Practitioner Research and Professional Development in Education

Anne Campbell, Olwen McNamara and Peter Gilroy
Which Research Techniques to Use?

OVERVIEW

This chapter will suggest appropriate techniques to use in the research of professional development and practice. It identifies key questions for practitioners who wish to research their practice and reviews methods of reflective writing in diary, log and journal formats, biography, stories and critical writing approaches. There are also reviews of, and support for using, observation techniques, interviewing methods and schedules and questionnaires.

Research: what research?

Before suggesting which research techniques to use, it would seem appropriate to consider what kind of research is to be undertaken. The type of research undertaken by practitioners is usually small scale and focused on professional practice and thinking as manifested in the workplace. Practitioner research is often concerned with the improvement of practice, of teaching and learning and levels of care in medical and nursing practices. Research by practitioners is related to their everyday professional life and directly concerns their context or environment. It is affected by the prevailing social and political climate and is not uncontroversial. There are tensions and differences of opinions about what kinds of research matter and what kind of methods are appropriate for doing research. There is continuing debate about the value of practitioner research and applied research as opposed to ‘pure’ research.

This book promotes an approach that supports research aiming for the improvement of practice and has a commitment to practitioners themselves doing research into professional issues. It is important that practitioners have an understanding of the frameworks within which research has developed, especially the differences between scientific and interpretive research (see Chapter 1 for a fuller discussion of
these issues). Similarly, the differences between qualitative and quantitative models of research are important aspects to consider (see Chapters 8 and 9).

Practitioner researchers can move along a continuum of methods when collecting data. Figure 6.1 is intended to indicate that there are degrees of structure within each method that determine the kind of approach researchers might take and would also influence the level of formality in the conduct of the research. As a result of the development of thinking and practice in practitioner and action research methodologies, there are no longer narrow, simplistic models of data collection and analysis. The 'myth' of systematic inquiry is also being questioned. Walford (1991: 1) refers to accounts of both scientific and interpretive research processes that show that, often, research is not neat and tidy. Rather it is: 'frequently not carefully planned in advance and conducted according to procedures, but often centres around compromises, short-cuts, hunches and serendipitous occurrences.'

**Exercise: the relationship between research and practice**

Some questions surrounding the debates about the relationship between research and practice are given below in order to stimulate your discussion and thinking:

- Is it the role of practitioner research to provide 'tips' for practitioners?
- Is the goal of research primarily the development of more effective practices?
- Should research throw light on the socio-cultural processes that affect learning?
- Should all practitioner research demonstrate a commitment to reflect upon what happens in the workplace?

No one methodology dominates practitioner research and it is possible to be eclectic. However, issues of increasing importance are the justification for one's methodology, the consideration of ethical matters and the social context of research in the workplace. This last issue is particularly relevant to those researching the
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<th>Semi-structured and loose schedule</th>
<th>Highly structured script</th>
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<td>Unstructured</td>
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<td>Participant, non-participant</td>
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<td>Loosely structured</td>
<td>Lots of room for individual responses</td>
<td>Questionnaires</td>
<td>Closed questions and scales</td>
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**Figure 6.1: Interviews**

- **Informal**
  - Unstructured conversations
  - Semi-structured and loose schedule
  - Highly structured script

- **Unstructured**
  - Tape and video recording
  - Participant, non-participant
  - Time sampling

- **Open-ended categories**
  - Diary/log
  - Checklist of items to be marked

- **Loosely structured**
  - Lots of room for individual responses
  - Questionnaires
  - Closed questions and scales
  - Highly structured
raising of achievement or the meeting of targets. A consideration of the rights and responsibilities of those participating in the research must be carefully undertaken in order to avoid discrimination and bias. However, it is difficult in social and educational research to isolate factors causing events or behaviour. Variables are not always easy to isolate in complex social and educational contexts where activities contain factors that interact and are interdependent. All the more reason, then, to have an over-arching, albeit flexible, structure for such research, which we identify as involving three stages.

Learning aid: structuring your research

The first stage to practitioner research design concerns the preparation and setting of questions or areas to focus on. Key questions are as follows:

- What to research?
- What are the aims of the research?
- Why do the research?
- How to do the research?
- Whom and when to research?

