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Ethical practitioner research in design and technology education: developing a position and checklist for an action research project

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Ethical Practitioner Research in Design and Technology Education: Developing a position and checklist for an action research project

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Abstract

This paper reviews the ethical issues that need consideration when carrying out a piece of research as a practitioner/researcher. This is based on the lead author's own action research. The paper presents the background to the ethical debate and the practitioner/researcher's professional role and the potential for bias – objectivity/subjectivity. Ethical issues are reviewed in connection with the subjects of the research – school staff and pupils with reference to their confidentiality, anonymity and possible withdrawal. The paper concludes with consideration of the legal implications of carrying out practitioner research in the UK. Finally the authors present a framework for checking ethical issues.

Key words

ethics, design and technology, practitioner research

Introduction

Much classroom practice has advanced on the basis of practitioner research. Such research is ultimately about improving teaching and learning. However, it has the potential to harm the subjects of the study; the pupils themselves. Practitioner researchers, therefore, need a strong grasp of the ethical as well as methodological issues involved in such work. This paper presents a discussion of the ethical issues identified by a teacher as he developed practitioner/action research with groups of pupils in his school. The aim is to share his reading on ethical issues and procedures and to discuss the approach he adopted.

Practitioner research is taken to mean research conducted by a practitioner, in this case a teacher of design and technology in a secondary school. Such research is normally of small scale and focuses on the immediate role of the practitioner. The research may be passive, such as a survey or it may be active. The latter

is often defined as action research and follows Cohen and Manion's (1994:186) definition of 'a small-scale intervention in the functioning of the real world and a close examination of the effects of such an intervention'.

The background literature to the ethical debate is considered. The teacher presents his position on ethical considerations and his roles as teacher, head of department and researcher. Next his preparations for research are presented, including his methodology for handling potential bias; the fact that his 'subjects' included teaching and ancillary colleagues as well as pupils; issues of confidentiality, anonymity and withdrawal; role conflict and legal implications. Finally the checklist developed is presented.

Practitioner/researcher background

This paper reports work completed as a part of a longer term action research project by one of the authors, the Head of design and technology in an 11 to 18 comprehensive school. Curriculum and staffing constraints conspired to create a distinctive group in design and technology for low ability and disaffected pupils: a 'sink' group. The group consisted of a maximum of 16 pupils, 70% of these being boys. Analysis of GCSE results over a three-year period identified that this group were gaining their best results in design and technology. Comparing the same pupils' results in different subjects, showed they performed an average of 2.0 GCSE grades higher in design and technology than their other subjects. The Head of design and technology sought to identify factors that contributed to this.

These pupils were in the 'bottom set' for all subjects. They had been placed there either on grounds of ability – low reading ages and cognitive ability scores – or because they were disruptive and refused to work in other classes. The group had extra lessons in English and

mathematics. All had been temporarily excluded from school for fixed periods of time. A number of staff from other subject areas refused to teach these pupils either individually or in combination. The design and technology staff were surprised at the progress made by these pupils in the subject. They produced work as good as, if not better than, less problematic pupils in the year group, yet still continued to be disruptive and disaffected in other lessons. If these perceptions were accurate, could factors that contributed toward the creation of this trend be identified? Would these factors be related to the nature of the activities in the subject, the teacher, the pupils, the reduction in class size, from 20+ to 16, or a combination of a variety of factors?

These questions led the primary author to develop an action research programme as a basis for a PhD in conjunction with Loughborough University. This paper represents the author's reading and development of an ethical position for his research and an ethical framework or checklist to guide it.

Background to the ethical debate

Any research in a social context should be based on sound ethical principles. These principles are interrelated and are inevitably tied to the researcher's perception of their world and their construction of what they constitute as knowledge. Dockrell (1988:180) noted that most books on educational research published in the 1970s (Butcher and Pont 1973; Kerlinger 1973; Taylor 1973), not only do not include a chapter or section on ethics but do not even include the term in their indexes. This is not to say that the ethical debate did not exist before the 1970s. Hargreaves (1967:193-205) raised several ethical issues in his discussion of role conflict. However, it serves to illustrate the shift in ethical emphasis to more centre stage. Kemmis (1988) and Whitehead (1993) regard action research as being an ethical enquiry; Radnor (2002:34) describes interpretive research as 'ethics in action: dignity and respect for participants'.

