More than the Sum of the Parts: research methods in group interviewing

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Introduction

Interviewing—in its many guises—is very much an accepted methodology within educational research. Despite this, and perhaps contrary to first appearances, there is little consensus as to exactly what constitutes an interview. Not only is there a broad range of interviewing types used in research, even within a particular type of interviewing there is a wide variety of approaches to the actual processes involved. Nor is there overly much written or reported about the conduct of interviews in research papers. Here we consider some of the potential and drawbacks of using group interviews and illustrate some of the issues raised by reference to a recent short study in science education. The issues we raise are primarily methodological and pragmatic. The study we refer to concerns school students' perceptions of their science education from 11 to 16 (Ebbutt & Watts, 1987).

Group Interviews

Defining a group is probably as difficult as defining an interview and, whilst we do not intend our definitions to be hard and fast, it is probably as well to come to terms at an early point. We take an interview to be a *conversation initiated by an interviewer for the specific purpose of obtaining research relevant information and focused by him/her on content specified by research objectives.* This definition of an interview, ascribed to Cannel & Kahn by Cohen & Manion (1985) allows for either very structured or very unstructured interviewing. A group we take to be a congregation of more than two interviewees at a time. Walker (1985) suggests that a group interviewer's task is not to conduct several individual interviews simultaneously but to,

> facilitate a comprehensive exchange of views in which all participants are able to 'speak their minds' and respond to the ideas of others. (Walker, 1985)

It is the interaction between participants that is important, certainly as important

as the interaction between interviewer and interviewees. Interviewing two people at once is quite common, though in many senses the interaction possible then is constrained and that kind of interviewing has more in common with individual interviews—one reason for our suggestion that a group is greater than two. Interestingly, Walker treats group interviewing as a quintessential method within qualitative research, one seldom used with survey research methods. This seems to us an unduly limited view of group interviews and Keegan & Powney (1987), for example, give an excellent example of how it can be used as a precursor to extended survey research. That said, our own use of group interviews was very much as a qualitative research tool.

We had two main reasons for conducting our inquiry. During the early development phase of the Secondary Science Curriculum Review (SSCR) the Review's central team attempted to gather the views of a wide range of individuals and institutions concerned with the future of science education, primarily through a consultative document (SSCR, 1983). We were aware that although we had consulted many people, we had overlooked the idea of consulting school students. We saw our first and major task to remedy this omission. Our second reason concerns research methodology—to explore the use and effectiveness of interviews with groups of students. Whilst both of us have some experience of 'individual' interviewing we had not previously attempted to interview a group of people at the same time.

We were interested in students' memories of, and feelings about, their experiences of science education 11–16. Obviously we needed to talk to students whose experiences were still fresh. So we decided that first-year sixth-formers would form an ideal group for our purpose. We also felt we wanted to conduct the interviews in an atmosphere which was as free as possible from 'institutional' constraints. Therefore we selected sixth form colleges as ideal sites. This was because such colleges draw from many secondary schools so students are (on the whole) no longer in the same school they originally attended. The five colleges and schools we approached were in two local education authorities.

Group Interviewing as a Methodology

All data gathering techniques have their limitations and, as has been argued elsewhere (Powney & Watts, 1987), interviewing is no different. Here we have drawn out three features of group interviews, purpose, practice and interpretation, and we explore aspects of these in turn.

(1) *Purposes*

Keegan (op cit.) used group interviews as a precursor to an extended survey. The intention there was to examine the range of responses likely to arise before a major survey was commissioned. Cost was a telling factor. The research was commissioned by the National Consumer Council and concerned the information needs of parents in relation to their childrens' education—how well parents needs were being met by the information provided by schools and local authorities. The funding body was keen to see the extent of the problems before embarking on major research. It was used in this sense, then, in order to pilot issues as a pre-test for a main survey. In many instances group interviews are a less expensive form of

interviewing than one-to-one approaches. Such pilot interviews can give some indication of the range of responses to be expected and can therefore be an attempt to validate possible survey questions. For example, research conducted by Marketing Direction Limited (1984) for the Electricity Council concerned the uptake by teachers of the range of educational materials produced by the Understanding Electricity service. This is another instance of two-phase research with the interviewing seen as the qualitative first pilot stage, to be followed at a second stage by a (quantitative) questionnaire. In that case both group and individual interviews were used, with one aim being to 'help design a questionnaire for quantitative evaluation' of the service being provided.

