feedback in another way

You might also wish to use a questionnaire in order to introduce a particular idea to a chosen audience. The example about bullying suggests that questionnaires can be used to pave the way for new ideas.

Some preliminary pointers

- > Establish why you want the information. Is it essential to your project?
- > If you already know the answers do not use a questionnaire.
- Never ask questions if you can get the information elsewhere. If people have to answer too many questions, they will not return the questionnaire.
- If it is to be a postal survey, can you afford it? Remember you will probably have to send out reminders.

- If you want to ask a representative sample of people you need to read about sampling procedures in a specialised book on that subject.
- Will you need to gain access to the people you want to question? Have you got the necessary permissions?
- If you are intending to send a questionnaire to colleagues at work, are you sure that a questionnaire is the best way of getting your answers?

Constructing questionnaires

Collingwood (1939) said that there are no 'true' answers. There are only 'appropriate' answers that will keep the dialogue open. The same idea applies to questionnaires. There are no 'correct' questions, but there are 'appropriate' questions, whose answers can move things forward.

Always ask, 'Is this question appropriate? Is it going to give me the kind of feedback that will help me to move my thinking forward?'

Closed questions may be too narrow and prescribed to provide answers that will move your thinking forward. Closed questions have a restricted format, such as ticking a particular box which contains a pre-specified answer. Their advantages are that they require less space for answers and the answers are easier to chart. Their limitation is that you will never get back any answers that fall outside the range you have specified.

Open questions are much better because they allow the respondent to express a broader range of ideas. An open question is one such as, 'What do you think about...? Open questions require more space for the answers. You will also find these open answers more time-consuming to analyse because they are so diverse and rich in ideas. However, even an open question closes off possibilities because it sets boundaries for the answers that can be given.

Questionnaire construction is a very technical business and if you want to do it well you should read one of the well-known texts on questionnaire construction first. Then you would be well advised to try it out on a few friends to make sure your questions make sense. Pilot it again on a different audience, one that is familiar with the kind of situation you are exploring. Always show it to your tutor (if you have one) and to your critical friends. You cannot pilot a questionnaire too many times. Remember, questionnaires are dangerous things and can ruin the research context for you if they are inappropriate!

Steps in administering a questionnaire

- 1. Decide what information you need to find out. Construct your questionnaire or use one that has already been piloted. Put the instructions for completing the questionnaire at the top of the paper.
- 2. Be polite, and ask your participants to help. At the end of the questionnaire, thank your participants. Make a statement to say that you will inform them of the results, if they wish.
- 3. Have a clear policy for dealing with confidentiality and share this with your respondents.
- 4. Clearly write or type your questionnaire. Leave enough space for the respondent to fill in easily. Clearly number or otherwise annotate your items. Use good quality paper. Pay attention to detail in content and appearance.
- 5. If you photocopy the questionnaire, make sure that the copies are clear and legible.
- 6. Pilot the questionnaire. Try it out on a few people, and invite their criticism. Try and analyse the responses to see if it is giving you the sort of data you want.
- 7. Run the questionnaire. Give your respondents a fixed time in which to return the questionnaire. Write on the questionnaire itself when you would like it returned. If you want people to send it back to you, provide postage and envelopes.

(see McNiff and Stanley, 1994)

Interviews

Interviews are used in a variety of research contexts and may be used within an action research design. However, within action research, because of the principle of 'collaborative intent' interviews are more likely to be informal discussions in which the researcher is aiming to influence the interviewee to become a collaborator.

More formal interviews may be necessary if the action researcher needs to establish some information or to evaluate an outcome, much in the same way that we described for questionnaires.

Interviews have distinct advantages over a questionnaire because you can get richer feedback as a result of being able to probe further.

Interviews range from fully structured to quite open with many variations between these extremes.

- ➤ A fully structured interview is really the face-to-face delivery of a questionnaire. The interviewer must ask the questions exactly as they appear on the interview schedule. The aim is to provide exactly the same questions, in the same order and style of delivery, to all interviewees.
- An open interview would have a starting point and an objective but no set agenda of questions. The interviewer would be free to follow where the interviewee led as long as it was within the general framework.

Choosing between open and closed interviews would depend on their purpose. If the interview was for the purpose of evaluation, it is likely it would be more structured than if it was for the purpose of establishing what sort of situation existed in a context with which the researcher was unfamiliar.

Guidelines for conducting interviews

- (1) You should document the interview unobtrusively. Some of the procedures for documenting data described at the start of this chapter may be used if appropriate to the situation, such as the use of notebooks, audiotape and videotape recording. Always let your interviewee know that you are doing this.
- (2) You should be clear about the ethics of interviewing which are similar to those for all forms of research.
 - Tell your interviewees what the interview is about, or tell them that you are unable to do so.

- ➤ Do not mislead or deceive people in order to get them to impart information.
- ➤ Be prepared to maintain complete confidentiality if this is requested.
- (3) You should develop listening skills. Active listening includes controlling your body language to communicate the message that you are interested in and value what is said.
- (4) You need to give verbal cues to encourage your interviewee to talk freely.
- (5) You need to play back what the interviewees say in order to help them maintain their flow. For example, you might say, 'Now, as I understand it, you are saying you were a victim of bullying at school.'
- (6) You need to show that you empathize with your respondents' positions so that they expand what they are saying.
- (7) You need to be able to accept silences because they are important spaces in which speakers gather their thoughts or harness their courage.
- (8) Get some practice in using possible 'framing questions' that help to keep the conversation going. For example:

Clarifying questions to clarify something that the speaker has said: 'Can I check that, please?'

Probing questions to explore an issue that the speaker has raised: 'Can we discuss that a little further?'

Context-specific questions that check (a) that the interviewee is at ease with the question: 'Is it all right for us to talk about this?', or (b) that the interviewee understands the question: 'Can I ask you to put that question in your own words?', or (c) that the interviewee is comfortable with your own performance: 'Have I said that correctly?'. (*see* McNiff and Stanley, 1994)

Photography, tape recordings and video

Photography

Photography is an increasingly popular method within action research. Its obvious use is to document action, but it can also be used as part of the monitoring and evaluation strategy. Rob Walker (1993) in his interesting paper 'Using Photography in Evaluation and Research' says that his ideas 'concern ways of using photography within a research or evaluation study as a way of working rather than as a means of illustrating'. Here are some ideas on how to do that.

- > Photographs can show changes over time. For example, one headteacher photographed the maths corner in six primary classrooms over a period of six months in which she worked with teachers to establish a more pupil-centred curriculum. The photographs show significant changes in the activities laid out for the children.
- Photographs can show the quality of children's engagement in an activity. Hannon (1996:109–120) photographed hospitalised children to show their engagement with materials in the science boxes she had designed for them.
- Photographs can be used for stimulated recall. For example photographs have been used to get children and teachers to talk about their experiences. This technique can also be used in an interviewing situation to prod the memory.
- > Photographs can be used as evidence that an event has taken place.
- Photographs can be used within self-study as the focus for deconstructing personal memories.
- We can use different photographs of the same event to stimulate interviewees to talk about what they see rather than what they are expected to see.

Audiotape recording

Tape recorders are probably the most popular piece of equipment for action researchers. We advise you to buy your own small tape recorder and carry it around with you. It is useful in recording data in all the ways suggested

for photographs and has the added advantage that it can be used as a talking diary or as a way of catching informal conversations and discussions about your research. We have already indicated that it can be used to capture conversations when you are observing a meeting so that you can edit or construct observation charts later.

Sometimes, using audiotape recording means that you will have to make a transcript later. It is a very lengthy procedure, and should be undertaken only if you are sure that this is the best way of dealing with the data. A transcript of a whole conversation captures the full flavour of the meanings, but usually you will only require excerpts or parts of the whole. One way to deal with this is to use the tape counter and describe what the tape contains at intervals. Then, you will only need to transcribe those parts of the tape you wish to quote.

However, the data on the tape is not only there to add to the content of written reports. You will want to listen to your tapes on more than one occasion in order to reflect upon and evaluate the action that has been captured. You may even want to play parts of them to critical friends. These are truly important times in the monitoring process, and there is nothing as versatile or rigorously documented as taped material.

