2 WHAT IS EDUCATIONAL RESEARCH?

We must begin by recognizing that the term 'research' is not one that has a well-defined meaning shared by everyone. It is used to cover a wide range of activities that differ substantially in all sorts of ways; and there is considerable disagreement about what should and should not count as research. At one extreme, the term covers forms of educational inquiry designed to contribute to disciplinary

knowledge in, for example, the psychology or sociology of education. Equally, though, educational research may be primarily intended to inform policy making or practice, or it may take the form of inquiries carried out *by* policy makers, school managers, or teachers, in order to further their own activities.

'Research' is a status-laden term, and including or not including something under this heading may have an effect on how people view it. This status-loading gives debates about research a political charge that we cannot neglect. Our aim in this section, though, will be not so much to decide definitively what does and does not count as educational research, as to sketch some of the criteria that are typically applied and the arguments for and against them. In doing so, we shall touch on most of the major controversies that surround educational research. For the purposes of this Handbook, then, we shall interpret 'research' in a rather broad sense, using it to refer to the selection and analysis of data with a view to the provision of valid and useful information.

We shall start from what has been the axis around which much methodological thinking about educational research has revolved: the methodological approach of the natural sciences. Our focus will be both on its influence and on the reactions against it.

2.1 EDUCATIONAL RESEARCH AS SCIENTIFIC

Much of the work of educational researchers, like that of social scientists generally, has been modelled on what were taken to be the methods of the natural sciences. In many ways this has been the most important influence of all shaping the ways in which educational researchers have thought about and carried out their research.

Activity 1

What characteristics do you associate with research in the natural sciences? Make a list of such features before you read on.

We shall probably not have succeeded in anticipating all of the features that you have thought of and we may have listed some that you overlooked, or that you do not associate with natural scientific methods, but here are some methodological features commonly identified with the natural sciences:

- The testing of claims against empirical evidence.
- The provision of an explicit account of the methods of testing, thereby providing the basis for replication.
- The quantitative measurement of phenomena.
- Experimental or statistical manipulation of variables to test causal hypotheses.
- A focus on facts rather than values.
- A concern to maintain objectivity, to avoid bias due to personal preferences.

These are the sorts of characteristics often associated with the natural sciences. We shall not consider here the question of the extent to which they constitute an accurate representation of either the ideas or the practices of natural scientists. What is more important for our purposes is that the conception of natural scientific method outlined above has guided and continues to guide the work of many educational researchers, although the features listed have been given varying emphases and been interpreted in different ways.

METHODOLOGICAL DEVELOPMENTS IN THE PSYCHOLOGY OF EDUCATION

We can illustrate the impact of what we have called the scientific model by looking briefly at the history of methodological ideas in educational research. To a large extent educational research as we know it today had its origins in the work of psychologists in the late nineteenth century, when psychology was itself only just emerging as an independent form of inquiry. During this period, the experimental method was widely regarded as the essence of a scientific approach to research. As a result, experimental psychology was seen by many as laying a theoretical basis for understanding the processes of learning, which would thereby revolutionize education by putting it on a scientific footing.

Another important aspect of the early history of educational research, again reflecting the influence of psychology, was the development of mental tests of various kinds: for example, of intelligence, personality, attitude, and academic achievement. Such tests were believed to be able to offer teachers, educational administrators and others valuable information of an objective kind about the characteristics of the pupils and students to be educated. It was believed that this information would enable both effective educational planning and the monitoring of educational processes to assess their success. The emergence of the testing movement led to a great deal of methodological work on the construction of tests, as well as to the development and use of novel sorts of statistical analysis.

Psychology, in a variety of forms, but all influenced in one way or another by the approach of the natural sciences, has continued to have a substantial influence on educational thinking up to the present day. A well-known example is the contribution to progressive ideas in primary education of the research of the Swiss psychologist Jean Piaget. He developed an influential account of child development, which portrayed the child as evolving through various stages, each stage providing for more complex capabilities. This encouraged forms of teaching attuned to individual differences in levels of development and to an emphasis on *facilitating* cognitive development rather than *transmitting* information or instilling skills.[1]

A contrasting example of the influence of psychology on educational thinking is the behaviour-modification movement. This drew on behaviourist psychology and was concerned with effective treatment of children's disorderly behaviour in school. It recommended highly structured ways of dealing with pupils, these being designed to reinforce conformity and to give no reward for deviance.[2] The existence of these strands of psychological research, which seem to carry very different implications for educational practice, suggests that the dream of the pioneers of educational research that science would provide a single determinate set of recommendations for the efficient pursuit of education has not come true. Whether this is something to be disappointed or relieved about we leave as an open question.