For Solomon (1985), it was neither cost nor piloting that provided the purpose. She used classroom discussion as a prime data collection method—one we would include within our notion of group interviewing. For her it is a 'natural' method of inquiry that allows collection of data concerning youngsters' common sense understandings of some parts of science in familiar ways and in familiar settings.

In our own inquiry with sixth formers the group interviews stand as the only data gathering method. Previously one of us (Ebbutt, 1981) had used group interviews to obtain a feel for the extent that perceptions previously gleaned through individual interviews were more generally applicable to a whole group. The group interview was useful to this end. Our procedure in this case was more or less the reverse of that process. We used the technique to raise issues at a fairly high level of generality. Again it was a very fruitful method for this purpose.

There might be many other reasons for choosing to interview groups than we mention here. One might certainly be that a particular group has a status within the domain of the research inquiry and it is important that a collective view is sought rather than interviewing the group members individually. It may be, too, that a particular combination of individuals is important and that they can only be brought together under the aegis of a group, or that there is simply not enough time for them to be interviewed singly.

(2) *Practice*

There are some interesting points of practice to note in reading research reports of group interviews. The first concerns the title of the interviewer. If the essential aspect of the group interview is the interaction between the participants then the interviewer has a different role compared to the normal one-to-one interview. The task becomes one of establishing and facilitating a discussion and not 'interviewing' the group. That is, the inter- of interviewing takes on a different sense. The term interviewer is often replaced by 'moderator', 'facilitator' or 'group leader'. For Keegan & Powney (1987), however, the term 'group leader' is inappropriate because 'the last thing you are doing is leading a group'. As Keegan says:

> I don't think you should be leading a group. In fact, if anything, you should be there to follow a group and therefore I would never use leader as a name. If I wanted to refer to things I would talk about 'group moderator'.

There are shades here of the 'proceduraly neutral chairman' that characterised aspects of the Humanities Curriculum Project (HCP, 1970)—a notion designed to enable pupil discussion on controversial issues.

A second interesting point is the number of interviewers present at the interview. Keegan & Powney, again, have a clear view—two is better than one. Over a number of projects Keegan, in particular, has developed a system of two interviewers operating at the same time. A major advantage is that where one takes the lead, the other can spot aspects of the group dynamic that might pass unnoticed by the moderator. They say:

> We found it so took the pressure off the moderator, by having somebody else who was going to be able to sit there, pick on the points that were missed, that we found that we were really getting double the value from a group. And what looks on paper as a fairly expensive type of operation turned out to be well worth the extra expense. Because again, the person who was not actually doing the interviewing could see a person hesitating in the group who was longing to say something but really couldn't bring herself to do so.

This kind of support was not one we implemented in our own study. We decided to interview singly and drew up a loose schedule of questions to ensure that we both covered similar issues in a more or less similar order. We both very much hoped that a fairly freewheeling discussion would take place, where students would react to issues which others had raised. Ideally, we wished to talk with students studying a full range of courses; sciences, arts, humanities and one-year courses, with an equal representation of boys and girls. We envisaged between nine and fifteen students would attend each interview. We did not discuss in our planning session whether to issue our questions to the students before the interview. None of the groups in our first authority had the questions prior to the interview. With hindsight we would now provide all the students with an opportunity to consider our questions before the interview session.

At one site we did decide that it would be interesting if we were both present at the same interview. This was the least satisfactory interview, both for the length of pauses before students responded (up to 46 seconds) and for the quality of the responses when they did eventually occur. Even now we cannot decide whether two interviewers were making each other uneasy, or whether our combined presence daunted the students. A final thought, here, is whether—once the conversation is underway—there is any need for an interviewer at all. Barnes & Todd (1981) interview friendship groups who had considerable control over the tape recorder—they could switch off or play back as they wished and could decide when they should stop. Another example, from science education, is that of Gilbert & Pope (1983) who interviewed small groups of youngsters about their concept of energy in science. The youngsters were asked to respond to a series of line drawings that might (or might not) exemplify aspects of the scientific concept. The researchers both audio- and video- recorded the discussions and, at a suitable point in the proceedings, retired to allow the youngsters to continue without an interviewer. This approach gave the interviewees an opportunity to continue discussion without an adult present, and the interviewers an opportunity to observe group dynamics and to discuss the way in which some individuals can dominate the discussion. This is an issue worth discussing a little further.