Videotape recording

'When we listen to and look at social life closely, which is what videotape recording enables us to do, we see and hear a different version of social life than is otherwise possible' (Hugh Mehan, 1993:103). This is because it is as near to reality as it is currently possible to get.

Video will capture the non-verbal, as well as the verbal messages that are being sent. Video recordings can be used in most of the ways listed for photographs and audiotape but they are probably better than the other two methods for capturing changes of behaviour in both individuals and groups. They have the added advantage that you can set the camera, and video your own practice. This can often show oneself as a living contradiction.

Having read this chapter, you should now have a good idea of the range of techniques you can use to collect your data. Remember, though, that in action research, these techniques should operate within the philosophy of monitoring outlined in the last chapter and should be tools in your search for improved practice.

Chapter 6

Making claims to knowledge and validating them

This chapter contains the following sections:

- What does making claims to knowledge mean?
- Validating procedures—what is validated, and who does the validating?
- Reaching agreement—what forms of agreement are there, and what is needed for the claim to knowledge to be validated?
- Criteria and standards of judgement—what criteria are used in making judgements, and what standards of judgement are used?
- Issues of legitimation—who is entitled to speak and be heard and who decides?

What does making claims to knowledge mean?

In Chapter 1 we said that all research has the aim of advancing knowledge. In doing your research you are aiming to create new knowledge. In presenting your research to others you are saying that you have done this. This knowledge takes several forms.

New meanings

The social intent of your research was to improve your particular situation. This improvement would have happened because you, and probably other people, improved your understanding of what you were doing. You were working collaboratively, so you were clarifying to each other what this meant for you and your work; you were negotiating and constructing your own meanings out of your shared practices. In this way you were advancing your individual and collective knowledge.

Making tacit knowledge explicit

People have a deep reservoir of tacit knowledge. This is manifested in a multitude of ways, from knowing that we are cold and putting on another jumper, to knowing what someone is going to say before they say it. Tacit knowledge is an incredibly powerful inner resource. Nonaka and Takeuchi (1995) for example, show how relationships and productivity may be improved in organisations by encouraging people first to share their tacit knowledge and then to go through processes to make this knowledge more and more explicit—first to share their values, and then to find ways in which they can live out them out.

This is what you have been doing in your research. At an individual level, you identified a situation which needed improving. You aimed to clarify your understanding around that area—to make your tacit knowledge explicit. You and others working collaboratively have raised your collective tacit knowledge about the values you share to a conscious level. You can offer a reason for your actions. In this way you are able to show your own accountability, how those actions are underpinned by moral commitment —the transformation of practice into praxis.

Contributing to the wider body of knowledge

Hallmarks of traditional research are replicability and generalisability. Research is held to be good quality if other people can do the same thing with the same results, and if the method and its findings can be generalised to all like situations. An implication is that researchers can predict outcomes in future situations, and also control them by manipulating variables.

These criteria are inappropriate for action research, which is not part of the scientific paradigm. It is not possible, nor desirable, to aim for replication or generalisation, since the aim is to understand rather than to predict, to liberate rather than control. People do research on themselves rather than on others; they do research with others in order to understand and improve their social practices. People offer stories of their own improved understanding as outcomes. They share these stories, not competitively but collaboratively. This shared learning leads to the construction of collective knowledge.

Traditional research has a body of knowledge built from the bricks of replicability and generalisability. Action research has a body of knowledge constituted of case studies. People tell their stories to other people, and those other people restory the originals into their own stories (Connelly and Clandinin, 1990); the accumulation of individual stories demonstrates a culture of collective learning.

This is not a culture of group-think, but a culture of independent thinkers, each willing to submit their claim to knowledge to the critique of others, to ensure that the claim is robust and legitimate. Action research is sometimes criticised as a methodological abdication of individual responsibility. This is not so. Action research demands intellectual independence, and also honesty and responsibility; and its methods ensure this by insisting that claims to knowledge are validated by the most rigorous standards.

Summative and formative evaluation

Your research question asked, 'How can I improve...?' Your research shows the process you went through to 'move from here to there' (Bennett *et al.* 1994).

We have seen that action research operates in terms of cycles. Each cycle contains the germinating question(s) for the next cycle(s). Each cycle notionally follows the pattern of identification of issue, imagination of solution, implementation of solution, gathering of evidence, evaluation of solution, modification of practice, although, as we have stated before, in reality nothing is ever quite as neat as this. For your project, you might want to undertake only one cycle, or you could develop this into several.

Throughout each cycle you would make intermediate claims in the form of progress reports, and you would present evidence in support. These reports constitute your formative evaluation—ongoing evaluation—to check that you are on line towards answering your identified research question. At the end of each cycle, you would offer a summative evaluation statement, to show that you had answered your research question (at least in part). If your whole project incorporates several cycles, you would be aiming to produce ongoing progress reports (formative evaluation statements) at strategic times during the research. Your summative evaluation for your first cycle could become the beginning point of your second cycle. The whole thing is seamless and transformational, although books like this break it down into analytical parts, to help us see the process more easily.

Validating procedures—what is validated and who does the validating?

It is straightforward to make a claim that you have brought about improvement, and to produce evidence, but unless other people agree with you, your research will not be regarded as credible. You have to present your work to other people, and ask them to agree with you, or, if they do not agree, ask why not and what you can do so that you can make the necessary adjustments, either to your practice or to your report (e.g. include more evidence, or evidence of a different nature).

Forms of validation

There are different forms of validation (see also McNiff, 1988):

Self-validation

As a responsible practitioner can you show to your own satisfaction that you have done the things you set out to do? Can you show that you have carried out a systematic enquiry, to help you live out your values more effectively than before? Can you offer a rational account of your own professional learning?

Peer validation

Can you convince a group of peers that your claim to knowledge is to be taken seriously? Will they agree that you are demonstrating responsible and excellent practice? Can you offer clear criteria for the assessment of your work, and produce unambiguous evidence around those criteria?

Up-liner validation

Can you show to managers and those in authority that you have intervened in your practice to improve it, and that your way of working could be adopted in institutional development plans?

Client validation

Will the people you are supporting agree that you have acted in their interests, and that the quality of their life is better because of your intervention?

Academic validation

This is validation by the academic community in terms of whether it agrees that you have contributed to a recognised body of knowledge. Many of

you who are engaged in courses that lead to awards will have to submit your work for the established forms of examination.

The general public

Your final validation group will be the wider community of readers, in organisational or general contexts. Going public is the subject of the next chapter and there we deal with issues such as getting published and targeting particular publication outlets. It might take time for your work to be accepted. Ideas about what is considered good work mature. Or it could be a matter of politics, as can be the case with paradigms and movements. It can even come to the trivial level of who is considered to be in fashion and has a following of admirers. The test of ideas, however, is not in the person, but in the durability of the ideas, and how they can work for human betterment. Individuals might get forgotten. Good ideas last in the lives of other people.

The Validation Group

Validating within action research contexts usually involves submitting your research for judgement by a group of relevant others. This group could be made up of members from any of the groups listed above and may vary in size and formality.

A validating group needs to be made up of persons who are sympathetic to the research, but who are able to give critical feedback. There can be a real dilemma here, in protecting the emergent thinking of the researcher while giving the critique that will move the researcher's thinking forward (Lomax, 1994a: 24). There is no point in inviting people who are hostile or indifferent to your research to be in your validation group. You do, however, need to establish a group of critical observers, to avoid a possible challenge of collusion. Your work needs to stand on its own merit, and therefore you need to include in your group outsiders who would view the work with a cautious and critical eye.

It is helpful, though not always possible, to identify the people you wish to be in your validating group from the start of your project, and invite them to take part. Make sure that the size of the group is conducive to the work that needs to be done. The group should not number more than ten, and would usually be four or five. Explain that they will be making a commitment for the duration. Ideally, you need to have much the same group throughout, so that they will be able to comment on your progress by comparing and contrasting events such as critical incidents. Give your group a list of dates when you would like them to be available to work on your reports with you: once every two months, perhaps. The intervals depend on your circumstances and the willingness and availability of your group. It is much easier of course for people to come together if they are working in the same organisation. If people have to travel, organising meetings is more difficult, and calls for careful forward planning.