This new emphasis reflects the shift from seeing participants, in this case pupils, as samples or representatives of the population to seeing participants as individuals. It can be argued that this 'dignity and respect for participants', (ibid), is a factor in assessing the accuracy of the data collected. Lincoln and Guba (1985)

believe that a standard for qualitative research, where events and the perspectives of those being studied have to be reconstructed, is the demonstration that the researcher's findings and interpretations are credible to the participants. The act of research in this form becomes a dialogue between researchers and researched.

The British Educational Research Association (BERA 1992) provides a set of ethical guidelines to support the researcher in an educational setting. Ethical committees and guidelines are also, usually provided by universities. In this case the practitioner was registered as a PhD student with Loughborough University and used the guidelines last revised in 2003. The guidelines provide a very clear framework and checklist that can raise the awareness of the researcher as to what may lay ahead.

Ethics and the researcher's professional role

White (1973:223-237), argues in her exploration of the relationship between *Education, Democracy and the Public Interest* that education is central to democracy. She continues the argument as to what might constitute an 'appropriate education' and who determines it. Public interest policies like education are about things that the public 'ought' to have, (White's emphasis) and are therefore based on value judgements. The development of educational policy and the curriculum are intrinsically connected to this ethical debate.

A cursory analysis of the UK 'School Teachers' Pay and Conditions Document 2000' reveals a list of professional duties that relate to issues that affect the quality of existence of pupils, governors, parents and fellow professionals. These duties include formulating and implementing policies that range from the curriculum, to pastoral care, discipline, relationships with staff and with parents, (See DFES 2000:77 -83). Keirl (1998) asserts that anyone who has an interest in the quality of our existence is faced with ethical questions and therefore involved in some degree with an ethical discourse. The study of ethical issues inevitably leads to the discussion of associated terms such as right and wrong, obligation and values. Slote (1995:591-595), argues that a major problem of moral philosophy is the development of a rationally defensible theory of what constitutes right and wrong action. Singer (1993:204) rejects this notion of theory and comments that: 'Ethics is practical, or it is not really ethical.'

Keirl (1998), discusses the issue of ethics in relation to design and technology education. He considers the question of technology curriculum design and describes it in terms of competing variables. These variables include issues about what should be taught, and how. Any response to address these issues requires ethical reflection and action. It remains incontestable that there will always be a debate about what is meant by 'good design and technology education'. 'Ethics', 'design' and 'technology' all have in common that they are contestable, non-neutral terms open to interpretation. Keirl concludes, (1998:221) that the practise of ethics and the ethics of practice in technology education constitute a complex issue, central to the concerns of educators and society alike.

Before beginning the research

It is clearly essential to have permission from the Headteacher and governors to carry out research at their school and to gain that approval before any research has taken place. (See section E: Loughborough 2003, and clause 7, BERA 1992). A vital factor in gaining consent is the nature of the research itself. Is the aim and purpose of the research clearly conveyed to this audience? What reassurances can be offered regarding use of time, resources, and confidentiality? What does the school stand to gain? Who should be included in this audience?

The matter should be discussed with the Headteacher and a statement made at a staff meeting to raise awareness. The ideas of the research project could be outlined at parents' evenings with individual parents. An appropriately worded outline of the research and its implications could be used as a basis for the discussions. If parents of the target group were unable to attend, then the research outline could be sent home to them with an invitation to contact the researcher at the school for further details. The pupils could be included in these preliminary discussions. This inclusive approach has to be balanced against the methodological implications of sensitising the participants. Sensitisation via informing parents and children could reduce the reliability and validity of any data.

Teacher practitioner research can be viewed as an extension of professional practice: reflecting rigorously on teaching and learning with the aim of becoming a more

effective teacher. Evaluating and reviewing is enshrined in the School Teachers Conditions of Service Document, (2000:80-88):

'Planning and preparing courses... reviewing methods of teaching and programmes of work... advising and cooperating with the Headteacher on the preparation and development of courses of study... teaching methods'. (para. 58.1-58).

Sharing ethical concerns with all stakeholders during the course of 'normal' professional reflection and curriculum development is rarely considered. Where to draw the line between these activities and 'research' is itself an ethical decision. A decision further complicated by communication and language problems due to the diversity of the audience. Is it possible for all participants to have a common understanding of the aims of the research? A parent could withdraw a child from a group because they misunderstand the nature of the research. A pupil could object to an interview transcript being used or the meaning the researcher draws from it.