Psychology and the methodological ideas associated with it have thus had an enormous influence on educational inquiry and, in methodological terms, this has generally been in the direction of encouraging a 'scientific approach', broadly defined in terms of the list of characteristics we outlined earlier. However, the impact of at least some of the characteristics of that approach is also to be found more widely, notably in the sociology of education.

[1] For a critical analysis of Piaget's influence on education see Egan (1983).
[2] For analysis of the influence of behaviour modification see the discussions and references in Fink and Hyde (1985) and Seborg and Hosford (1985).

METHODOLOGICAL DEVELOPMENTS IN THE SOCIOLOGY OF EDUCATION

When the sociology of education came to be established in the UK in the 1950s, its primary concern was with measuring the inputs into and outputs from the educational system. In particular, researchers were interested in the extent to which children from different social classes enjoyed equality of opportunity within the educational system. A major interest among researchers in England and Wales was the impact of the 1944 Education Act. (Similar measures were introduced in Scotland in 1945 and Northern Ireland in 1947.) Previously, most pupils had received all their education in elementary schools, with only a minority receiving a secondary education, either funded by private means or through the award of scholarships. The 1944 Act replaced this structure with a tripartite system in which, at the age of eleven, children were allocated on the basis of an examination, a test and/or teachers' recommendation to grammar or secondary modern schools and a few to technical schools, although private schools continued to exist. Grammar and technical schools catered for those who passed this 'eleven-plus' test; secondary modern schools were for those who did not. The earlier system had clearly disadvantaged children from the working class and much sociological research of the 1950s was designed to discover how far the new system rectified this. For instance, there was investigation of the extent to which able working-class children gained access to grammar schools and thereby had a chance of pursuing middle-class careers.

Although this sociological research was not experimental in character, it employed similar measurement techniques (e.g. of pupils' ability and social class) to those used in psychological research. It also used statistical analysis designed to simulate the manipulation of variables involved in experimental research. Quantitative research relying on these techniques continues today, though now the focus is as likely to be on differences between girls and boys, or between pupils from different ethnic groups, or on the contribution that schools make to pupils' levels of achievement.

The last of these, measurement of 'school effects', is an area of research that has come to have great salience in recent years. One of the original stimuli for this was the report in the United States by Coleman (1966). This was based on a survey of a large sample of schools, documenting their material circumstances and the home backgrounds and levels of achievement of their pupils. Comparison was made mainly between schools that had predominantly white pupils and those with predominantly black pupils, reflecting concern about the fact that black people tended to be concentrated at the bottom of the occupational structure and suffered a disproportionate level of unemployment. Analysis of these data suggested that the differences between predominantly black and predominantly white schools were surprisingly small and that school characteristics seemed to have little effect on the levels of pupils' achievement. This led Coleman to the controversial conclusion that family background is much more important than school characteristics in explaining differences in pupils' achievements.

The limited contribution of schools to reducing inequality was also emphasized by some other research, such as that of Jencks *et al.* (1972); but later quantitative studies have questioned this conclusion. An early example in the UK was the work of Rutter *et al.* (1979), which claimed to discover significant 'school effects' arising from such factors as the extent to which schools laid down clear rules for pupils' behaviour and the degree to which such rules were enforced. Other studies, employing more refined statistical techniques than those available to Coleman and Jencks, have also claimed to discover significant differences among schools in their effects on pupils' achievements (e.g. Smith and Tomlinson, 1989).

Another area outside of psychology where quantitative research and the influence of 'the scientific approach' were very important was in the field of educational evaluation. In the UK in the 1960s many large-scale projects for curriculum development were sponsored by the Schools Council and by private funding

agencies, such as the Nuffield Foundation. Very often these projects were subject to evaluation as part of the process of implementation. This usually took the form of a translation of the objectives of the project into quantitative terms and an investigation relying on quantitative measurement of pupils' achievements, attitudes, etc., to determine whether those objectives had been achieved. This quantitative approach to evaluation has continued to be influential, notably in government circles, even though, as we shall see, qualitative conceptions of evaluation also became prominent in later years.