The final validation exercise should aim to look at the overall report (summative evaluation), together with all the evidence, when the group would agree (or not) that the claim to knowledge is a valid claim—i.e. the research is credible, so this knowledge may be put into the wider body of knowledge and acted on by others.

Sometimes validation procedures are part of formal programmes such as the masters programmes at institutions where we (Jean, Pam, and Jack) work. In those contexts action researchers are given specific guidance about the constitution of the validation group, the materials to be presented and the form that the criteria should take. At the end of this chapter there is an example of a briefing sheet applying to that specific context.

At other times, how you conduct the validating sessions is up to you. You may appoint a neutral chairperson, or conduct the session yourself, or invite another member of the group to do so. At the meetings you should aim to fulfil the basic principles of (a) producing a progress report (eventually the final report), specifying what has been achieved and what is outstanding; (b) organising the evidence to support the claims you make in the report; and (c) offering your own critical analysis of your work, for example by matching the evidence with the claims, or by asking advice about aspects of the work.

Reaching agreement

It would be pleasant (but surprising) if everyone agreed with you. You are not aiming necessarily for consensus, though. We are all entitled to our different opinions, and this leads to a society in which healthy differences may coexist.

You are looking for confirmation that you have done what you say you have done. You are also looking for feedback about whether or not your intervention has led to improvement. If your panel feel that it has not, you would expect them to offer advice about what else you might try.

How many people need to agree that your research is to be validated? The validation group will need to establish its own procedures here, through discussion of their own responsibility as assessors, as well as discussion of your work. What happens if no one agrees with you? Then you would need seriously to reflect on what has been said, and aim to re-present your evidence later in such a way that it might shed new light. However, if you stand by your convictions, you have to remember that you are potentially influencing other people's lives, and you must accept responsibility for your actions. Be honest about whether you have the best interest of others at heart, and you are not just self-serving. We are all guilty of this.

If your group agrees that you have done what you claim to have done, and therefore that your claim to knowledge is valid, you are entitled to proceed in your chosen direction with confidence. Your work has stood the test of critical scrutiny, and you have achieved your aim through merit.

On the following page is a copy of the Briefing Sheet produced by Pam for validation meetings in the MA programme at Kingston University.

BRIEFING SHEET

Purpose

The purpose of the validation meeting is for action researchers to test out their claims to have managed change in their professional practice by presenting evidence to a sympathetic but critical audience. The result of a successful meeting should be for the researcher to have an enhanced understanding of the research and a clearer idea of its direction.

Role of Validation Group

The validation group should consist of

- 1 the tutor
- 2 members of the support set
- 3 a critical friend(s)
- 4 an independent person(s) from another support set

(Opportunity should be made for a small number of first year students to observe the meeting. The course director may attend some meetings.)

Validators should have access to the relevant information before the meeting in the form of a short report. Their role is to look carefully at the evidence, listen to the account given by the researcher, probe by questioning and finally to contribute to the evaluation of the evidence, in relation to the claims being made. Their role is that of sympathetic critic rather than unconditional supporter!

Preparation for Meeting

Researchers must have the *agreement of the* tutor before they proceed to validation. The tutor is responsible for checking that the claims to be made are sufficient and clear enough to support a dissertation at masters level.

The date of the validation meeting should be chosen in consultation with the tutor, and the date, time and place should be posted on the notice board. A short report (1–2 pages) setting out the context and aims of the research should be prepared for the validation group and circulated a day or so before the meeting. It could be in the form of the original proposal— i.e.

What was my concern? What were the reasons for my concern? What did I do about it? What are the outcomes?

It should include a list of the claims that will be made.

Evidence to support the claims should be presented at the meeting. Meetings should not be held until the researcher has sufficient evidence to support claims.

The Meeting

The meeting should last about one hour. The researcher should document what is said carefully. Tape recording is useful. An account of the validation meeting should go in the dissertation as an appendix.

Assessment

The validation meeting and the documentation that accompany it are part of the *assessment process*.

[1] In order for the researcher to *proceed* to the next stage of the research the validation group should be satisfied that the claims being made are supported by the evidence and that the researcher is on the right track. If the group wishes to *recommend* that the researcher follow a particular course of action it should be clearly specified on the validation record.

[2] Where the claims are not supported by the evidence but the researcher demonstrates a clear understanding of the steps to be taken to close this gap, the researcher may *proceed* but with the expectation that *conditions* are met. These conditions must be clearly specified on the back of the validation record. In the event of changed circumstances, where the conditions are no longer appropriate, the researcher must get the agreement of the tutor to a change of direction and this must be recorded on the validation record.

[3] Where the researcher does not produce evidence to support the claims or where the claims themselves need major revision, the researcher must not proceed but *repeat the validation*. The regulations allow for the validation to be repeated on one occasion only.

At the end of the validation meeting the Validation Record should be completed and signed by the group. The tutor should ensure that the researcher has a copy to include in the dissertation and that the Course Director has a copy of the Validation Record and other papers for assessment purposes.

Criteria and standards of judgement

Making judgements about good quality can be problematic, because the idea of 'good' depends on issues such as

who is making the judgement? what criteria does that person use in making the judgement? what standards of judgement does that person use? who decides who is entitled to make judgements?

Let's look first at the issue of criteria. Criteria are the signs by which something is judged. People set criteria in terms of what they understand as 'good', that is, their values. Criteria vary with the people who set them. People working in factories might set criteria which are different from those set by, say, parents, or lecturers in further education. For example, those groups respectively might judge the value of work experience as (a) cultivating values around productivity, (b) leading to a wide experience of life skills, or (c) offering an alternative experience to formal schooling.

The way people judge, and the kinds of judgements they make, are also affected by the standards of judgement they use. These too would be different for different groups of people. Factory managers might use standards of judgement to do with a marketplace philosophy; parents would be making decisions around important life skills; and lecturers would be basing their judgements on the use value of a diversity of educational experience. The criteria we set and the standards of judgement we use are informed by the values we hold, as they relate to our circumstances.

You need to be aware of these issues, and the rules of the game you are in, if you wish your work to be successful.

If you are doing research without aiming to present it in a public forum, you can basically do as you please, but it would not conform to the notion of systematic enquiry made public that we have taken as the main characterisation of research. If it is to be research, it must be made public, but this does not mean it has to be presented to an academic community to be judged by academic criteria. In the academic context you would need to make a claim to knowledge and present that claim for validation by a critical community. If your action research is part of an award-bearing course, you have to play by the established rules of that community. There is no point playing football by the rules of rugby. That is simply the way it is if you want to get an award.

Many people feel that this situation is unjust. Some of the difficulties are:

Work that is presented as part of award-bearing courses is often judged on the quality of the report, rather than the quality of the practice that the report describes. It is deemed as important to follow the set pattern for report-writing as to show an improvement of practice (and sometimes more so).

- > Work is often judged in terms of the pre-set criteria of examiners, rather than the negotiated criteria of the practitioners. Therefore work could be judged in terms quite different from those that the practitioner intended.
- Work is sometimes judged by people who hold a different set of values from the practitioner. Examiners might be looking for an improvement in the social situation, feeling that this is what counts as the use value of research; the practitioner might be aiming to show an improvement of personal understanding, which could be of enormous consequence to her personally.
- Work can be judged in terms of different standards of judgement. Examiners could be using academic standards to judge technical excellence in reporting; practitioners could be using humanitarian standards to establish whether the work contributed to human betterment.

There is a major movement now in academic contexts to encourage students to negotiate criteria and standards of judgement. Pam Lomax and her colleagues, for example, have shown the benefit in supporting practitioners to negotiate their own criteria, while recognising the problems that this can raise when reports are offered within award-bearing schemes (Lomax, 1994c).

The following tables show the success criteria in relation to intention and rationale, used by Pam at Kingston University.