A means of overcoming this problem is to have a simple set of objectives. The language and terminology must be understandable to all the participants in the research at the school. There may also be potential benefit for all parties in allowing the research to go ahead. For example, to identify teaching strategies so that learning for the pupils might be more effective.

The researcher should present the methodology used in detail and include how the various parties have been briefed on the research. This should enable the reader to be clear as to potential sensitisation and be in a better position to make his or her own judgement as to the validity of the work. 'Reasonableness' must be applied. There is a danger that the pursuit of ethical purity could prevent any potentially valuable research from taking place.

Potential for bias – objectivity/subjectivity

As head of design and technology the lead author has to be aware of the potential difficulties in creating personal interpretations of the data that is being collected. Burgess (1989:68) argues that the researcher might be tempted 'not to tell all'. Practitioner/researchers must also guard

against telling it as they think it is, or seeing what they expect to see. Extreme circumstances may arise. How might they react to an act of professional misconduct by a colleague? Griffiths (1985:210) reflects on this ethical dilemma that could be particularly acute amongst teacher researchers; how could the research affect 'the delicate credibility structures amongst one's colleagues'?

As a practitioner/researcher the lead author has a role within the school that sets serious time and movement constraints on his availability to carry out the research. This may give rise to the temptation to see his 'snap shots' of a situation as being wholly accurate. Torrence (1989:177) warns that this may be exposing routine practice to potentially unfair criticism. Taking a subjectivist approach to the research would seem an inevitable perspective to adopt. Historically this perspective may have been problematic but it would appear that the subjectivist approach has gained an acceptable level of respectability. Indeed, Glesne and Peshkin (1992:104) consider that: the subjectivity that originally I had taken as an affliction... could be... taken as virtuous... My subjectivity is the basis for the story that I am able to tell. It is a strength on which I build '.

Is recognition of these perspectives sufficient or are there other checks and balances that can help the researcher guard against the potential ethical problems associated with bias? The authors believe there are. Firstly, we agree with Fraser, (1997:2) that the 'practitioner' researcher has a professional obligation to the subjects of the research; in this case a professional responsibility to pupils, parents and staff. Secondly, the research is being supervised externally and aspects published as the work proceeds; a biased line of reasoning can be identified and challenged by supervisors and peer review. Thirdly, respondent validation will help guard against the researcher's own personal bias predominating. Transparency also supports research methodology: the reader is given all the information necessary to help them make judgements on the data and draw conclusions from the research. Figure 1 is a simple diagram of an ethical research plan. The plan emphasises the need for renegotiation based on feedback from the participants in the research.