There are numerous relationships that can exist between interviewee and interviewer in a one-to-one interview, from peer, friend, and counsellor to remorseless interrogator. In group interviews the situation is slightly different. The interviewer

wants to allow free discussion and yet at the same time keep the thread moving in a particular direction so that the needs of the research design are met. In some instances, one dominant person in the group can be an asset in that he or she can forward opinions and begin to shape and sharpen ideas so that the discussion begins to take off. On the other hand a dominating and opinionated person can inhibit others in the group, either by simple volubility or by force of argument. Keegan, an experienced professional interviewer says (Keegan & Powney, op cit.):

> .... you have to decide: that person's useful, he's saying a lot of very useful things. That's why he's dominating, because he knows a lot about the subject—well usually it is... but how much am I going to risk losing the little lady sitting over here who is obviously intimidated by this man's knowledge? Already she feels her two-penny's-worth is just not going to be worth her saying. Which is going to be more important to get? And it's very often a hard decision to make. I've had sometimes to call their bluff, er the dominant person. I try and make the rest of the group gang up against the dominant person in a case like that. And I say "come on are we going to let him get away with a thing like that sort of remark?" and hopefully, you know, sort of let the group say 'hey!'. You know, to see that I too know that he's dominating and he's not going to dominate me, so why should he dominate them? And mostly it works.

There are other interesting practical problems with groups, too. Where groups congregate 'naturally' there may not be a problem of recruitment. In professional interviewing the task of bringing a group together is sometimes delegated to a 'recruiting interviewer' who may establish time, venue and the full complement of interviewees, but who would not necessarily participate in the actual interview.

The very act of recording the data, too, can be problematic. Tape-recording is probably essential. Field notes alone may be possible, especially where two researchers are present, but they represent a huge burden in terms of attempting to note all aspects of what is being said. While in a one-to-one interview it may be possible for the interviewer to slow the proceedings to accommodate note taking, the dynamic of a group may be such as to preclude any such direct control. Conversely, the presence of the tape-recorder in the room may be less of an inhibiting factor for a group than for an individual. However, few microphones—particularly built-in microphones—have the range or discriminatory powers to cope well with a fairly dispersed group. Quality falls away rapidly with distance, even over only one or two metres, and few rooms have the accoustic properties to allow even reasonable recordings. It is possible to use recently developed 'conference' microphones, though at the several hundred pounds each (at the time of writing) they may defeat the cost-effectiveness of the methodology. Again, in one-to-one interviews it is possible to place the tape-recorder unobtrusively close to the participants, or to use small 'clip-on' directional microphones to good effect. In our case, our early experiences were not encouraging. We were recording in school classrooms and laboratories which produced diffuse, 'clouded' and indistinct recordings. We attempted to overcome some of the technical difficulties by distributing several machines round the room and using small high quality remote microphones directed towards sections of the group. Transcription then became a process of compiling a full transcript from two, or sometimes three, separate tapes. A further problem concerns the authentication of data. In many one-to-one interviews it is

possible to return to interviewees and seek clarification, confirmation or re-interpretation of what has been said. It is possible to negotiate the release of sensitive data, or the stress or emphasis within a research report. All this may also be possible where groups meet as a matter of course. Where they are convened as a one-off exercise, or where the composition is likely to change over time, then returning to the same group for consultation poses difficulties. One solution is to seek a spokesman for the group though this, too, is not necessarily a straightforward issue. The sixth formers in our study may seem a fairly stable group. In fact, for many reasons such as absence, differing time-tables, different course requirements and so on, we realised that it may not be possible to return to exactly the same groups at a future date. After each interview was complete we sent our first analysis of the transcript back to the group for their comment. In each school one student agreed to receive the analysis and to ensure that each member of the group had sight of it. Further, this student agreed to pass comments back to us. In the event this strategy seems to have been reasonably successful—whilst not all the schools responded, we did receive both positive support and criticism for our analytic efforts.