The second stage involves data collection. Again, there are key questions:

- What mix of data collection techniques and methods is to be used?
- When will the research take place and for how long?
- Where will the research be conducted?

The third stage is the analysis and evaluation of the data. Here the questions to be addressed include the following:
- Have the aims of the research been met?
- Was the analysis rigorous?
- Have the underlying assumptions been addressed?
- Have the data been evaluated?
- What are the implications of the research?
- What are the findings/conclusions of the research?
- How will the research be disseminated or made public?

This third stage will also involve consideration of a number of issues, including the following:

- Validity (do the conclusions follow from the arguments presented?).
- Reliability (are the methods used appropriate and relevant to the research aims?).
- Feasibility (were the research aims realistic?).
- Authenticity (is there a sense of reality about the research?).
- Representation (is the sample used appropriate?).
- Ethics (have issues of confidentiality and bias been considered?).

You need to make sure that these issues have been addressed to ensure that your research is robust.

When researching one's own practice or investigating aspects of professional development, some methods will be more appropriate than others. Small-scale research into one's practice is often open to criticisms of lack of objectivity and rigour. Qualitative methodologies are concerned with authenticity and voice and interpretations of situations and behaviour, and do not set out to 'prove' hypotheses
in the same way as experimental, scientific research may do. This does not mean, however, that rigour, critical review and processes of checking validity do not form part of these small-scale research projects. What is generally called triangulation is frequently used to check the perceptions and interpretations of several people. Denzin (1970; 1985) distinguishes four types of triangulation:

1. methodological
2. investigator
3. theory
4. data.

Figure 6.2 gives more detail as to how to undertake the different types of triangulation. Involving colleagues is desirable, whether they are colleagues in school, those in your course group or colleagues you meet through action research networks or cluster groups of schools. Colleagues can be very useful to you as ‘critical friends’ or ‘critical community’ members. The cross-checking and the gathering of differing perceptions about research is an essential way of ensuring reliability and authenticity.

The concepts of critical friendship and critical community are discussed in detail in Chapter 7; however, brief descriptions of the role are presented here. A critical friend is someone who acts as a peer reviewer, asking questions in supportive yet challenging ways. It could be characterised as a kind of partnership in investigation of practice. A critical community extends the notion of critical friendship from an individual to a group of people acting as a way of debating and examining practitioner research. The community could operate in a variety of ways: as a sounding board; as a group of experts in the research area; or as a group of lay people who might represent those with a stake in the developments being undertaken by the researcher.

In the paragraphs that follow, a number of common and useful research techniques will be introduced and reviewed, as follows:

- Reflective writing, diaries, logs, journals.
- Biography, stories and fictional critical writing.
Figure 6.2: TRIANGULATION

Try different methods to cross-check your data, e.g.:
- interviews
- questionnaire
- observation
- diary notes
- video
- tape record
- field notes

- Document your observations/notes
- Cross-check other observers 'or researchers'
- Consult those being observed
- Seek other opinions to cross-check observations

Search for differing theories about WHAT you are observing and bring them to bear on your observations

- Collect data from different people
- Collect data at different times
- Use different space environment to collect data
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- Observation.
- Interviewing.
- Questionnaire design.

Reflective writing, diaries, logs and journals

Many writers feel giving a personal response to events and situations is a kind of therapy. Recording one’s reactions and thoughts to events and situations, how one felt, how one behaved, can tap into the inner self and serve to develop understanding. This can be a very subjective account or perspective, but it can provide important insights into situations. It is important, however, to keep to a professional code when writing and to observe an ethical code that is non-discriminatory and which recognises the dilemmas which teachers face in the course of their professional lives. The guidelines produced by the British Educational Research Association (BERA – bera.ac.uk/guidelines.htm) are a very useful resource for identifying and resolving such dilemmas for researchers.

REFLECTIVE ACCOUNTS

Reflective writing is a major tool for a teacher researcher who wishes to investigate and research practice with a view to improving and refining his or her practice. Most teachers in schools today will have qualified through course models that espoused the development of the reflective practitioner at either initial teacher education or continuing professional development stages. Schön (1983) coined the phrase ‘the reflective practitioner’ which, according to Day (1999: 26), has become synonymous with good practice (see also our Chapter 1).