2.2 REACTIONS AGAINST THE SCIENTIFIC APPROACH

Much educational research, on both sides of the Atlantic, has been quantitative in character. This has reflected in varying ways the influence of what we called the 'scientific method' or 'scientific approach'. There have, however, been strong reactions against such research. We can identify two broad sorts of criticism, one concerned with validity and the other with ethical and political issues. We shall look at each in turn.

VALIDITY CRITICISMS

The first area of criticism concerns the extent to which the results of 'scientific' educational research are valid. It has often been argued that, although the numerical evidence produced by such research has the appearance of being 'hard data' of the kind used in the natural sciences, there are, in fact, fundamental doubts about its validity; about whether it represents accurately what it claims to represent. We can get a sense of these criticisms by looking briefly at the work of Piaget, mentioned earlier. Interestingly, this was not strongly quantitative in character, and it has been criticized by some for being insufficiently rigorous from an experimental point of view; reflecting, at least in part, a difference between Piaget and commentators on his work about the requirements of scientific research. This highlights the point we made earlier: that although it is convenient to refer to the 'scientific method', there is, in fact, a variety of interpretations of what is involved in a scientific approach to research and of how it should be applied to the study of human beings and their behaviour.

Piaget carried out a number of experiments on the basis of which he developed the idea that children go through different stages of development, and that only when they have reached the necessary stage of development can they carry out the most advanced forms of cognitive operation. A famous experiment of his required children to compare the amount of liquid held by different shaped containers. The containers had the same capacity, and even when young children were shown that the same amount of liquid could be poured between the two containers, many claimed that one was larger than the other. Piaget's interpretation of this was that the children were *unable* to perform the logical task involved in recognizing that the two containers, while different in shape, were the same in capacity; this being because their cognitive development had not reached the necessary stage. Critics of his work have questioned this conclusion (see, for instance, Donaldson, 1978). They raise the possibility that the children were simply unwilling to play the experimenter's game, or that the children misunderstood what the experimenter was asking. These criticisms point to the fact, obvious enough, but important in its implications, that experiments are social situations in which interpersonal interactions take place. The implication is that Piaget's work and attempts to replicate it are not only measuring the children's capacities for logical thinking, but also the extent to which they have understood what was required, their willingness to comply with these requirements, the experimenters' success in communicating what was required, in motivating the children, etc.

Similar criticisms have been applied to psychological and educational tests. For example, Mehan points out how test questions may be interpreted in ways different from those intended by the researcher:

> [In a] language development test, children are presented with a picture of a medieval fortress – complete with moat, drawbridge, and parapets – and three initial consonants: D, C, and G. The child is supposed to circle the correct initial consonant. C for 'castle' is correct, but many children choose D. After the test, when I asked those children what the name of the building was, they responded 'Disneyland'. These children used the same line of reasoning intended by the tester, but they arrived at the wrong substantive answer. The score sheet showing a wrong answer does not document a child's lack of reasoning ability; it only documents that the child indicated an answer different from the one the tester expected.
>
> (Mehan, 1973, pp. 249–50)

Here we have questions being raised about the validity of the sort of measurements on which the findings of quantitative research are typically based. Some, including for example Donaldson, regard these as technical problems that can be overcome by more rigorous experimentation. Others, however, including Mehan, believe them to be not simply problems with particular experiments or tests, but serious threats to validity that potentially affect all research of this kind.

At the same time, questions have also been raised about the assumption built into the 'logic' of quantitative educational research that causes can be identified by physical and/or statistical manipulation of variables. Critics suggest that this fails to take account of the very nature of human social life, assuming it to consist of fixed, mechanical causal relationships, whereas in fact it involves complex processes of interpretation and negotiation that do not have determinate outcomes. From this point of view, it is not clear that we can understand why people do what they do in terms of the simple sorts of causal relationships on which quantitative research focuses. Social life, it is suggested, is much more contextually variable and complex.

Such criticisms of quantitative educational research have been the stimulus for an increasing number of educational researchers, over the past thirty or forty years, to adopt more qualitative approaches. These researchers have generally rejected attempts to measure and control variables experimentally or statistically. Qualitative research can take many forms, loosely indicated by such terms as 'ethnography', 'case study', 'participant observation', 'life history', 'unstructured interviewing', 'discourse analysis', etc. In general, though, it has the following characteristics:

- A strong emphasis on exploring the nature of particular educational phenomena, rather than setting out to test hypotheses about them.
- A tendency to work with 'unstructured data': that is, data that have not been coded at the point of collection in terms of a closed set of analytical categories. When engaging in observation, qualitative researchers therefore audio- or video-record what happens or write detailed open-ended field-notes, rather than coding behaviour in terms of a predefined set of categories, as would a quantitative researcher employing 'systematic observation'. Similarly, when interviewing, open-ended questions will be asked rather than questions requiring predefined answers of the kind typical, for example, of postal questionnaires. In fact, qualitative interviews are often designed to be close in character to casual conversations.
- Typically, a small number of cases will be investigated in detail, rather than any attempt being made to cover a large number, as would be the case in most quantitative research, such as systematic observational studies or social surveys.
- The analysis of the data involves explicit interpretations of the meanings and functions of human actions, and mainly takes the form of verbal descriptions and explanations. Quantification and statistical analysis play a subordinate role at most.

The two areas of educational research where criticism of quantitative research and the development of qualitative approaches initially emerged most strongly were the sociology of education and evaluation studies. The trend towards qualitative research in the sociology of education began in the UK in the 1960s with studies of a boys' grammar school, a boys' secondary modern school, and a girls' grammar school by Lacey (1966 and 1970), Hargreaves (1967), and Lambart (1976, 1982 and 1997). They employed an ethnographic or participant observation approach, though they also collected some quantitative data on, for example, friendship patterns among the pupils. These researchers observed lessons, interviewed teachers and pupils, and drew on school records. They studied the schools for relatively long periods, spending many months collecting data and tracing changes over time.

The studies by Hargreaves and Lacey became very well-known and widely influential.[3] Their research focus was the effects of streaming on pupils' motivation and achievements, which they claimed became polarized. They argued that streaming increased the motivation and achievements of pupils in the top stream and depressed those of pupils in the bottom stream. They also argued that a similar effect occurred within streams, with the differences in motivation and achievement between those ranked high or low by the teacher being amplified. Although the work of Hargreaves and Lacey contrasted with earlier research in the sociology of education, in being focused on intra-school processes and being largely qualitative in character, it shared the concern of previous researchers in this field with social-class inequalities. Both authors looked at the way in which differentiation and polarization processes within the schools largely reinforced social-class differences in pupils' achievements. This theme has been continued in more recent work by Ball (1981), Abraham (1989) and others.

In the late 1960s and early 1970s other qualitative researchers within sociology broke more sharply with the earlier tradition of quantitative sociological research on education. They argued that this research did not ask deep enough questions about the phenomena it investigated, that it took too much for granted. For instance, it simply assumed that the education that schools dispensed was of positive value. Rather than giving attention to the nature of school knowledge and pupils' learning, it concentrated exclusively on the distribution of educational opportunities. By contrast, these 'new sociologists of education' sought to place the question of who defines what constitutes education on the research agenda. They suggested that the nature of the teaching and learning processes in schools reflects the cultural and, ultimately, the political and economic dominance of some groups in society over others. This change in theoretical orientation in the sociology of education had methodological relevance: it was widely believed that only qualitative research could provide the necessary understanding of the cultural and political processes involved in schooling.[4] Both the example of Hargreaves and Lacey and the writings of the 'new sociologists' encouraged the growth of ethnographic and other forms of qualitative research in the 1970s and 1980s.

Similar developments also took place in curriculum evaluation. As we noted earlier, the original approach to evaluation was one in which the goals of an innovation were specified in terms of measurable features of the situation. Gains in knowledge and changes in attitude on the part of pupils were then assessed by comparing the results of tests before and after the innovation. This approach was criticized on a variety of grounds. The most fundamental criticism paralleled directly criticisms of quantitative research in the sociology of education: that such an approach made false assumptions about the nature of human beings and their social interaction and that, as a result, it could not capture the effects of innovations. There were other criticisms, too. For instance, it was argued that

[3] Lambart's work did not have the same impact at the time, though it anticipated later interest both in the effects of setting and in gender differences in school experience and achievement.
[4] For a more recent example of this argument in the field of research on the experience of ethnic-minority children in British schools see Troyna (1991). See also Hammersley (1992b).

being concerned solely with outcomes, this type of quantitative evaluation failed to document the processes that had led to those outcomes and, consequently, failed to understand *how* they had been produced (Hamilton *et al*., 1977). It was also suggested that the narrow focus of quantitative research meant that unanticipated, but perhaps very significant, outcomes were unlikely to be discovered (Rist, 1984).