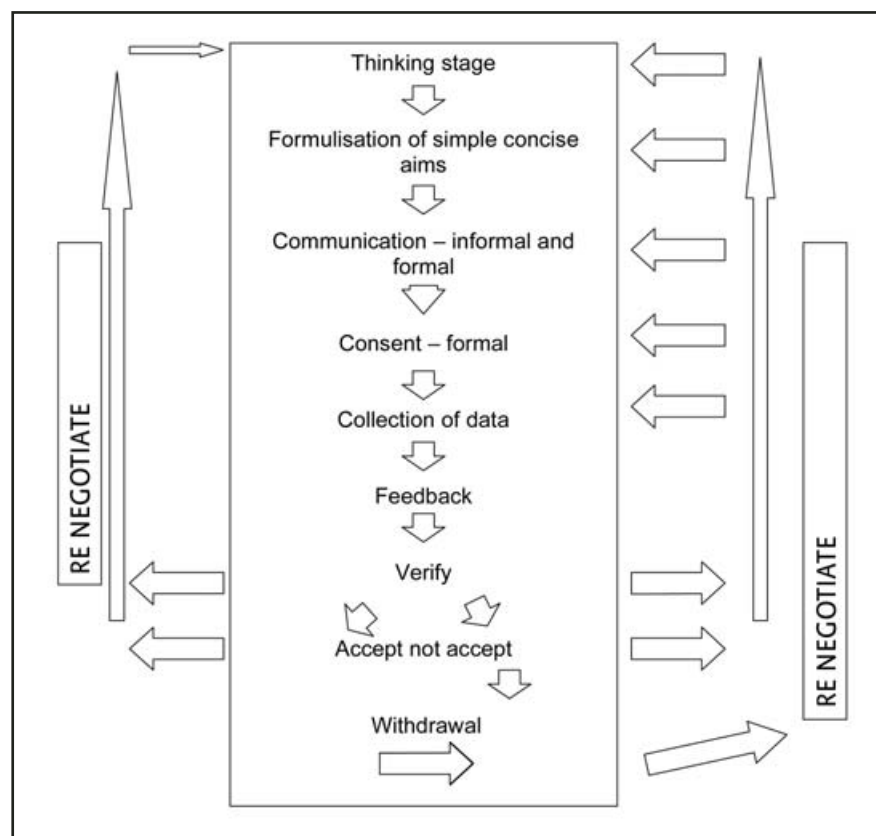


Figure 1: Diagram of ethical research plan

The subjects of the research – the staff and pupils

The BERA ethical guidelines (1992:1) have five points on ethical considerations relating to the participants of the research. They are summarised below:

7. Participants in a research study have the right to be informed about the aims, purposes and likely publications of findings... the potential consequences;
8. Care should be taken interviewing children... permission should be obtained;
9. Honesty and openness should characterise the relationships;
10. Participants have the right to withdraw;
11. Researchers have a responsibility to be mindful of cultural, religious, gender differences.

Pring (1984:10) adds the factor of re-negotiation. It is not sufficient to negotiate aims and purposes at the outset, as it is possible that these will shift as the project evolves. The researcher must develop a process of feeding back data and sharing findings with the participants. This supports the research principle of data checking. However, this action carries with it the problems of participants being over sensitised and the 'Hawthorn effect', (Cohen et al, 2000: 303).

BERA's points 7 and 8 appear fairly mechanical to execute. However, points 9 and 10 are far more problematic for the teacher researcher. Such researchers have an obvious existing relationship with the subjects of the research. They cannot reconstruct these relationships; they are already firmly established.

This quality of relationship will be a factor in collecting data but it can also be perceived as part of the wider debate regarding the goal of educational inquiry. Hammersley (1995, chapter 1) argues that accounts produced by researchers are accounts that reflect their personal characteristics and socio-historical circumstances. This line of reasoning develops into the distinction between the use of fictional and factual rhetorical forms in accounts. An interview account is a version of events as the interviewee and interviewer perceives them. It could well be that the themes of the

stories being told are more significant than the accuracy of the language of the account.

Walker (1978:147) poses a set of searching questions at the beginning of his article, 'On the use of fiction in educational research': Can the quest for objectivity distract us from the pursuit of truth? Is fiction the only route to some kinds of truth?

Confidentiality, anonymity and withdrawal

BERA point 13, and section G: Loughborough, 2003, both highlight the issue of anonymity and confidentiality. Researchers use several strategies to address the issue of confidentiality: the use of fictitious names, as in 'Hightown Grammar', (Lacey, 1970), or as Richardson (1973), did in her 'Nailsea' study, negotiate with all the subjects before the report was published. Radnor (2002:35), discusses the ethical approach of a PhD student undertaking an interpretive study. The student summarises her consideration of ethical issues as a means 'to protect her respondents'.

'Respondents received different names... any information... was deleted if it was so personal as to lead to respondent identification'.

Each of these anonymity strategies has their merits. It is likely that they will be combined – negotiated with the participants, who will also be given false names. The question was how could it be achieved in the setting of the practitioner/researcher in this case – a small comprehensive school, a small group of identifiable pupils, and staff who are recognised by their academic subjects? It would be difficult for people external to the school to crack the anonymity codes, but those subjects could still be traced. The issue here becomes one of 'reasonableness'. Has the researcher taken all reasonable steps to protect the participants?

Whichever strategy, or combination of strategies, are used, the subject should still maintain the right to read their material before the account is published. This raises three further questions: To what extent should the subject have the right to remove material to which they object? What constitutes material – transcripts of verbatim interviews and observations, or, interpretations of the transcripts? What is the relationship between the rights of the subjects and the rights of the community for whose

benefit the study was executed? This particular action research focuses on low ability and disaffected pupils and, therefore, raises further questions. How does the researcher make the material of his/her research meaningful to the breadth of potential audience?