Currently there is much debate about the relationship between reflection and technical aspects of teaching. Our view is that having access to a ‘technical toolkit’ is not sufficient in itself to create or support good teaching or researching. Rather, one has to know why any particular strategy or method is appropriate at any given stage or time. This involves understanding frameworks or paradigms for teaching and researching.

Arguably, effective teachers and researchers ask good, well framed and probing questions and are good listeners and readers. In order to ask appropriate questions,
it is necessary to have a conceptual framework on which to draw so as to know what is and is not appropriate. Eraut (1994: 124) offers a five-level model of teacher development that spans the territory from novice to expert and identifies reflective and analytical approaches at expert level. Day (1993) also reminds us that collaboration improves reflective practice and that reflection alone is not sufficient for the improvement of practice.

However, evaluating events by writing reflectively, and critically appraising the process and outcomes with other researchers or colleagues, can stimulate renewal and provide useful research data and indicate areas for further development. Some questions to address when starting to write a reflective account are as follows:

- What has been successful and why?
- Which strategies or approaches worked well? Why?
- What were the difficulties?
- What action can be identified to improve the situation in the future?
- What can I do? What can others do?
- Do I need an action plan?
- How will this be monitored?

**DIARIES, LOGS AND JOURNALS**

Practitioner researchers may also find it useful to keep a diary or journal. This document would be part of the data collection, and extracts or transcripts could be used or referenced in any report or account of research. Attention should be paid to confidentiality issues. The style of writing should be that of professional discourse, reflective and analytical, but using everyday language and professional terms. It is advisable not to identify particular institutions, colleagues or children but to use alphabetical or numerical notation when necessary (e.g. teacher X and child 5 in institution Y). There is currently some discussion about confidentiality issues that indicates that perhaps there should be an acknowledgement and celebration of successful practice and good practice by naming teachers and schools. Whatever, the consideration of, and discussion about, ethics and confidentiality
issues is an important and essential part of doing research (see Chapter 10 for further discussion of ethical and confidentiality issues).

Some different ways of recording thought, actions and evidence are:

- critical incident analysis
- informal observation
- log of events.

Critical incident (or scenario) analysis is an interesting and innovative way of looking at the professional experience and life of practitioners in education and related professions. As part of keeping a diary, it may be useful to use a variety of approaches to help structure the writing. It involves a great deal of reflection on incidents and events that occur as part of one's professional life, and then selecting those incidents and dilemmas which are rich and which can be critically reviewed with a view to understanding and developing thinking and practice. The classic example is the impact of the window cleaner and his ladder upon a lesson. But there are hundreds more and they happen to practitioners all the time.

In some ways undertaking a critical incident analysis relies on the ability to analyse and appraise situations, which is helped by a researcher/teacher's abilities to focus on key incidents, events or situations that might yield data relating to the professional concern or research focus. Some questions that may aid the process are as follows:

- What led up to the event?
- What happened?
- What was the outcome?
- How would you take action from this critical incident?
- How can you make action judgements, diagnostic judgements, explanatory judgements, reflective judgements and critical judgements?
• How will you check out your perceptions of the events with another observer or participant?

For an in-depth look at critical incident analysis you should consult David Tripp (1993).

A log of events can quite simply be a list of events, dated and timed. Keeping a log can be useful in documenting your own behaviour or that of others. It could be a list of interactions of a particular type for analysis or a log of the different roles you undertake as a researcher. Logging the course and the conduct of the research project can also be a useful aid to writing up your methodology.

The terms log, diary and journal seem to be used interchangeably. Bolton (2001: 156) refers to the work of Holly (1989) in order to distinguish between them. A log seems to be characterised by its straightforwardness, like an aide-mémoire, being highly selective like a ship’s log which would never claim to be a record of everything that occurred on board. A diary can ‘contain anything’ and ‘be a confessor, a confidante, or a special friend ... just like a reflective practitioner’s writing’ (Bolton, 2001: 157). A journal, however, is like a diary but includes ‘deliberative thought and analysis related to practice’ (Holly, 1988: 78).