As a result of these trends, the amount of qualitative research in education grew considerably in the 1970s and 1980s, spreading beyond the areas of sociology and evaluation. It is worth emphasizing, though, that while they rejected exclusive reliance on quantitative techniques, most qualitative researchers at this time retained a commitment to at least some of the features of what we have referred to as 'the scientific approach'. For instance, there remained a general interest in the testing of empirical claims and a concern to maintain objectivity of analysis.

In recent years this has started to change; with a small, but increasing, number of qualitative researchers coming to question virtually all aspects of that approach. For example, it has been denied that educational research can rely on testing claims against evidence, on the grounds that no evidence can be independent of the presuppositions of the researcher. In part, this argument reflects changes in the philosophy of science in the past few decades, in particular discrediting of the idea that there is a body of data (e.g. direct observation of physical behaviour) whose validity is given to us independently of all theoretical presuppositions. The consensus among philosophers of science today is that all observational data rely on theoretical presuppositions. Not only may these presuppositions be wrong, but which ones are taken to be true varies across cultures and over historical periods. Thus, for example, work in the history of science has shown how, in the past, scientists have interpreted the same data very differently from modern scientists. Moreover, it is argued that this cannot be accounted for simply in terms of our better knowledge of the natural world today.[5]

Some have drawn the conclusion from these ideas that we must simply accept that there are different perspectives on the world, based on different presuppositions, and that a key assumption built into the scientific approach, that research can provide us with conclusive evidence to judge between competing accounts, is false. Thus, some educational researchers reject the whole idea that the goal of educational inquiry can be the production of accurate representations of educational phenomena. Instead, it is argued that the accounts produced by researchers are constructions that reflect their personal characteristics and socio-historical circumstances. It is sometimes inferred from this that these accounts should be judged by ethical, aesthetic, or political, not cognitive, criteria. Another important element of this trend has been to question the distinction between factual and fictional accounts, stressing the reliance of both on similar rhetorical forms and devices. Furthermore, it is suggested by some that the educational value of research reports often depends heavily on those rhetorical devices, and that fictional accounts may be able to fulfil much the same functions. Indeed, they may be more effective than research-based accounts – see, for example, Barone (1990).

One important area of debate concerns whether research and its findings can be objective, and what the term 'objective' means. We can explore this by looking at some of the work of two influential writers on educational research methodology: Elliott Eisner and Denis Phillips (see, for instance, Eisner, 1992, and Phillips, 1990). Eisner criticizes what he takes to be the traditional conception of objectivity underlying much educational research. This treats as the aim what he calls 'ontological objectivity': producing an account that captures the phenomena investigated as they truly are, independently of the researcher. And this is believed to be achievable by means of what he refers to as 'procedural objectivity': the following of a method that eliminates, or at least minimizes, the scope for personal judgement and therefore for subjective bias. Eisner criticizes

[5] For a now classic example of this work see Kuhn (1970).

both these aspects of objectivity. He argues that in order to show whether ontological validity has been achieved we need to have direct access to the area of reality being represented, so that we can compare representation with reality to check that they correspond. This is clearly impossible and, if it were possible, it would make research unnecessary. He adds other reasons in support of this argument: for example, that perception and understanding are always framework-dependent, so that the framework of presuppositions on which we rely allows us to perceive and understand some things, but not others. More than this, the framework plays a role in actually *constituting* what it is we see and understand. From this point of view, knowledge and experience are achievements, products of the transaction between our frameworks of understanding and features of a 'world-out-there' that we cannot know directly. Eisner claims that unwillingness to relinquish the notion of objectivity stems from the feeling that this would leave us without bearings in the world. He argues that this is not so, and that we can and must learn to live with this sort of relativism. He suggests that it does not prevent us using the concept of truth, so long as we understand that what we regard as true depends upon shared frameworks of perception and understanding. While we cannot have knowledge whose validity is certain, we can still judge whether beliefs are more or less sound. Furthermore, we must remember that the literal conception of truth as correspondence only applies to those forms of inquiry directed towards achieving literal truth and that these are not the only valuable ones. He is thinking here of artistic representation as an alternative model.

Phillips adopts what, on the face of it at least, is a contrary position. He explicitly criticizes Eisner, claiming that the relativism which the latter advocates leaves us in a position where we cannot make reasonable judgements between competing empirical claims. He sets out to demonstrate that relativism does not necessarily follow from the absence of some foundation of data whose validity is absolutely certain. He is at some pains to show that the concept of truth is legitimate and desirable, and that so too is the concept of objectivity.