Kemmis, (1988:42), describes action research as: 'a form of self-reflective enquiry undertaken by participants in order to improve the understanding of the situations in which the practices are carried out'. The aim of this research is to improve, to make a difference. Members of the potential audience will interpret the term 'meaningful' differently.

The methodology of interpretive action research can involve the subjects very closely in the construction of data. It is anticipated that the preliminary dialogue with participants would outline the potential benefits of the research. This would help give a wider perspective to problems created in the third question discussed above – *the rights of the subject/the benefit for the community* – but also increase the potential to further sensitise the participants.

However, what if the participant disagrees strongly? The ultimate action would be for the participant to withdraw. Both the Loughborough and BERA ethical guidelines, (See section F: Loughborough, 2003, and clause 10, BERA, 1992) underline the participant's right to withdraw. The right to withdraw from the study also has broader implications for a teacher/researcher. Can a pupil request to opt out of the project or even leave the class under observation? Requests to opt out would be very difficult for the teacher/researcher and for the school to manage. If the child remained in the class they would have an influence on the class but their specific influence could not be recorded. Yet, removal from the group could create a different set of problems for the research by altering the composition of the group as a whole. This issue has implications for the viability of the research.

Discussing the implications of carrying out the research at the outset with all participants should help to avoid this situation. A different group of pupils could be selected at the start if the researcher had doubts. If a pupil requested to opt out from a class under observation the researcher would need to

examine his/her methodology. Woods, (1996:83) describes researchers who adopt a qualitative approach as those who: 'try not to disturb the scene and to be unobtrusive in their methods in an attempt to ensure that data and analysis closely reflect what is happening'. Ideally the pupil would be made aware of the research at the outset but would be unaware of the research as it progressed. Withdrawal from the group could be for other reasons – prolonged illness, truancy or exclusion. The practitioner researcher has to work around these situations by applying skills of re-negotiation and reasonableness.

Role conflict

Hargreaves (1967:194) defines role as an aspect of the total behaviour of a particular actor occupying a particular status within a social system. Role conflict occurs when expectations cannot be fulfilled. Hargreaves, (1967:199) assumes many roles during his research: as a teacher, with a role to play with other teachers and pupils, as an observer, and as a friend to the boys. He concluded that the ethical issues that developed by these roles and relationships were incapable of simple resolution.

Pring (1984:286), discusses role conflict issues – betraying trust, taking or not taking action that is expected of you. As a senior manager, during the course of every day teaching duties, the lead author finds himself in positions where decisions as to who to support are ethically difficult to make – the wronged child or the failing teacher? Nevertheless, decisions are made and are made on the spot as a result of his/her own judgement of the situation. How are these decisions arrived at?

Carr (1987:163-75) discusses the question – 'What is an educational practice?' Part of his article illuminates the Aristotelean concept of 'phronesis', the ability to identify the particularities of a situation in the light of their ethical significance and to act consistently on this basis. It is not the judgement of an umpire applying a set of codified rules, but a form of wise and prudent judgement that takes into account what would be morally appropriate and fitting in a particular situation. 'Phronesis' is an ability that develops through people's life experiences by deliberating and reflecting on them: 'Thus, deliberation is not a way of resolving technical problems. Rather, it is a

way of resolving those moral dilemmas which occur when different ethically desirable ends entail different, and perhaps incompatible, course of action.' (Carr 1987:170).

Legal implications

The discussion so far has focussed on an academic discourse. However, it is vital to be aware of the legal implications that are the consequences of legitimising the ethical debate.

The United Kingdom Data protection Act, 1998, is intended to safeguard people's rights when data about them is being collected and processed. There are eight enforceable principles of good practice that cover both facts and opinions about the individual. Enshrined in the legislation is the right of participants to know: who will process the data, what purpose is the data to serve, who will view the results of the research and comment on the outcomes. Previous to the 1998 Act these may have been perceived as ethically sound research methodology, now they are legal requirements.

The other legal landmark act that has legal implications for all who deal with children is the Children Act 1989. A key feature of the Act is 'Paramountcy' – any decision made about the child has to be made in the child's best interest. Local authorities and professional associations have produced strict guidelines to support teachers, and other similar pastoral workers, to enable them to stay within the law. Confidentiality can never be promised. Any degree of confidentiality will be governed by the need to protect the child. What happens in the interview if a pupil makes an allegation against a parent, friend or member of staff? It is clear that the researcher has the legal responsibility to pass on this information and for action to be taken which lies far beyond the remit of the research.