It is important to consider the timing and frequency of diary/log/journal entries/reflective accounts. As a rough guide, our experience of working with teacher researchers indicates the following time frames to be useful:

• Critical incidents should be recorded as and when they occur.

• Informal participant [observation] should be recorded when you have a set of questions to investigate.

• Log of events should be recorded daily or weekly if selected or specific events occur at that interval.

• Personal response: whenever the situation demands it and you feel ‘moved’ to write.

• Reflective account should be once or twice weekly for entries which review events and less frequently for non-specific reflection.
Biography, stories and fictional critical writing

Less well explained in the research literature is the use of biography, stories, pen-portraits and fictional writing. Nevertheless, teacher biography and teachers' stories are established methodologies (Ball and Goodson, 1985; Dadds, 1995; Thomas, 1995), but the fictionalisation of settings and characters is less well established. Campbell and Kane (1998) and Campbell (2000) have developed fictionalising research data in the investigation of school-based training drawing on the work of Winter (1985) and Clandinin and Connolly (1996). Pen-portraits, developed to illustrate and depict teachers' perceptions of professional development, were utilised by Hustler et al. (2003) in a major UK government-funded project which investigated teachers' perceptions of professional development. This involved amalgamating evidence gained through interview into teacher pen-portraits to depict common experiences and views about professional development.

Hardy (1986) called narrative 'a primary act of mind' and gave 'storying' a central place in logical thinking. Thomas (1995: xii), in his introduction to a collection of teachers' stories, notes that: 'story telling can be captured in logs, diaries, research journals, vignettes, life histories or autobiographies ... can be seen as ways in which the person socially constructs him or herself' and refers to Woods (1993) as providing clear evidence of the value of personal narrative to the development of teachers and teaching.

Talking with teachers about their personal experience of teaching and constructing a life history give good insight into the profession, and these techniques would also apply usefully to other professions. Thomas (1995) provides a long list of the varieties of biography and story already in the literature, ranging from a newly qualified teacher (NQT) who was interviewed and observed closely by Bullough et al. (1991), to teachers of English writing their biographies (Beach, 1987), and a large-scale study of the professional and private careers of primary teachers (Nias, 1989).
Learning aid: writing a biography or telling a teacher story

Some methods, which might help in starting to write a biography or to tell a teacher story, are given below:

- Construct a simple curriculum vitae and then identify two or three major development or growth points or professional 'disasters', if appropriate, from each entry in order to begin a biography.

- Think of the most rewarding time in your career and start to unpick the reasons why and the events that led up to it.

- Write a short pen-portrait of yourself as a teacher. Pair with a colleague and each of you construct an informal interview schedule based on reading the pen-portrait which aims to engage in a professional dialogue about each other's career developments and history.

- Think of a particular difficult or amazing pupil or student from the past. How did you deal with this person? What key characteristics can you identify from your behaviour? How does this fit with your perceptions of yourself as a teacher?

- Interview pupils or students about your teaching. Care should be taken to elicit stories that are authentic, not just what the listener might want to hear.

It is not much of a step to begin to fictionalise the data collected from research or from teachers' writing above. Fictionalising data allows the writer to bring the voice of the participant to the centre of the stage and also allows for the amalgamation of 'real' stories and 'fictional' stories as exemplars for discussion and critique. Clandinin and Connolly (1995; 1996) talk of teachers' professional landscapes and believe that the access to those landscapes which will unlock professional development is best gained through story. As teachers tell and retell their stories, different versions are evident as new insights are gained and prevailing 'band-wagons' influence interpretations.
Learning aid: fictionalising data

Before beginning to fictionalise data, it is necessary to have some idea or hypothesis relating to the research and data collected (Chapters 3 and 4 will be useful for this). Some questions to ask are as follows:

- What lies beneath the stories? What hypothesis is being developed? What was the impetus to tell a story?
- What issues and topics will be raised? Will each story cover different topics or will each story provide different versions or perspectives on the same topic?
- What characters and personalities will be constructed?
- How will issues of confidentiality and ethics be considered?
- Whose perspectives will be put forward? Teachers, pupils, parents, other professionals?
- What is the plot?
- How will theory and practice debates be integrated into the stories?