To some extent, what we have here are two writers who, though they address the same issues, do not seem to join in argument; a fact that might be taken to support Eisner's claim that 'when people do not share frameworks, there is no common ground; they cannot understand each other' (1992, p. 14). We can get a sense of what is involved in the disagreement if we recognize that the two authors are criticizing opposite polar positions that each regards the other as exemplifying. To call the target of Eisner's critique 'objectivity' is potentially misleading because, as he points out, that term is used to cover a variety of considerations. We would do better to see him as criticizing what he refers to elsewhere in his 1992 article as 'naïve realism'. This is the idea that all knowledge, to be justifiably referred to as such, must constitute a full representation of the objects known and a representation whose validity is absolutely certain. Furthermore, this view seems to require that knowledge can only be gained by following a procedure that excludes subjective influences and thereby gives direct access to reality. However, it is important to emphasise that Phillips also rejects this position.

By contrast, Phillips takes as his target relativism; but this is not synonymous with the relativism that Eisner admits to; and, for this reason, we shall call it 'extreme relativism'. Extreme relativism is the view that all 'knowledge' is a construction based on a particular framework of presuppositions, that these presuppositions can never be fully assessed because all assessments themselves rely on presuppositions, and that all empirical claims must be treated as equally valid in their own terms. From this point of view, we cannot talk of validity as correspondence to a reality that stands outside of any framework of assumptions, nor of a procedure that provides access to any such reality.

We are not faced, then, with a conflict between two positions each represented by one of these authors, but rather with two authors attacking opposite polar positions that neither of them seems to occupy. Thus Eisner suggests that quantitative educational research is founded on naïve realism. Yet the

philosophical ideas associated with quantitative research have been quite diverse and have included rejection of naïve realism in favour of approaches that seek to avoid all reference to any reality beyond our experience. Indeed, what Eisner refers to as procedural objectivity has been regarded by some quantitative researchers as the only form of objectivity there is, agreeing in this respect with him that this is 'all we can ever have' and that we must 'recognize it for what it is'.

Similarly, Phillips treats Eisner as effectively claiming that any view is as good as any other, that this is what the abandonment of objectivity implies. Yet Eisner clearly does not see his position in these terms. He quotes the philosopher of science Stephen Toulmin to the effect that even in the absence of knowledge that is certain we can still make reasonable assessments of competing claims (Eisner, 1992, p. 15). It must be said, though, that Eisner does not spell out how this is to be done and, in particular, how judgements of validity are to be justified; nor does he address the issue that Phillips raises about whether it is possible to offer rational justification for the selection of frameworks.[6]

This debate between two influential authors indicates the sort of philosophical issues that are at the heart of much discussion about validity among qualitative educational researchers today. Our analysis of them shows that the differences of view are often complex and subtle.

POLITICAL AND ETHICAL CRITICISMS

The debates about the nature of educational research and the scientific approach have not been concerned only with the *validity* of research findings, but also with political and ethical aspects of educational research. For example, in the 1970s and 1980s many educational researchers rejected earlier work in the psychology and sociology of education on the grounds that it had effectively served to preserve the political status quo, rather than challenging it. This was true, it was claimed, even of sociological work concerned with whether working-class children received equality of opportunity, since this research drew attention away from the fact that the educational system serves to reproduce an unequal society. In other words, the focus had been on the *distribution* of education rather than on the functions performed for capitalism by the educational system. The effect of this, it was suggested, was to reinforce the widespread belief in the political neutrality and value of the education offered in schools, when this should have been challenged.

These criticisms symbolized the emergence of a tradition of 'critical' educational research, on this and the other side of the Atlantic. Such research is concerned not just with exposing educational inequalities and the ways in which the educational system reinforces wider *social* inequalities, but also with questioning dominant views about the character and role of education in modern capitalist societies. While initially focused on the reproduction of the social-class structure, this perspective has come to be applied to aspects of inequality previously neglected, notably those produced by sexism and racism. One consequence of this has been an increased amount of research, largely qualitative in character, on women's and girls' experiences of the educational system – see, for example, Deem (1980), Stanworth (1981), Griffin (1985), Weiner (1985), Arnot and Weiner (1987), Weiner and Arnot (1987). Similarly, there has been a growing amount of research looking at the experience of ethnic-minority children in schools – see, for example, Eggleston *et al.* (1986), Mac an Ghaill (1988), Foster (1990) and Gillborn (1990).