There are also similar guidelines produced to guard against teachers getting themselves into potentially compromising situations and having allegations made against them. The whole issue of one-to-one interviewing needs to be evaluated thoroughly and the professional, as well as ethical, risks weighed up very carefully.

Reflection

This discussion is based on the lead author's own experience of dealing with the ethical issues that arose during the research. The importance of background reading needs to be stressed. This supports a clear understanding of the wide-ranging issues that can emerge: from legal implications to professional misconduct to 'doing bad research'. There are other spin offs: a sense of comfort, support and learning how other people have coped with the experience. These may be perceived as irrelevant to researchers working within an academic community where experiences may be easier to share. However, despite the unfailing support of a tutor, the action researcher can feel isolated.

Thinking through the aims of the research and how the research evolves is a key factor in any research. The lead author in this research was fortunate to have encouraging and objective professional support from colleagues throughout the research process. This compensated for the feeling of isolation from the academic community to a certain extent. Open discussion with colleagues leads to questioning and enriches the self-concept of 'Phronesis'. Justifying a course of action to a colleague who asks 'why?' leads to self-questioning and the considering of alternatives.

The process of open discussion focussed the lead author on simple research questions: Why were a group of pupils achieving, on average, a GCSE grade in design and technology that was 2 grades better than their other GCSE grades? If factors could be identified could they be applied to raise standards of achievement in other contexts? This line of questioning locates the research in the area of school improvement: research that could be of benefit to all the stakeholders – pupils, staff, governors and parents. The lead author experienced no difficulty in gaining formal consent from these stakeholders. Consent and support from the stakeholders is essential if a longitudinal study over 5 years is to be sustained.

The research questions were also key factors in being able to share the research with the broad range of audiences. Communicating with staff and governors was not problematic. However, communicating the aims of the research with low ability pupils and their parents

could have been problematic if the research was not perceived as being of direct benefit. Parents' evenings were used to discuss the research with parents. The parents were targeted and additional contact made with them to invite them to attend. A number of parents would have had poor literacy skills. To give them a written rationale may have alienated them from the start. They were presented with a simple verbal statement:

'Over the last few years children who have taken this subject have had good GCSE results. I am trying to find out why this happens. When _____ takes this subject I will want to look at his work closely and ask what he likes or doesn't like about the subject. I will want him to be very honest with me. I might want to write down some of the things he tells me but I won't go and tell the other teacher about what he says and I won't write down that he said it. All this will happen in a normal lesson. I won't let this finding out stuff get in the way of a normal lesson and if he tells you that he is not happy about something then you must phone me so that we can sort it out. If you want to ask any questions about this then I'll try my best to answer them.'

This statement has been the standard during the research. No parent has ever said no, or asked further questions, no pupil has ever withdrawn. Is this to do with the clarity of the communication or with the imbalance of power that can exist between teachers and parents in these contexts? There is much to reflect on. The attempt to communicate simply the aims of the research is sincere; however, the relationship between parent and teacher is unbalanced. The parent is placed in a position where it is difficult to say no. Can confidentiality, anonymity and withdrawal be genuinely offered in the context of a small school? A concern emerges that in attempting to follow ethical guidelines unethical situations arise. 'Reasonableness' must be applied or no research could take place.

Dealing with ethical problems as the research is being carried out brings additional situations that are potentially more problematic because of their immediacy, visibility and realness. Classroom observation is now widely used as a management tool in schools. However, observing a lesson for the purpose of research unearths more

complex ethical situations. If the lesson goes wrong when does the manager intervene and when does the researcher intervene? Clearly the manager can intervene at once. The very presence of the 'manager' can have a direct impact on the teacher classroom management. As a researcher there is a desire not to influence the setting. Perhaps the lesson that goes wrong may yield more useful data than the lesson that is effectively delivered. As a senior manager in a school and a researcher there is obvious role conflict.

What does the researcher do with the data collected – the interview transcripts and lesson observation notes? Anonymity and confidentiality have been promised but the data uncovers: a child protection issue, an act of professional misconduct, a teacher victimising a group of pupils, lessons not planned, work not marked or a pupil who has given up? Child protection issues and acts of professional misconduct have defined responses that are legal obligations. Poor lesson preparation or pupils not working in a lesson are situations where when and how to intervene are less defined. Both situations pose a similar dilemma that could be based on a continuum:

Take issue early, act as a manager and thereby erode the promises of confidentiality and the creation of trust between researcher and participants?