The writing up of biographies, stories and fictional accounts is greatly dependent on the abilities of the writer and the ability, as in drama, to suspend disbelief. It is, however, an enjoyable and interesting approach to research. Examples of fictionalised accounts can be found in Campbell and Kane (1998), especially in the chapters dealing with student teachers' and mentors' perceptions of the challenges, trials and tribulations of school-based training. See chapters 8 and 10 for further support regarding the analysis of this type of data.

Observation

One approach to practitioner research is informal participant observation. Recording what you see as you participate in teaching or meetings or other educational
events can provide evidence as to what is happening. ‘Insiders’ in events often understand the significance of what is happening as they are very much in tune with the context. On the other hand, because ‘insiders’ are very familiar with the day-to-day routine, it may be difficult to see anything ‘new’ in events.

Use can be made of time-sampling techniques (noting every so often at intervals of one minute onwards what is happening) or recording the frequency of events (recording every time a certain event or behaviour occurs). Just simply noticing events can also provide insight into situations.

Many researchers develop this technique as taking field notes. Taking field notes as part of research is a recognised and well developed research method, adapted from ethnographic and anthropological research for use in educational settings. Hitchcock and Hughes (1989: 67) suggest that field notes can be contextualised by background notes and are often supplemented by gathering data by other methods, such as interviews or structured observations (that is, triangulation). It is useful to get into the habit of dating and timing your observations and reflections in order to use them as evidence and provide a system for organising them.

The issue of subjectivity is relevant to many qualitative and interpretive approaches. Macintyre (2000: 62) discusses the issues of selection of what to record and the need to maintain a professional code of practice when researching. As long as objectivity is not claimed in the research and that research methods are justified and critically reviewed, subjectivity is accepted and recognised as a perhaps inevitable feature of small-scale qualitative research. Thus Dadds (1995: 68), when discussing ‘Vicky’ the action researcher and her personal convictions and her personal presence in her research, claims that ‘subjectivity enriched its authenticity’.

Making observations is far more complex than it sounds at first hearing, especially in professional situations such as the schoolroom as:

classrooms are exceptionally busy places, so observers need to be on their toes. Every day in classrooms around the world billions of events take place: teachers ask children questions, new concepts are explained, pupils talk to each other, some of those who misbehave are reprimanded, others are ignored (Wragg, 1999: 2).

Observation has many uses in the various social and educational settings in which professionals in education and related fields find themselves. It is an integral part
of human behaviour. We all make observations as we go about normal everyday life. Observing as a part of the process of doing research is different, being more organised around a specific focus, although some researchers use very open-ended and unstructured approaches.

Another complicating factor is that it is now much more common to find more than one person in each educational or workplace setting and for there to be collaborative work practices in classrooms and other settings. Observation of professionals at work is a more frequent phenomenon than in previous years: for inspection purposes, for training purposes and for assessment purposes. The kind of observations that are undertaken in a research context are systematic and organised to suit the aims of the research and the style of research. Types of observation can range from highly structured schedules to 'noticings', which are informal and happen incidentally.

We suggest that a few guidelines should be followed. First the purpose and focus of the observation must be decided, which will greatly influence the type of observation used. Some purposes might be to observe:

- pupil, teacher or student behaviour;
- teaching performance;
- pupil interaction in particular contexts;
- the nature of pupil–teacher interaction;
- the frequency of certain events; or
- the rating of behaviour or interactions.

Approaches to observation can be described as either quantitative or qualitative and are demonstrated by the continuum below:

Pre-ordained ↔ Open

Observations of all types offer insights into situations and can often be combined in powerful ways to 'saturate' situations. Many research projects successfully combine quantitative or survey methods with qualitative or interpretive methods.
Quantitative observation is characterised by highly structured, systematic schedules. Rating scales, such as those devised by Likert, allow researchers to make judgements against defined criteria. An example of a behaviourally anchored rating scale is given below. It refers to the observation of pupils in a science activity using a five-point (Likert) rating scale.