At the same time, the feminist and anti-racist movements have also had an important effect on methodological thinking about educational research. Many feminists have argued for a distinctively feminist methodology, characterized for instance by a commitment to taking women's experience more seriously, to

[6] More extensive presentations of these arguments are to be found in Eisner (1991) and Phillips (1992).

practising 'non-hierarchical' forms of research, and to directing research towards the emancipation of women. [7] Similar developments have become evident in anti-racist research (Troyna and Carrington, 1989) and among advocates of critical ethnography.

A useful illustration is an article by Gitlin, Siegel and Boru (1989). This is located firmly within the 'critical' tradition of research on education. But the authors criticize previous work in that tradition for failing to give sufficient attention to methodology; and, in particular, for adopting ethnographic method without taking sufficient notice of methodological arguments among anthropologists concerning both the capacity of ethnography to produce objective accounts of the world, and the way in which all research methods involve political commitments. The first of these criticisms relates to an issue we discussed earlier in connection with the articles by Eisner and Phillips. The second concerns, more directly, the political and ethical aspects of research. What the authors challenge is the separation of what they call understanding and application; they challenge the idea that it is the researcher's task simply to understand events rather than also to participate in them in order to bring about 'emancipatory change'.

There seem to be three reasons for Gitlin *et al.*'s rejection of the distinction between understanding and application. One, hinted at rather than spelled out in any detail, is that being a spectator rather than a participant does not give access to knowledge or at least impairs such access. It must be remembered, however, that they reject the idea that knowledge consists of representations of events that are independent of the researcher, in favour of the view that 'the rightness of educative research is based on the *relation* between normative frameworks established by a dialogical community and the specific practices of the study' (1989, p. 207). This has the effect of collapsing the issue of cognitive validity into the political and ethical aspects of research. The second reason for their redefinition of the task of research is the claim that previous research, even that carried out from a committed leftist position, has not had an emancipatory effect. The final reason is that they believe the division of labour between researcher and researched in conventional qualitative (and other) research to be unethical, since it involves an unequal distribution of power.

On the basis of these arguments, the authors advocate what they call 'educative research', research that is not only committed to bringing about 'emancipation', conceived in terms of egalitarian and democratic forms of social organization, but which also seeks to implement those forms within the research process. In other words, they argue for a kind of research in which researcher and researched collaborate, to the point where the differences between them disappear.

There are a number of questions that might be raised about this argument. For one thing, these authors seem to adopt an even more extreme anti-realist position than Eisner, apparently denying the possibility of knowledge in any sense independent of ideas that prove successful in the political struggle. Symptomatic here is the statement that 'the question is not whether the data are biased; the question is whose interests are served by the bias' (p. 200). The authors also comment that 'clearly a consideration of ethnography's "objectivity" is an attempt to gain legitimacy in relation to the more positivist paradigm' (p. 192), as if this were obviously true and as though (even if it were true) it exhausted the interest we might have in objectivity. Phillips' arguments seem even more relevant here than they were in the case of Eisner.

The other major issue we shall raise about Gitlin *et al.*'s argument relates to their claim that research should be directly concerned with the pursuit of political goals. Most educational research is not so committed, even though all researchers have political preferences (preferences that could bias their findings) and even though research may sometimes have significant political consequences. None of the arguments put forward in support of this redefinition of the purpose of research is

[7] For criticism of the idea of a distinct feminist methodology, see Hammersley (1992c). For responses, see Gelsthorpe (1992), Ramazanoglu (1992), and Williams (1993).

entirely convincing, in our view. That interventionist research of the kind recommended by Gitlin *et al.* will have more impact upon the people studied than conventional forms of ethnographic research is very probable, but whether the effects will be 'emancipatory' is another matter. The authors themselves note that the sort of research they are recommending cannot by itself achieve 'emancipatory change at a societal level' (p. 192). Even beyond this, though, we might want to question the political values on which 'educative research' is based. What is the emancipation promised an emancipation from? From all forms of oppression simultaneously? How could this be achieved? What about differences in view about what constitutes oppression, equality and democracy? Also, we might reasonably ask what concept of education is involved in the idea of educative research. Apparently, it amounts to learning what is necessary to overcome inequality. Many would agree that this is important, but it does not exhaust the meaning of education. Given this, we should ask what other aspects of education ought to be taken into account in educative research. Furthermore, the authors seem to have an excessive confidence that disagreements about such issues can be resolved; and resolved in a just fashion, via dialogue. From a more traditional research point of view, what is proposed by Gitlin *et al.* seems to be a transformation of research into a political campaign and perhaps one directed towards goals that are questionable in terms of both desirability and feasibility.