One final point here is the difficulties that can be encountered with groups of young pupils. Much of the work we have mentioned has used youngsters of secondary school age. Problems can include the difficulty of teasing out a diversity of views (especially if pupils are interviewed in friendship groups) and the need, often, for visual stimuli or a very concrete set of questions.

(3) *Interpretation*

Interpreting the outcomes of group interviews raises several important points. First, at a practical level, the act of transcription is itself not straight forward. People 'talk over' each other, or make asides as others speak; voices are often unattributable, and much of the interpersonal communication is lost in non-verbal interaction. One ploy to mitigate some of these difficulties is, at the outset, to go round the group asking each person to briefly introduce themselves. This has the double virtue of 'breaking the ice' so that everyone hears themselves speak and of allowing the transcriber the facility of returning to identify a speaker's voice later in the session.

In our case, we had never met the students before. They arrived at the designated room in ones and twos and were given identification lapel labels on which to write their first name. We wanted to encourage a sharing of views between students and to be able to identify in the resultant transcripts who was saying what. In practical terms this meant from time to time during a fruitful discussion in the interview, the interviewer had to interject a sotto voce 'voice over' in order to identify a succession of speakers, a strategy which sometimes impeded the very flow we wished to encourage. A second approach is not to ascribe views and comments to individual speakers in the interview, but to treat the outcomes as communal views and to represent them as artefacts of a shared encounter. That is, to treat the group not as a collection of individuals, but as an entity in itself—as an 'artificial hothouse society created for the purposes of the research' as Hedges (1985) puts it.

Secondly, then, these two approaches have a strong bearing on how the outcomes of the interviews are reported. In our report we not only attributed comments to individuals in the groups, we used extracts from the transcripts to illustrate and exemplify points. Salmon & Claire (1984) use a similar approach. They tape-recorded friendship group discussions about aspects of school life and reported the

discussions by attributing and quoting particular comments to particular individuals. This has its own problems— of confidentiality on the one hand, and balance of views and representation on the other. Does one, for example, try to represent the views of everyone present? To include a quote from each individual? Or to attempt a balance in terms of the number of major ideas or opinions being proffered? Even so, to treat the discussion as simply (or even as more than) the aggregate of individual opinions is also problematic. What can be said of such outcomes that can be either generalised or particularised? We noted earlier that our one previous use of group interviews (Ebbutt op cit.) had been to obtain a feel for the extent that responses already gleaned through individual interviews were more generally applicable to a whole group. Our procedure in interpreting sixth former's views was more or less the reverse of this: we used the technique to raise issues at a fairly high level of generality. Whatever the case, in our view each report should be a case study of a specific interaction with a specific group with a specific 'chemistry' of interaction. This need of itself be no problem—always providing, of course, that the status of the report is noted and recognised as such. As Keegan & Powney (op cit.) say:

> It is important to stress that group interviews are never intended to provide results that are represenative of, or generaliseable to, a population group as a whole. They are intended to indicate the possible range of experience and attitudes, but not to suggest numerical or proportional frequency of occurrence of particular experiences and attitudes.

Nor is it easy to see how group interviews can be quantified in any meaningful way. Hedges (op cit.) points out a tension in attempting to 'count' within group interviews. There may be occasions, he suggests, when the researchers might properly tot up the number of people who say different things. This, though, would be for his or her own illumination so that, for example, it would be possible to decide if a comment frequently made was because many people were saying the same thing or one person saying it repeatedly. Not, he cautions, that it would be proper to quote such numbers in a report, and certainly not in any way as to make them seem like mathematically reliable statistics. As he observes:

> If that's what you were after, you're doing the wrong kind of research.

Thirdly, our own case highlights a particularly interesting issue of interpretation. Few of the young people we spoke to had very favourable things to say about their experiences of school science. There were only one or two in each group who, often against the trend of the discussion, were able to say encouraging things about their time in school science. On the whole the interviews produced a catalogue of disinterest, dissatisfaction and despair at what they had been offered. We see two main reasons for this. First, their experiences were unhappy: the provision of science education in the secondary schools they attended was not well organised, was narrowly conceived, irrelevant, traditionally examination orientated and clearly ill-suited to many of the youngsters to whom we talked. Secondly, there was a sense that, once discussion began to draw on the foibles and failures of science teachers, on the tedium and irrelevance of lessons and on students' own mischief and escapades, the conversation seemed to feed on the climate of depreciation created. During our analysis we referred to this, between us, as an 'infectious downward spiral of shaded awfulness'.