**Example: observing pupils in a science activity**

1. = Pupil is fully engaged on task and fully occupied.
2. = Pupil is mostly engaged on task and is occupied.
3. = Pupil is frequently engaged on task and is occupied.
4. = Pupil is sometimes engaged on task and sometimes occupied.
5. = Pupil is seldom engaged on task and seldom occupied.

The use of opposite behaviour or mood characteristics can be used as a rating schedule.

**Example: observation of teaching behaviour or characteristics**

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<tr>
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<td>2</td>
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<td>4</td>
<td>5</td>
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<td>7</td>
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Wragg (1999: 23) identified some criticisms of rating scales, not least the possibility of differences between observers, their use and judgements in observation, although training of observers until they show high agreement with each other's systems may lessen these subjective differences. Simpson and Tuson (1995) refer to the valuable
work of Powell (1985) in the development of the System for Classroom Observation of Teaching Strategies (SCOTS schedule) and of the selection of an appropriate rating scale. Obviously a great deal of time will be taken up with identifying the categories to be rated, with careful reference to the range of behaviours or features in the area to be researched being absolutely necessary.

Care should be taken to note when inference is being made by the observer, as the reader should know when this is happening (for example, does a nod mean that a person understands what has been said, or is he or she simply trying to appear as if he or she understands?). There is nothing wrong with using inference as long as it is recognised that that is what is happening and that value judgements might be being made by the observer. Two instances of how inference can be measured are given below.

Illustration: ‘Pupil happily reads her book’

This observation requires considerable judgement by the observer and has a high inference as the judgement of ‘happily’ requires the observer to infer from his or her viewpoint what is meant by someone else’s (the pupil’s) body language and facial expressions.

Illustration: ‘John used his handkerchief ten times in the mathematics session’

Low inference is evident in this observation as the observer is recording the recurrence of discrete pieces of behaviour.

Having a specific focus for observation inevitably structures the observation. It is necessary to highlight the different features in the context being researched. For
instance, there will be a difference in what is being looked for in a modern foreign
languages session with 15-year-olds and a story-time session with a nursery class.
The quality of the analysis of the context will significantly affect the quality of the
observation schedule design. Observation is not done in a vacuum. To neglect the
details of time of year, size of classroom and learning environment in the
description and setting for the observation leaves the reader in a disadvantaged
position and would mean that questions could be posed about your research
concerning factors such as validity, reliability and authenticity, identified earlier.

Interviewing

A frequently used research method is the interview, and in fact this is something we
used in Chapter 4. There are many different types of interviews, ranging from
highly structured, formal interviews to informal conversations (ours was semi-
structured). You must choose the form to suit your purpose after carefully
considering what style and approach to data collection you wish to pursue. For
many practitioners interviewing colleagues, pupils or clients a more informal style
is appropriate, though a structure of some sort is required.

Learning aid: interview planning

When you are making preparations for interviewing, consider the following:

- The setting for the interview in order to consider comfort, privacy and seating.

- Timing to suit interviewee and duration of interview. Remember that long
  rambling interviews are difficult to record and could be seen as a waste of time.

- A need for clarity of focus for the interviewee is essential in order to maximise
  the time and give a sense of value to the interviewee.

- How structured will the interview be? Consideration of what you want to achieve
  as a result of the interview should be clear in your mind at the outset.
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- Planning of prompts, probes or follow-up questions. It is useful to have these prepared so that you don't 'dry up' or have nothing to say.

- Preplan the way you will analyse the interview so as to aid the process of interviewing. It is always useful to have some notion of the way you intend to analyse the material when interviewing.

- Whether to record the interview or not (recording does allow for more eye contact and focus on the questions to be asked). A negotiated (between the interviewer and respondent) account can be produced as the outcome of the interview which serves as a summary of the main points.