In discussing Gitlin *et al.*'s argument, as with our earlier discussion of the work of Eisner and Phillips, we have tried to give you a sense of the sort of debate that is currently going on in the field of educational research; in this case about its ethical and political dimensions.

As with critical ethnography, so too in the field of educational evaluation, criticism of quantitative research was, from the beginning, as much concerned with ethical and political issues as it was with the issue of validity. In particular, what was rejected was the hierarchical relationship built into traditional forms of evaluation, with the evaluator claiming to stand above the teachers involved in curricular projects and to assess their work. This concern is exemplified in MacDonald's 'A political classification of evaluation studies in education'. He identifies three kinds of evaluation study:

> *Bureaucratic evaluation*
>
> Bureaucratic evaluation is an unconditional service to those government agencies which have major control over the allocation of educational resources. The evaluator accepts the values of those who hold office, and offers information which will help them to accomplish their policy objectives. He acts as a management consultant, and his criterion of success is client satisfaction. His techniques of study must be credible to the policy-makers and not lay them open to public criticism. He has no independence, no control over the use that is made of his information and no court of appeal. The report is owned by the bureaucracy and lodged in its files. The key concepts of bureaucratic evaluation are 'service', 'utility' and 'efficiency'. Its key justificatory concept is 'the reality of power'.
>
> *Autocratic evaluation*
>
> Autocratic evaluation is a conditional service to those government agencies which have major control over the allocation of educational resources. It offers external validation of policy in exchange for compliance with its recommendations. Its values are derived from the evaluator's perception of the constitutional and moral obligations of the bureaucracy. He focuses upon issues of educational merit, and acts as external adviser. His techniques of study must yield scientific proofs, because his power base is the academic research community. His contractual arrangements guarantee non-interference by the client, and he retains ownership of the study. His report is lodged in the files of the bureaucracy, but is also published in the academic journals. If his

> recommendations are rejected, policy is not validated. His court of appeal is the research community, and higher levels of the bureaucracy. The key concepts of the autocratic evaluator are 'principle' and 'objectivity'. Its key justificatory concept is 'the responsibility of office'.
>
> *Democratic evaluation*
>
> Democratic evaluation is an information service to the community about the characteristics of an educational programme. It recognises value-pluralism and seeks to represent a range of interests in its issue-formulation. The basic value is an informed citizenry, and the evaluator acts as broker in exchanges of information between differing groups. His techniques of data-gathering and presentation must be accessible to non-specialist audiences. His main activity is the collection of definitions of, and reactions to, the programme. He offers confidentiality to informants and gives them control over his use of the information. The report is non-recommendatory, and the evaluator has no concept of information misuse. The evaluator engages in periodic negotiation of his relationships with sponsors and programme participants. The criterion of success is the range of audiences served. The report aspires to 'bestseller' status. The key concepts of democratic evaluation are 'confidentiality', 'negotiation', and 'accessibility'. The key justificatory concept is 'the right to know'.
>
> (MacDonald, 1977, pp. 226–7)

It is not difficult to detect MacDonald's commitment to democratic evaluation here, a commitment that he makes explicit elsewhere in the article.

From a slightly different angle, but still within the field of evaluation, Walker (1978) has criticized both quantitative research and traditional forms of ethnographic research for failing to recognize the rights of informants to have control over the data they produce during interviews, as well as for what he regards as the lack of practical relevance of their findings. It was partly on the basis of arguments like these that it came to be proposed that teachers in schools should become their own researchers, rather than being subjected to research by outsiders, an argument we shall examine in Section 3.

2.3 CONCLUSION

In this section we have looked at some of the debates about the nature of educational research. We examined the influence of the natural sciences as a methodological model and the reactions against it. We saw that for much of the history of educational research the scientific approach was very influential, but that in recent decades criticism has grown, both of quantitative educational research and of the scientific approach itself. Criticisms of quantitative research have taken two forms: arguments about the validity of its findings and about its political and ethical aspects. The growing influence of these criticisms was accompanied by a great increase in the amount of qualitative research, initially in the fields of the sociology of education and evaluation studies, but later across all fields of educational study. At the same time, we saw how the continuing commitment of more traditional forms of qualitative research to key elements of the scientific method has come under increasing challenge. One result of this is that there is now a great diversity of approaches to educational research, many of them at odds with one another.