Or:

Do not act as a manager; maintain the confidentiality and trust of the participants and lose credibility as a senior teacher at the school?

The correct response lies somewhere on the continuum but not always in the same place. Two factors assist in locating the appropriate place on the continuum: 'Reasonableness' – every effort has been made to act ethically and, 'Paramountcy' – the actions are in the best interests of the pupil. A valid observation on this issue is that the situations where these decisions have to be made cannot be planned. They call for an immediate response which once made cannot be undone.

The response can be reflected on and this may help to give a more appropriate response if a similar situation arises again. Being self-reflective is an essential skill in carrying out qualitative research as it helps the researcher to become aware of his or her subjectivity.

Before the research begins:		Done?
1.	Raise awareness of ethical issues – background reading – legal implications – The Data protection Act, 1998, Children Act 1989.	
2.	Think through the aims of your research – What do you hope to achieve? What does the school stand to gain? Can the aims of your research be clearly communicated to a range of audiences – staff/pupils/parents?	
3.	Be open, talk through the plans for your research – discuss plans with colleagues.	
4.	Gain formal permission from headteacher and governors – to interview children/staff/parents, administer questionnaires.	
5.	Prepare simple written research outlines for the various audiences – give the aims of the research, the possible outcomes, possible publication of findings. Dispatch.	
6.	Communicate aims of the research with pupils, offer confidentiality as far as possible (child protection issues), offer the right to withdraw as far as possible, apply 'reasonableness' to both – guard against over-sensitising.	
During the research		
7.	Be aware of your professional obligation as a teacher to your pupils – mindful of gender/ethnic implications.	
8.	Be aware of the possible implications of one-to-one interviewing of pupils, using electronic recording equipment to carry out observations or interviews.	
9.	Be aware of your own perspective on subjectivity. Temper your research using a Delphi group/your research supervisor to read over your work. Use respondent validation – feedback, to validate data collected.	
10.	Be prepared to make changes as a result of feedback. Maintain a dialogue with all participants; be mindful of the conflict between their perspectives and the aims of the research.	
11.	Be prepared to renegotiate due to changes in direction as the research develops.	
12.	Reflect on all your work as it grows and consider the consequences of whatever action you decide to take.	

Table 1: Ethical checklist for practitioner research in schools

The establishment of a Delphi group also helped to address these issues. The Delphi technique, (Toffler, 1970:462) is a tool to obtain the most reliable opinion of a group of people. Group members are invited to share their thoughts to contribute to the shared understanding of an issue. This Delphi group consisted of two teaching colleagues and a teaching assistant with experience of working with the target group. Creating such a group has its own ethical considerations. As a senior manager in the school the practitioner researcher could be perceived as being in a position of power. This opens up the possibility of group members deferring to

the views of the manager. Sharing this concern with the group helped to guard against this possibility. In addition the Delphi members were long established members of staff who had worked in a context in which openness was encouraged. This group was utilised to explore issues emerging during the action research and to limit the danger of single observer bias.

Conclusion

Teachers researching practice in their own school have a wide range of ethical issues to consider before the research begins and will become aware of additional ethical issues as

the research continues. Fraser (1997:4), as a practitioner researcher, writes about her own ethical dilemmas:

'In all of these instances there could not have been a planned theoretical response to the dilemmas, instead I needed to continually reflect upon my research and attempt to consider the consequences of whichever action I might take.'

The shift in emphasis from seeing participants as samples or representatives of the population to seeing participants as subjects and the provision of legal frameworks, such as the Children Act 1989 and The Data Protection Act 1998, have undoubtedly moved the ethical debate to centre stage. Radnor (2002:34) believes that her model of interpretive research should be 'ethics in action: dignity and respect for participants'. Add to this model the legal implications and perhaps it would be fair to say that research must be 'ethics in action'.

In this case the primary author and practitioner/researcher has developed an ethical checklist based on the various guidelines and discussion above, (see Table 1). This was then used in planning the specific sections of research. This checklist will also act as a quality control/quality assurance measure throughout the research. The checklist must be seen as an evolving document and will be continually upgraded on the basis of on-going professional reflection during the practice of the author's action research project.

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