CRITERIA FOR JUDGING ACTION RESEARCH

Stage 1

ntention	Rationale	Success criteria
he action research is ddressing a concern hat you have identified h your practice with a iew to making changes	Explain why your concern is professionally relevant and important enough to promote your personal engagement	 Research context explained Research question exposed Rationale given
his needs to be focused nto a research question f the type, 'How can I	and commitment to the task.	
nprove my practice of ducation here?'	Your rationale will need to expose your personal/professional	
s well as seeking nswers to this question ou will be working owards exploring the neaning of the question self.	values, including ambiguities, contradictions and educational policies that impinge on this.	

Stage 2

Plan	Strategies	Success criteria
Translate the initial intention into a manageable plan. Start small. You will have to establish and develop a clear link between your actions and develop strategies for challenging this. You will have to learn to stand back from your practice and view it with action research eyes.	You should start with a clear plan of action which includes 'imagined solutions'. You should be ready to modify this plan as the research proceeds. This process of clarification of intention should be recorded and made explicit. You should begin to identify where your practice contradicts the values that you claim to hold.	 Link between reflection and action established Research process made transparent Demonstration of values in practice

Stage 3

Collaborative intent	Your own role	Success criteria
Work to involve colleagues as co-researchers rather than research subjects. Encourage colleagues to share the educational experience of being an action researcher. Involve a colleague as your critical friend and ask for critical feedback. Be prepared to relinquish ownership of action when colleagues are ready to take it over.	Be open. The integrity of action research depends on avoiding manipulating others. You will need to be ready to take 'risks' and possibly expose others to risk. You will need to consider the part others play and establish clear ethical principles to govern your research.	 Research role made transparent Collaborative intent realised Ethical principles developed and applied

Stage 4

The action you take should be described carefully including the relationship between events as well as the events themselves.In order to 'appreciate' the action, you will need to interrogate the data and identify patterns and themes. These patterns and themes are the 'green shoots' of theory that is grounded in the events that you describe.Comprehensive data collectedBe persistent about monitoring. Collect a variety of data. You will need to sample the many viewpoints on the same event in order to get a more comprehensive description.In order to 'appreciate' the action, you will need to explain how you have grouped the data and what alternatives existed.• Comprehensive data collecta • Patterns and contradictions appreciatedYou will need data for further reflection andIn order to 'appreciate' the action, you will need to explain how you have grouped the data and what alternatives existed.• Comprehensive data collectedYou will need data for further reflectionIn order to 'appreciate' the action, you will need to explain how you have grouped the data and what alternatives existed.• Analysis exposed to critiqueYou will need data for further reflection and• Analysis existed.• Alternatives considered	Action	Analysis	Success criteria
'evidence' for authenticating your research.	should be described carefully including the relationship between events as well as the events themselves. Be persistent about monitoring. Collect a variety of data. You will need to sample the many viewpoints on the same event in order to get a more comprehensive description. You will need data for further reflection and 'evidence' for authenticating your	action, you will need to interrogate the data and identify patterns and themes. These patterns and themes are the 'green shoots' of theory that is grounded in the events that you describe. You will need to explain how you have grouped the data and what alternatives	collected Data from different sources confronted Patterns and contradictions appreciated Analysis exposed to critique Alternatives

Evaluation	Validating claims	Success criteria
Are the outcomes significant? For whom and why? Do you like them? Has there been practical change? Can it be justified as educational change? Have you developed professionally? Has the research integrity in relation to the ethics of being a practitioner action researcher?	Have you exposed the assumptions and contradictions of your 'claims to know'? Is the evidence to support your analysis and explanation sufficient and appropriate? Are your claims 'authentic' to your colleagues? Can you insert your findings into a critical professional debate?	 Claims important Explanations convincing and authenticated Individual findings related to critical professional discussion Further questions generated

Stage 5

Stage 6

Reporting	Making explicit	Success criteria
Who will read your report? Do you know the criteria they will use to judge it? Have you followed the guidelines for the presentation of the report? Is your account succinct yet comprehensive? A chronological account is useful but it is also important to 'bring the situation to life'. Is the style and language of the report appropriate for the audience?	Have you clarified the purpose of your report? Who are you and what was your research about? Does the account demonstrate a high standard in relation to the criteria listed for stages 1-5? Have you drawn conclusions and subjected these to a critical dialogue drawing upon other sources? Have you given sufficient information for readers to follow up leads and check out your information?	 The report has clear frames of reference, is well structured and is written with minimum jargon. The report presents a succinct yet comprehensive account that describes the strengths and limitations of the research. The implications of the research are spelt out and evaluated critically in relation to other sources of information. The report provides sufficient information for readers to follow up issues that are of interest.

Issues of legitimation

In any field of human interaction, there are those who speak and those who are heard. What is interesting is who decides who should speak and who should be heard, and who agrees that they have the authority to make those kinds of decisions. These are difficult issues, and are usually resolved by an appeal to power. People in power set the rules. They also vote themselves into power, so they become gatekeepers of the rule-making procedures as well. It is very hard to break into such tightly controlled cultures. These are very easy to find in society, from the monopoly on television sport by cable TV, to the monopoly on valid knowledge by policymakers. Often there also is a hegemonising process in operation, where people are led to believe that this is the way things should be, just because it is the way things are. This is a very subtle form of control; people are lulled into comfortable ways of thinking, seduced by a dream of sharing power with the established powerholders, instead of critiquing and challenging where necessary the whole process of who decides who should be in power in the first place (McNiff, 1995, 1996).

Before you submit your research for validation, check your audience and their expectations. Clarify what criteria and standards of judgement are going to be used in assessing it. Check whether or not you have any power to negotiate these. If not, there is little you can do, other than wait until you are in a position of power where you can work towards more democratic forms of assessment. If you are able to negotiate, you will be able to set your own criteria. This will probably also apply to the form of representation, in which case it is up to you to justify why you have chosen a form other than conventional reportage, and to show how this is more appropriate to what you are trying to show. In terms of the research project, you would also aim to set criteria related to how your work should be assessed—does it show movement? does it show the development of critical reflection? —and to offer advice to your examiners about what they should look out for in the work—specific performance indicators, perhaps, or critical incidents which would indicate movement.

Some of the ideas presented here would not be acceptable to many academics. The values we hold in writing them include those of the right of each and every person to make their contribution to wider understanding for human betterment, and to have that contribution valued for what it is worth. We celebrate diversity in ways of knowing, and we do not privilege certain forms of knowledge because of the power structures that underpin them. The second volume in this series (Lomax *et al.*, 1996) contains case studies from the people we support, in which we address the issue of what criteria and standards we use to make judgements about excellence. These case studies, and the conversations in which we engage with their authors, show how we are aiming to live out our values as providers, consultants

and supporters by enabling them to do the same. Throughout this book we have aimed to offer rational justification for espousing these values, and in offering this justification, we hope that we demonstrate our own responsibility in accounting for ourselves. We do not require you to adopt the same values, and we do caution you that things can get uncomfortable if you decide to swim against the stream (Whitehead, 1993).

Our advice at this stage of your research career is to be aware of the risks. You must be strategic. If you choose to fight battles, be selective about what kind of battle it is; and make sure you have powerful allies, such as a tutor who you are sure will support you and get you through the course. Stand up for your rights and seek the support of others.

Chapter 7

Making your research public: creating your living theory

This chapter discusses what is required in writing up your action research.

The sections covered in this chapter are:

- Sharing your work with others.
- Contributing your living theory to an epistemology of educational practice.
- Ways of representing action research.
- Getting published.

Many researchers shrink at the word 'public', imagining that they have to start publishing their work in journals. While you are doing your research it is enough to share the work with others such as your critical friends or your validation group. The purpose at this stage is to invite critique, so that the work may be seen as having credibility in a public forum, and any claims you make may be acknowledged as valid. However, you might wish to submit your work as a portfolio of evidence for the accreditation of prior learning, as an action research module on an advanced professional development programme, or a dissertation in a taught masters programme. This chapter suggests ways in which you can do that.

Sharing your work with others

We have commented before that much of the social and educational value of action research is in sharing case study material, so that people can learn from the example of others. This can be true, both in terms of the subject matter and also in terms of the processes of the research.