It would appear that many individuals feel pressure to want to give answers to interview questions that please the interviewer and many try to guess the answer favoured by the person asking the question. Some discussion at the beginning of an interview about feeling able to give an opinion could alleviate this pressure. Confidentiality must be assured if there is any risk or disadvantage to the interviewee or if the topic is controversial. There has been some discussion in the research community about whether anonymity is always the best solution to issues of confidentiality, there being some concerns that omitting the names of informants may result in practitioners' contributions to research in the workplace remaining hidden and unrecognised. Whatever is decided, again it may be useful to consult the Ethical Guidelines produced by the British Educational Research Association (BERA)

One major pitfall to avoid is asking predominantly 'closed' questions or questions that appear to have a factual or right answer such as 'Do you think research can be done in classrooms?' or 'Is it a good idea to base teachers' professional development activities in schools?' Both these could be answered with either 'Yes' or 'No' responses. Interviews should aim to be exploratory and facilitate the giving of information or opinions and be discursive in nature. Use open questions such as 'How would you describe your recent professional development activities?' or 'What kinds of activities do you think would best support you in your professional development?' Open-ended questions facilitate the giving of opinion and allow the respondents opportunities to develop their responses in ways which the interviewer might not have foreseen.
Most interviews will use a range of open and closed questions. The work of Hitchcock and Hughes (1989: 79-93), summarised below as types of interviews, may help to structure the format of any interviews planned.

### Learning aid: interview formats

**Structured and semi-structured interviews**
Most close in style to a questionnaire and can be useful for situations where you wish to have a high degree of control, such as in a survey or in market research.

**Counselling interviews**
Involve a great deal of interviewer participation and may be used to structure a programme of intervention or give advice to colleagues or pupils involved in reviewing their work or practice.

**Diary interviews**
Focus on reviewing diary entries and providing interpretations or explanations after the event. These could be useful in developing reflective evaluations of teaching and learning.

**Life history interviews**
Allow researchers to ask about the interviewees' personal, professional experiences in ways, that encourage anecdotal and narrative accounts of their lives in teaching.

**Teachers' biography**
A well documented methodology in researching professional development (see Ball and Goodson, 1985; Goodson, 1992; Thomas, 1995).

**Oral history interviews**
Provide opportunities for respondents to provide a historical account of the past in relation to information they may have or their memories of events and incidents.

**Ethnographic interviews**
Involve the researcher in working like an anthropologist. Studying a way of life takes account of the context, identity of persons involved and their relationship to each other, and the variety of social, cultural, institutional and linguistic factors influencing the interview. It is a naturalistic interview technique.
Telephone interviews

Sometimes used when dealing with people in remote places or who have difficulty finding time for an interview. There are limitations in telephone interviews due to the inability to see facial expressions and body language. Para-linguistic utterances, such as 'uh-uh', 'mmm' and 'um hum', can be used by the interviewer to encourage talk and support the interviewee.

Group interviews

Where one interviewer interviews several people may require tape recording, as note taking at the same time as guiding the discussion could be difficult. Alternatively, a 'scribe' can be used.

Unstructured interviews or conversations

Non-directive and offer greater scope for asking questions. Some attention to issues concerning systematic inquiry and validity is necessary. Many researchers find the informality of unstructured interviewing very suitable to 'insider' research contexts when working with colleagues or familiar pupils or clients.

Whatever type of interview is selected, interviewers must try to reduce bias, often by rehearsing (or piloting) the interview with a friend who can then give feedback on how the interviewer's views on the topic being researched are evident. After reflection further steps can then be taken to reduce any bias. It is always worth while to trial or pilot questions in the pursuit of high-quality data, which will result in interesting and worthwhile analyses. The quality of the questions asked will directly affect the type and quality of the responses. It is also a good idea to have well thought-out and preplanned, but not intrusive, strategies for probing interviewees.

In conclusion there are a number of useful tactics:

- Have a well prepared schedule.
- Be friendly but business like.
- Help interviewees to be explicit in their answers.
- Try not to lead your interviewee.
Try to use verbal and non-verbal tactics to structure the interview, rather than leading or dominating it.

Keep checking your approach and style by listening and reviewing your tapes and notes.

Analysing the data from interviews

There are many advantages in transcribing taped interviews, such as access to a complete account of the interview and the facility to scrutinise detail. But there is one major disadvantage, and that is time. For many readers engaged in small-scale research of their own and others' professional development, time or secretarial support will not be available. It may be useful to consider taping the interview and selecting short extracts for transcription and providing a negotiated account of the rest of the interview (for further, more detailed, advice on analysing data, see Chapter 8).