Our own interests, however,—as science educators rather than researchers—were

not best served by simply reporting a compendium of disasters. While youngsters' comments and criticisms needed to be documented, described and discussed as fully as possible, we also wanted to draw from the comments some pointers for good practice. In reporting the outcomes of the interviews, then, we shifted emphasis. We saw implied in all their comments a vision of what these students thought to be good practice. This became our central organising concept. Our approach became one of teasing out perceptions of good practice so that, within our synthesis, we attempted to reverse the sense of what was said, to make positive the negative. That is, we drew from their negative comments some of the positive features of the science education youngsters seem to be seeking.

The problem is well known to all researchers. Data is not value-free, researchers are not (and cannot be) purely objective, analysis and interpretation are not dispassionate acts. Both the researched and the researchers have objectives in mind at the outset. Our own approach was clearly value-laden and as we wrote our 'story' through the data we attempted, where possible, to outline our position and prior assumptions. There was much in the interviews which allowed us to build a composite picture of some of the features which—retrospectively—the youngsters saw as being part of satisfying science education. The fact that the majority of the students described something less than this did not prevent us building a picture of their view of what good practice might be.

Our notion of shaded awfulness may well be a problem exacerbated by the methodology. Many people, and our youngsters may be no exception, once set upon a critical path enjoy the opportunity of a collective 'moan session'. Nor is it easy to see how, or whether, such a course might be changed. The issue of 'control' in interviews is not clear cut. The myth exists that the interviewer controls the proceedings—a view that under-acknowledges the power of interviewees to shape events, tailor discussion and veto information (Watts & Powney, 1985). One-to-one interviews allow greater possibility for the interviewer to be task orientated, for the interviewee to be brought back to the task and to the questions in hand. Or perhaps more pointedly, to be harnessed to service the needs of the researchers. Groups are less ammenable to influence, particularly since the aim is to provide opportunities for a free-flowing and interactive exchange of views. As such groups have a much greater potential to usurp the moderator, so that the chemistry of the interaction feeds the shape and direction of the conversation.

Some Summary Comments

Group interviews are becoming a popular means of data collection in educational research. To the uninitiated there may be a temptation to treat them as unproblematic, perhaps simply as 'multiple single interviews'. The problems they pose, however, are distinctive and bear consideration before use.

Their advantages lie in their potential to allow discussions to develop so that a wide range of responses can be collected. Such interviews are useful, for example, where a group of people have been working together for some time or common purpose, or where it is seen as important that everyone concerned is aware of what others in the group are saying. There are advantages in education where groups are a common consequence of managerial and social organisation. They have the potential, for example, to be used by practising teachers with the minimum of disruption to their normal teaching procedures. Conversely, they can be used, too,

to deliberately bring together people of widely differing opinions, or as representatives from different organisations or constituencies.

They also have drawbacks. For example, group interviews are of little use in bringing intensely personal issues to the surfaces, or points where the interviewer has to probe an interviewee's perceptions with a succession of follow-up questions. The dynamic of a group denies access to this sort of data. As a method it is roughly analagous to a limited sample questionnaire, if somewhat more fresh and spontaneous. Spontaneity, of course, depends somewhat on the topic of discussion, the context in which the discussion is taking place, and the skills of the interviewer. It is worth a final note that such skills are quite particular—what Hedges (op cit.) calls 'executive level' skills. If the interviewer is not the originator of the research itself then he or she has the task of interpreting the research brief in a way that retains the essence of the research objectives whilst allowing the group to develop as an entity. As Hedges points out, the moderator must be of sufficient calibre that they can take decisions in the heat of the moment as to what are—or may be—profitable lines of inquiry.

Group interviewing for one's own research, as in our case, is a matter of establishing one's own code of conduct. After all, at the final analysis there is only the interviewer to blame for fruitless data.

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