People in your organisation

The most obvious people to share your research with are the people in your organisation. They will already know that you are doing research, and you need to keep them informed—at worst, simply out of courtesy and to avoid being seen as doing something 'unusual'; at best to let them see the value of what you have been doing and hopefully learn from it themselves. They might even be persuaded to do their own action research.

Consult with your principal or manager about ways to make your research accessible to others in the organisation. Perhaps you could make a copy of the final report available, or you might request time at a staff meeting, or send round a memo. If this sounds too much for you, ask your manager to announce that your work is available for anyone who cares to read it, and they should approach you for a copy. Be open about your research, so that professional learning is seen as part of normal practice and not mysterious or 'highbrow'.

Often action researchers find that they set a new ethos of collaborative learning in their organisation, especially if they can show the relevance of their work to improving the quality of organisational life. It is not unusual to find networks of colleagues within the same organisation, working collaboratively on individual as well as group projects (e.g. Hewitt, 1994; O'Sullivan, 1994). Often principals will support any work that might improve the organisation, either with funding or with remitted time. Such research communities can build a real atmosphere of collegiality in the workplace, much to the benefit of students and clients.

People outside your organisation

Let other people in the wider circles of your organisation know about your research—chief education officers, regional, branch and head office managers, continuing professional education organisers. Send them a copy of the report, and indicate that you would be happy to talk about your work with them. Often organisations have networks, particularly if there are special interest groups. Membership of these groups tends to be

inexpensive, and they often have their own newsletters and e-mail networks. They also organise conferences of their own. There is often a greater chance to meet key people on this more intimate level than in large organisations.

If you cannot become part of an existing network start one. It is quite easy. Start by organising a social evening (you will have to beg a room from a sympathetic manager somewhere—you don't want to be hiring facilities at this stage). Aim to produce a newsletter, and get others to contribute. (Be aware that this involves chasing people for material, so you need tenacity and good humour as well as vision.)

Find opportunities to share the work with a wider community. This might be local, in town or regional education centres, or in regional or head offices. Make contact with the managers of these organisations, and ask them about any opportunities for you to present your work.

Aim to access national networks and organisations. These would give you opportunities to network with people from a wide range of contexts. Organised conferences and meetings keep you up to date with the best work and sustain your own enthusiasm. They also give you the opportunity to present to a wider audience, and raise your own profile, as well as share ideas with an extended clientele.

Attending conferences and presenting papers

Conferences can be an excellent source for:

Meeting other people

The social times outside formal presentations can be the best for making contact with researchers from other institutions and contexts. You will get invaluable richness from these contacts, both in terms of learning what others are doing, and also in moving your own thinking forward.

Keeping up to date

Listening to the top people in the field is a good way of keeping up to date with new ideas and developments, as well as getting an immediate feel for areas of interest or controversy within a particular field.

Getting new ideas

The buzz around conferences tends to spark off new ideas. Take your notebook everywhere. Write down only key words or points from lectures. (If you want to tape record a presentation, you must ask permission first;

and don't get huffy if it is denied.) Your notes can often lead to a fruitful line of thought. Many researchers write papers in skeleton form at conferences, picking up new ideas from others. This does not mean that it is permissible to use other people's ideas without referencing them, simply that listening to others can spark off new ideas in our own minds.

Learning how to present papers

You can learn a great deal about organising material, what keeps people's attention, and also about the way to present. Watch good presenters—see how they handle an audience, deal with questions, use OHPs and other presentation devices. Model yourself on the best.

Raising your own profile

There is always an 'in-group' of people who attend conferences, and you would become known in a surprisingly short time. The camaraderie and intellectual stimulation that such contacts can provide is very good for your own morale, as well as providing the conversational community that all serious researchers need.

Presenting papers

This can seem quite daunting to new researchers, but it can be an enriching and valuable experience. Writing the paper helps to get your own ideas sorted out; presenting it can be an exhilarating experience; getting feedback can provide valuable insights about how you can progress your own thinking.

Negotiating to present a paper

Most organisations invite you to send in a proposal. This is usually reviewed, so getting a paper accepted is not a walk-over. It does, however, show that your work has merit with peer professionals. You will probably be asked to send an abstract in advance: this goes into the conference programme.

Making the presentation

Rehearse beforehand. Write your paper, but do not aim to read it to your audience (boring!). Summarise the key points, and write them down, in large lettering, on one or two sheets of paper, so that you can speak spontaneously but keep on track.

Make OHPs or other visuals to support your presentation. Put them in order beforehand, and number them. Mark up on your presentation copy to show when you are going to use them. Advance preparation like this is essential. Produce your talk as a hand-out. Decide whether to give this out in advance or at the end, and let your audience know. You want them to listen to you, not take notes all the time. Be careful if you hand out copies of your paper in advance—they will have read it before you finish talking. You might want to refer to it as part of the talk, though.

Stay relaxed but businesslike. Your audience is knowledgeable, so don't talk down (or up!), and they are supportive, so don't expect hostility.

Dealing with questions

At the beginning of your presentation, let your audience know if and when they can ask questions or comment—during the talk (this means interrupting you), or at the end. Acknowledge all questions, and aim to answer as many as possible. If you don't know the answer, say so. People respect honesty. Give concise answers to questions, and don't be railroaded into answering something off the point. Stay courteous and friendly at all times. People tend to value the opinions of those they can relate to.

Contributing your living theory to an epistemology of educational practice

Going public is also about making a contribution to public theory and knowledge—to epistemology. This is particularly significant in action research because it contributes to living theory, which has a different epistemological basis to other sorts of theory—what we call an epistemology of practice.

Epistemology is not a word that appears often in the professional literature, but it is a word associated with research. If you are to turn your descriptions of your educational practice into explanations (theories), you will do better if you understand the body of knowledge to which they will contribute. This body of knowledge, we have argued, is constituted by the 'living theories' of educators like yourselves and us. Understanding the grounds upon which this knowledge is constituted is understanding its epistemology.

(a) If you can provide a validated account of how you have improved education through your action research, you have contributed to the creation of 'living theory'.

Living theory is constituted by your own descriptions and explanations of your educational practice as you have striven to become more effective (Whitehead, 1989). The principles you used to explain your actions came from the educational values which are embodied in your practice. These are the yardsticks against which you can measure your effectiveness. The validation of this process depends on you being able to provide convincing arguments for the importance and adequacy of your descriptions and to show their direct contribution to your explanations.

(b) If you can describe and explain your practice of improving education in relation to your own educational values, you have begun to develop the explanatory principles for understanding the grounds of your own professional knowledge.

You should work from your own values when you explain your educational practices. Your pursuit of educational goals is about living your own personal educational values in your practice as an educator. Your explanation of your practice as educational practice can be based on, and

is comprehensible, in terms of your values. Values are those qualities which provide meaning and purpose in your life and which also provide the explanatory principles for why you make the judgements you do. We do not mean that values are absolute qualities that necessarily remain unchanged. An aspect of the 'living' quality of educational theory is that values are questioned, modified, clarified and sometimes changed as the research proceeds.

(c) If you are researching your action in endeavouring to improve education you have started the disciplined approach towards generating knowledge about your practice.

An understanding of practice cannot be separated from the means through which you improve it. The research methods of social science and business provide technical links between the object and objectification of the practice whereas in action research the means and ends are merged so that methodology and theory intertwine in the service of practical, morally committed action which we call praxis. In living theory, practical educational explanations are particularly powerful because they form part of the process of trying to improve the quality of professional practice; they involve you in researching your action as you try to bring about improvement by working to reduce the gap between your values and the practice.

(d) If you are theorising the grounds of your own knowledge, you are developing your epistemology of your personal practice.

We see that not all current knowledge of education is appropriate to the educational tasks at hand. We think we need professional knowledge in the form of living theory if we are to do our educational work better. Values define the purpose of education and therefore are at the core of living educational theories. But the creation of living theories about educational practice can occur without you understanding the grounds of your own professional knowledge. Where you are able to theorise about the grounds of your own knowledge of your practice you have begun to develop your individual epistemology of personal educational practices.

(e) If you are making your personal epistemologies of your own practices public you are contributing to an educational epistemology of practice.