Using questionnaires

As with designing an interview, questionnaires need careful and detailed preparation if they are to yield a high quality of data: they are, in a sense, an interview without the presence of the interviewer. The quality of the questions asked will directly affect the quality of the data gathered. Hopkins (1993: 134) states that questionnaires provide a quick, easy way of accessing pupils' views of what happens in the classroom and can give specific detail about a teaching method or aspect of the curriculum. He also suggests that cartoon pictures make the completion of a questionnaire more fun. If the researchers are interested in pupil feedback about their teaching then developing simple, uncomplicated questionnaires which pupils are motivated to complete will be an advantage.

As with interviews, questionnaires may include closed and open questions depending on the data required. Open questions that allow for individual response will, of course, present more challenges in the analysis stage. One of the biggest problems with questionnaires is the low response rate (sometimes well below 20%), but perhaps if the researcher is well known to the respondents it may positively affect the response rate. One other disadvantage to questionnaires is the time-consuming
nature of the design and analysis. However, questionnaires can yield specific information from a group of people in cost-effective ways.

## Learning aid: questionnaires

When designing a questionnaire for a more sophisticated audience, the following points and questions may be helpful:

- Keep the title, description and objectives of the project at the front of your mind at all times.

- Keep the questions simple in order to aid the analysis and to motivate the respondent.

Ask the following key questions:

- What is it I am trying to discover or measure?

- How can I do this in a straightforward way?

- Does this question get at what I am trying to discover?

- What will the responses look like?

- How will I analyse the responses?

- How far are the data generated likely to fulfil my aims or objectives?

- What forms will the data take?

- How can I structure the questionnaire effectively?

Consider issues of validity and reliability:

- Am I discovering or measuring what I intended to?
WHICH RESEARCH TECHNIQUES TO USE?

- Will the way I have worded the questions get a similar reaction from all respondents and at different times of administration?

Be aware of timing, structure and piloting issues:

- Use different sections, fonts and colours for different types of question/data.
- Will the questionnaire be able to be completed in an optimal time of five minutes?
- Are the explanations and instructions to respondents unambiguous, simple and clear?
- Do you need to promise confidentiality?
- Do you need to explain what will happen to the collected responses?
- Have you considered the analysis of the data as you construct the questionnaire?
- Have you asked anyone to review the questionnaire and offer a view on whether it is a good questionnaire?
- Have you undertaken a trial?

Be prepared to pilot the questionnaire on a small sample and be prepared to make changes.

Conclusions

It will be obvious that there is no shortage of research techniques for a practitioner researcher to employ. These are the most suitable methodologies to the field of practitioner research that relies to a great extent on day-to-day activity in a changing landscape. However, it remains our belief that practitioner research is essentially untidy. It lends itself to illuminative approaches, particularly in the context of monitoring and evaluation. It is for this reason, as will be discussed subsequently, that lively and engaging dissemination is critical. In order to allow us to make it possible for you to see clearly what the different techniques are and how
you might, as a practitioner researcher, use them we have treated them in isolation from each other. Our last suggestion in this chapter is that, despite the way we have structured our material here, you should also be prepared to make use of a combination of techniques in order to produce as rich a data set as possible which can then inform your research of your practice.

Further reading

Bell, J. (1993) *Doing your Research Project*. Milton Keynes: Open University Press. This is a well-known and readable book for beginner researchers. It has useful sections on all the methods mentioned in the chapter.

A comprehensive book about the variety of writing styles that can be developed through the keeping of a personal-professional journal, ranging from therapeutic writing to logs of events.

If you are unfamiliar with critical incident analysis, this book will help you be more informed and feel confident in using this method in your research.

Well written, comprehensive and extremely useful, this book tells you all you need to know about observation in the classroom. It has many useful pointers to how observation can enhance professional development processes and practices.

This book presents edited versions of practitioners’ research reports and explores the motivations that caused the practitioners to break away from conventional approaches. Of particular interest are the chapters by Tish Crotty in which a fable is presented as a consideration of difficult issues, and by Liz Waterland where an imaginative reconstruction of several months in the life of a school is the focus of the research.