We would like to conclude our discussion of epistemology by emphasising the importance of making a contribution to public knowledge as a *profession of educators*. To do this you need to be able to theorise the grounds of professional educational knowledge so that you can distinguish it from other forms of knowledge. We argue that your individual epistemologies of practice, once in the public domain, contribute to a new epistemologies. We think that the validated accounts that you make public of your own educational practice contribute to a dialogical community that both informs and is informed by each individual account (Lomax, 1986a; Lomax and Evans, 1995; McNiff, Whitehead and Laidlaw, 1992:91– 96; McNiff, 1993:71–98; Whitehead, 1993). The metatheory about the method or way in which this living knowledge is constituted by this knowing community is what we call an *epistemology of educational practice*.

Ways of representing action research

At the end of this chapter there is advice about writing reports in relation to professional portfolios, professional development modules for advanced qualifications and masters dissertations. Before considering these we would like you to think about whether writing a structured report is the best way of representing your action research. It is possible to use writing in a more narrative form, and many action researchers do so. However, this does not mean that they can ignore the check-lists below. Even narrative writing must give the full picture. The difference would be in the way that the report was organised. In narrative writing the report tells the story of the research and tends to be set out as a story rather than in distinct sections.

Communicating meaning through writing

Writing, in action research, is not just a way of communicating your meaning to a third party. The act of writing itself is a way of empowerment for the writer. For example in a previous text, Jean wrote:

'In writing I tap my tacit knowledge. I externalise my thought-at-competence through my action-at-performance. My writing becomes both symbolic expression of thought (this is what I mean) and the critical reflection on that thought (do I really mean this?). My writing is both reflection on action (what I have written) and reflection in action (what I am writing). The very act of making external, through the process of writing, what is internal, in the process of thinking, allows me to formulate explicit theories about the practices I engage in intuitively.' (McNiff, 1990:56)

We (Jean, Pam, and Jack) have already indicated that we have demonstrated a dialectical way of representing meaning in our publication of authentic conversations which show a living theory being created. Such a way of representing action research is seen as an alternative to a propositional form. Jack Whitehead (1993:69) argues that a wholly propositional form masks the 'living form and content' of educational theory. The process of masking hinders that transparency which is essential to representing educational research (Lomax, 1994b). The propositional form excludes alternative ways of making connections; it is premised on certainties that are redundant when the 'living' enquiry comes up with a contradiction that questions the referent on which connection makes sense. In his PhD thesis, *How do I, as a teacher and an educational action-researcher, describe and explain the nature of my professional knowledge?*, Kevin Eames (1995) shows how a dialectical way of representing meanings could provide a professional knowledge base for teaching.

Story

Story is another way of representing action research. There is no necessary logic of connectedness in story; even the beginning, middle and end of traditional story have been suspended for the post-modern novel. Stories are generative in the way they encourage diverse and original interpretations for both their authors and their audiences. Moyra Evans' (1993) use of story is a good example of how a narrative can transform both its author's understanding and also engage others in its development. Evans is using action research to facilitate the professional development of staff. After working with a department for a year she presented her data in the form of a fictional story. She wrote the story to be consistent with the belief and value systems of the players in the scene, as interpreted by the author. None the less the story presented a multiplicity of meanings that Evans chose to explore with the teachers, using the story as the stimulus. Her own agenda was to open a debate about whether the school was right to support active teacher-centred learning. The story fitted the school in which it was read and discussed, and the teachers were able to talk about strategies they could implement which would work in the school. Kathy Carter says that a story 'is a theory of something. What we tell and how we tell it is a revelation of what we believe'. Stories are 'products of a fundamentally interpretive process that is shaped by the moralistic impulses of the author and by narrative forces or requirements' (Carter, 1993:9). Evans believes that writing a story involves its author in fitting the data together so that the story achieves coherence. Like McNiff she sees it as an exploration in which the search for the theory behind the story is more important than the issue of how real (or how true) the story is.

Snake charts

Zoe Parker (1993; 1994) has been exploring the use of snake charts to elicit and represent descriptions and explanations of practice. The snake chart is a picture annotated with brief notes which shows significant events for the drawer in the form of an undulating line. Parker's own research is about part-time research students' experiences of their work. She uses snake charts as a tool to look at her own practice and that of her collaborators. These collaborators are other research students whose concern about their own research enables Parker to identify with them as co-researchers. When working with others, she starts with focused questions such as 'What led you to do your research?' and 'How does this fit with/differ from the rest of your life as a learner?'. She describes the snake chart as a curved line which moves between turning-points: key moments, ideas or people that have been significant in their lives as learners. The snake can start at any point in time and need not necessarily move forward in a linear chronological progression. Some collaborators prefer to see the chart as a river or other metaphor. Key points are chosen by the collaborators and

discussion of these points leads to annotation of the chart by them. The charts become a two-dimensional depiction of conceptualisations expressed in three-dimensional terms; the representation is literally flat but the account given in the full discussion (which is taped) literally adds depth. Making the chart provides the opportunity for review, without the constraint of determining what the relationships should be. It gives the opportunity to identify the living contradictions of practice. It encourages a unique and personal perspective that can convey values as well as actions and enables the subject to develop her or his understanding further. Doing this collaboratively, where differing interpretations can be brought to bear, adds a dialogical element that moves the intra-subjective dialectic to an intersubjective plane.

Representations of action research at different stages of an enquiry can embody how conceptions of practice change over time. New ways of doing this can help the researcher express feelings about the process and progress of their enquiry, including admissions about contradictions between practice and intention. These can act as incentives for researchers to rethink what they are doing and incorporate both a reflective and a dialectical critique into the procedures (Winter, 1989). Through new forms of representation, action researchers can both account for their work and can show their accounts to be authentic.

An extended version of these arguments is available in Lomax, P. and Parker, Z. (1995) 'Accounting for ourselves: the problematic of representing action research' in *Cambridge Journal of Education*, 25 (3).

Writing reports

Writing any kind of research report requires a clear and concise presentation. What goes into the report will depend on its purpose and on the audience to which it is to be presented. These two factors determine the style and content that is most appropriate. For example, in Chapter 4, we distinguished between the sort of content that might be of interest to:

- → your boss—focus on the organisational outcomes
- ➤ your colleagues—focus on the teaching or management processes
- → your tutor—focus on a demonstration of appropriate learning
- your academic peers—focus on the contribution made to original knowledge

You might also be writing for different publication contexts that demand different styles and focus, for example

- → newspaper—short, sharp, focused and topical
- → professional newsletter—relevant with practical examples and ideas
- ➤ professional portfolio
- → professional development module
- → masters dissertation
- academic journal—tightly argued and related to current academic debate and writing

Whichever audience you choose for your report, you will have to make two important decisions:

What is the content to be?

All action research reports have in common some specifications concerning content. The purpose of action research is to improve your own practice and at the end be able to make some claims about how this has happened which will be useful for others to share. This means your research report must present this argument in such a way as to convince the reader of its truth and importance.

How will it be presented?

As well as providing an appropriate content, the report has to be organised in a form that meets the conventions of report writing—such as clear signposting to lead the reader, headings to guide attention, clarity of expression, avoidance of unnecessary jargon, and good linguistic and writing skills. Below we suggest guidelines for three different kinds of report:

- (a) A professional portfolio
- (b) Professional development module for advanced qualifications
- (c) A structured report for a masters dissertation

It is expected that you should organise your writing to provide clear signposts to your readers, so that they can find their way through your account with ease. It is your responsibility to provide headings, numbering of headings, and other techniques that will guide their reading. It is very much in your interest to do this, as there would then be no misunderstanding about what you meant to say. Communication and presentation skills are vital.

(a) A professional portfolio

The following is taken from material that Jean uses as part of the MEd course at Marino Institute of Education, Dublin, in partnership with the University of the West of England Faculty of Education. She is concerned that the experience of compiling professional portfolios should be educational. Please note that this material is extracted from more comprehensive notes, but gives a flavour of some of the issues involved in preparing professional portfolios.

Preparing a submission for the accreditation of prior (experiential) learning

A wide range of experiences may be relevant to the submission for prior experiential learning. Take some time to consider what episodes in your past might be considered as professional learning, and make a chronological list.

When you submit your claim for credit, you need to show both the evidence for the learning, and give a framework to show how this learning has affected your practice...

Theoretical framework

We suggest that you adopt a theoretical framework for the compilation of your portfolio, which draws on two research traditions. The first of these is autobiography research. The second is action research. (It would be possible to develop frameworks using other research traditions, such as feminist research, or policy research.)

Autobiography is a way of understanding personal practice, by telling one's own story, and identifying critical incidents within that account that caused a change of direction or a piece of significant learning. In telling how that incident affected our personal and professional lives, we can show how it brought about learning that encouraged us to change our practice.

Action research is a form of enquiry that involves action and research. It is a way in which we can develop morally committed action as praxis. A useful way of approaching this is to regard investigating our practice as a situation in which our values are denied in our practice, and to find ways in which that situation can be reversed: i.e. to show how we can live our values in our practice.

A good way of compiling your portfolio would be to give a brief overview of your current situation, saying that you are going to (a) offer your own enquiry into your own biography; and (b) show how your professional learning has been undertaken in order to help you to develop critical awareness of your own situation, so that you can live out your values in your practice.

You need to make your learning explicit at all times...

Form of your report

For each unit, the evidence that you submit, that is, your reports, certificates and other data, should be framed in a short report which constitutes your claim to knowledge.

The form of your report should in itself demonstrate the process of selfreflective learning, and is underpinned by the following questions:

What did I wish to investigate when I undertook this piece of learning? Why did I wish to investigate it? What did I think I could do about it? What did I do? What did I learn? How can I show that learning? How can I evaluate the impact that the investigation had on my professional practice? How has it extended me as a professional?

In compiling your portfolio, you are encouraged to tell your story of how you have attempted to live your educational values more fully in your practice...

Presenting action research reports

It is helpful to compose your portfolio using much the same headings as you used when you were doing the action research. If you wish, you can use the headings given below. You can make up headings of your own. You might use the outline plan given below as a general guideline, or checklist, of what needs to be in your report.

What was your concern?

Contextualise the study. Explain who you were at the time, what the context was like, what gave rise to your research issue. Was it a problem? Why? Was it a demonstration of good practice? Have you given a description of the practice so that any reader will understand what was so high in your mind at the time that you had to do something about it?

Why were you concerned?

Here you will need to give a statement about your own values base as a professional. If the situation was such that you undertook the study in order to see how you could bring about change, what was it in the situation that needed changing? Was there a problem that was going against the things you believed in? Was the situation such that it was a demonstration of what you believed in, so that you felt you had to share the good news? Was the situation such that you had to evaluate it to see if it really was in keeping with the way you envisioned things, with your view of what a good situation should be? In this section you should try to relate your research issue to the values that you hold as a professional, and show what relevance doing the research would have to your life. Have you discussed whether your perceptions were accurate, and whether you felt your intervention was justified? Why could you not tolerate the ambiguity? Why did you not leave well alone? This is a serious issue, and one that you need to tackle very consciously, because this will show how your intervention was not just interference, but morally committed action.

How could you show the evidence around your felt need to undertake the research?

Was there a problem? If so, how would your reader be able to understand what the problem was like? Was there a celebration? What picture of the context can you present? Produce some kind of evidence to show what the situation was like, to show why you felt you wanted to investigate it.

What could you do about it?

Here you have to spell out the possible solutions you imagined. There could have been a whole army of solutions! Which one did you choose? Why? Why did you decide on this solution rather than others?

What did you do?

Which solution did you try out? Was it easy? Was it straightforward? Did you stick only to the one path, or did you try several solutions in quick succession? Did you change your mind midway? What happened?

This section aims to give an account of the procedure. Do remember that your reader has no idea what you did. You need to tell the story in a very straightforward way. Say the obvious. Often researchers imagine that their reader will anticipate the most obvious things, precisely because they are so obvious. You must say the obvious, even if it seems overkill to do so.

It often helps here to tell the story into a tape recorder, or tell the story to someone else and get them to tape record it or make notes as you go along. Certainly tell the story to someone else. They will probably say, 'What happened when you did...?' They will constantly check on pieces that you might have left out or that are not clear. This telling someone else can act as your first draft. When you come to writing it down, imagine that you are telling the story all over again.

What evidence did you produce to show your actions and their impact?

Now you need to comment on your second block of evidence, and try to show the influence that you might have had on the research context. What data-gathering techniques did you use? Why did you choose them and not others? What significant features of the data did you select as being representative of a change? Why did you choose these features and not others? Can your reader clearly see your evidence, as well as a statement from you as to why you feel this evidence is important (an explanation of your criteria)?

Remember that in this part you are presenting real evidence. This could be in the form of field notes, transcripts, videotape recordings—selections from your raw data. Place all raw data in appendices to the report. Include here only excerpts from the raw data that will act as clear evidence to show an improvement in your practice, and in the practice of other people.

What conclusions did you draw from your evidence? How could you judge your own effectiveness?

Were things changing? How could you show that change? What were your reflections as you were doing the research? Where can the reader see evidence of that reflection? (Answer—in your journal; in written notes to your critical friend; in your assignments; etc.) Were you justified in believing that you were influencing the situation? What was happening to you as researcher? Were you satisfied that your intervention was justified—had you really done some good, and did you have confirmation from the people

in whose lives you were intervening that they felt you had done some good on their behalf?

How could you show that you took care that your judgements were reasonably fair and accurate?

How did you validate your claim, that you were influencing the situation, that things were improving, that you were bringing about change, both in yourself and in the situation? Who were your validators? Your colleagues in your workplace? Your tutors? Your research participants? Your critical friends? Your family? Were there any outside observers, who would act as critics of your work? Where is the evidence of that validation? What validation schedule did you follow? Did you make a tape recording with anyone? Did you extract pieces from your diary, and those of your research participants? Did you ask your colleagues to observe your teaching and share their observations with you—and did you keep a record of that, which you are presenting here in the report? How can you make quite sure that any reader can believe your report, and that you are not fabricating any part of it?

How did you modify your practice?

What impact did the research have on your practice? Did you decide to go on with the research, this time extending it to another issue? Has your research impacted on your workplace such that you need to carry it on? Are other people now involved?

Note: although this framework is presented here in relation to portfolio work, it is useful in the compilation of any action research report (McNiff and Whitehead, in preparation).

(b) A professional development module for advanced qualifications

Here are the details of the **Action Research 1 Module** in the Bath University Advanced Courses Programme from October 1995.

Purpose

The purpose of the module is to enable participants to carry out an action enquiry, to understand the fundamental principles of action research and to locate the significance of the approach to institutional, local and national governmental policies.

Organisation

This module will begin by focusing on the participant's understanding of what constitutes an educational enquiry. This will lead into the design of short action enquiries into areas of the participant's own choosing. These enquiries will be carried out over a four/five week period, using the group as a peer learning set in which issues and problems related to their enquiry will be addressed and discussed in detail. A final draft of the action enquiry report will then form the basis for participants' self and peer assessments.

The module will progress in three stages.

Content

1 What constitutes an educational enquiry?

Participants will give examples of educational enquiries drawn from their professional practice. These will be related to examples in the literature on different approaches to action research. The appropriateness of qualitative and quantitative methods for educational enquiries will be discussed, e.g. case study, action enquiry. Participants will then begin to formulate their own personal action enquiry to be carried out during the remainder of the term (this may be an individual or group enquiry).

2 Formulating and carrying out an action enquiry

Participants will present a draft of their action enquiry 'design' which will be the focus for discussion. They will then carry out their enquiry over the next four/five weeks, reporting back to the group on issues and problems arising from their enquiry. This will be the focus for group discussion/ analysis/reference to literature etc. During this time it is envisaged that we will consider the integration of the methods and conceptual frameworks from the disciplines of education into an educational enquiry: e.g. conceptual analysis, theories of learning, the use of autobiography and narrative in the presentation of qualitative research.

3 Final draft of an action enquiry report

Participants will present a final draft of their enquiry report. This will be used to share evidence concerning claims to knowledge which emerge from the enquiries. Questions of validity, justification and rigour will be raised and discussed, as will questions concerning the politics of educational knowledge. The latter will focus on the legitimisation of different conceptions of educational theory from a dialectical perspective. The final draft of the participant's enquiry will form the basis for triangulated self/ peer/tutor assessment.

(c) A structured report for a masters dissertation

This section deals with the contents of a structured, summative report which could be presented within the format of a dissertation. You would write this sort of report after you have completed some of the validation procedures outlined in the previous chapter. Remember this is an example only. You may change the arrangement to suit your own style and the content of your project. This example is given as a broad outline, and to show its logical sequence.

The parts of a structured report

- 1. The title page
- 2. Abstract
- 3. Contents [including contents of appendices]
- 4. Illustrations/Figures
- 5. Acknowledgements
- 6. Introduction
- 7. Body of text, divided into chapters
- 8. Bibliography
- 9. Appendices

Guide to content of chapters

Abstract

This should consist of approximately 250 words and be written in the present tense. It describes the structure, purposes, methods and overall significance of the work. It should enable another researcher to assess if the dissertation contains material that is relevant to their interests.

Introduction

This should be placed before the main body of the text. It should contain: the general background; your own role in relation to the research; the reasons for and the aims of the particular area of research; the main research claims or findings; and a concise description of the content of the dissertation. The introduction should orientate the reader. Make sure that you cross-reference to the relevant chapters.

Chapter 1: The focus

This should identify and discuss a specific question or problem, both with regard to the relevant literature and with regard to practice. It should

provide a rationale for your work, particularly in terms of its educational significance.

Chapter 2: Context

Aim to contextualise your work. Say who you are, where you work, something about the character of the workplace. Do not give a life history, but aim to let the reader get familiar with your context, so that the reader can see the relevance of your research and what impact it might have on your professional learning.

Chapter 3: The method of enquiry

This consists of identification and discussion of the research methods employed, modes of data and evidence analysis used, together with justification for their selection. You must say why you have chosen the design and methodology that you have. Why did you choose practitioner research rather than empirical research? Why did you choose one model rather than another? You would show your knowledge of the action research literature. At the same time, you need to show that you are questioning your own assumptions, and that you are quite clear about epistemological and methodological assumptions in different research traditions. It is essential here that you present a well-developed argument to show that you have rationally analysed these issues, and can defend your choice of methodology on rational grounds.

Chapter 4: The project

It is important for you to be clear of the difference between your description and explanation of your data although these are likely to have progressed hand in hand during your project.

- Description of data. There should be an account of the progress of the investigation at various stages. It is useful to include: a chronological table of relevant events; graphic representations of different research cycles; summary tables.
- Interpretation of Data. What are your principal results/claims? How are these claims supported by your data? How have you validated this link?

Chapter 5: Significance

Discuss the significance of your research to the issues you identified in chapter 1 of your report.

- → How has your own understanding progressed?
- What is the relevance of the work to the institution?
- → How does it link with other research?
- ➤ Does it contribute to theory?

What future developments for theory, practice, and research may come of the work?

Bibliography

Make sure that all your references and citations are included in your bibliography. Make sure that you follow conventional formats for organising bibliographies, such as the Harvard system. Your tutor will give guidance here about any appropriate house style.

Appendices

This is where all your raw data is presented. Appendices should be organised in terms of the data you have gathered.

Presenting your dissertation

- 1 Text should be word-processed/typed using double spacing.
- 2. Margins 1.5" on inside and 1" at each of the remaining three.
- 3. Pages in the main body of the text should be numbered using arabic numerals. The introduction should be numbered using roman numerals.
- 4. All material must be labelled. Tables and figures should have full and explicit titles. Cross-referencing must be precise.
- 5. All quotations should be acknowledged with appropriate citations and page numbers.
- 6. Citations and bibliographies should use the standard format described in the library document 'Bibliographic Citations'. No footnotes should be used. All references and citations should include page numbers.
- 7. Appendices should not include raw data. Appendices should be for derived data (e.g. tables and figures not included in main body of work), examples of archived materials (e.g. questionnaires), or for summaries of key meetings (e.g. validation meetings). Use your archive for raw data and also for bulky original data such as video and tape recordings. List archived material in your first appendix.

Check-list for writing the report

The following check-list will help you to evaluate both the content and the organisation of your report.

- 1. Have you organised your report in such a way that any reader has easy access to the overall arguments?
 - explanatory statement or abstract at start?
 - subheadings?
 - concluding statements/summary?
- 2. Have you explained your rationale for doing the research and set out your overall aims?
 - importance to school/institution?
 - link with your value position?
 - link with other work/research?
- 3. Is the context in which the research was done described? Remember to preserve colleagues' anonymity and use a pseudonym for your institution!
- 4. Have you explained your own role within this context? What are the implications of the proposed action for your role?
- 5. Have you explained why the action research approach/ methodology you have chosen is a good way of achieving your aims?
 - what is action research?
 - how have you used it?
 - what were its limitations and strengths?
- 6. Have you described the particular techniques you used to monitor your research?
 - why did you make these choices?
 - who else was involved?
 - have you included a time plan?
- 7. Have you made the process of study explicit?
 - have you explained how the data has been generated?
 - have you described the data clearly and shown how it has been analysed? Did you use action research cycles?
 - have you explained the significance of the data?
 - are the results of the analysis clearly stated?

- 8. Have you described the validation procedures?
 - how has formative evaluation played a part in your action research cycles?
 - have you presented and discussed the outcome of the final validation meeting?
 - was the authenticity, accuracy and relevance of your research agreed?
- 9. Have you explained the implications of the study for personal and professional practice in relation to
 - a better understanding of personal professional practice?
 - success in achieving planned change?
 - a better understanding of your own practice in relation to the wider professional context?
- 10. Have you taken all necessary precautions to present your bibliography and citations in the correct house style? Have you proof-read?

Getting published

Whatever kind of report you write, it is important that it does not gather dust on some library shelf but is put in the public arena. Do try to publish and communicate your work to others.

Decide if you want to get published and then do it. Be single-minded; don't let anything stop you. Be warned that it can take a long time—often years. Even the most famous authors had to start somewhere.

Submitting papers

Target the market. Read the journals. Get a feel for the style. Read the 'notes to contributors' and write accordingly. Also submit your material in exactly the way that the editors ask. If you don't, your material might get rejected out of hand.

Be prepared to edit your work. Most papers are sent out to reviewers. Their comments are often sent to authors, and you should pay close attention to what they say. Even if you don't rework the paper entirely as per the suggestions, you should consider modifying it.

Be prepared to shorten the paper. This can be very painful, but you just have to be ruthless. Anything you cut at this stage can be stored for use in a later paper, so previous efforts and bright ideas are not wasted.

Writing books

Target the market. Look at the books in your field; who publishes them? Get a feel for the style, content, general look of the books. Make a short list of publishers who you feel might be interested. Their addresses appear on the books. If not, read *The Writers' and Artists' Handbook*, which has all the addresses you need.

Once you have a good idea for your book, organise the idea as a proposal and send it to the publisher (usually the editor for your specialty). Produce two to three sides of A4, using the following headings:

Rationale for the book About the author Contents of the book Possible market (and, if you can say something useful, possible marketing strategies) What other books are available (these would be competition) Time-line for writing the book

Include some sample writing. This could be one or two chapters, or extracts from several chapters. The editor needs to see what your writing is like.

If you think this is a tall order, remember that editors have proposals coming in continually. It is a very competitive field, and budgets are limited; therefore you have to sell your work to the publisher, as he or she will have to sell it to the consumers.

People who publish are often compulsive writers. They need to be. Expect to draft and redraft at least three times, often more. This can take months, or even years. Allow plenty of time. Get on with it, however; someone else might get the ideas out before you!

Also allow plenty of time for the book to appear. When it goes from you, you will see it only once again, at proofreading stage. After that you can expect to wait months—possibly well over a year—before it appears as a book.

There is nothing quite so thrilling as to see your name in print. All that hard work, from when you started your project, to now that it is there in the public domain, has been worthwhile. All the blood, sweat and tears were for something. You have produced something of value to yourself and can feel affirmed when others acknowledge that they too have found value in your ideas.

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