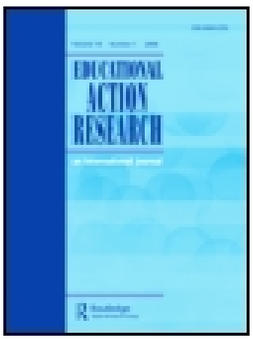

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On the Teacher as Researcher

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ABSTRACT This article sketches the development of the idea that educational research should be integrated with the work of teachers in schools, in the form of the teacher-as-researcher. The arguments advanced in support of this proposal are examined. These consist in part of criticisms of conventional educational research: on the grounds that it is less likely to be educationally relevant and valid than teacher research, and that it is undemocratic and exploitative of teachers. An equally important part of the case for teacher research, of course, is criticisms of 'traditional' teaching, both for the nature of the classroom learning it encourages and for its 'unreflective' character. The conclusion drawn from assessment of these arguments is that, while they have some force, they are not conclusive; and they do not add up to a convincing case for the superiority of teaching-as-research.

In this paper I want to examine an idea that has been widely advocated in recent years: that educational research should be an integral part of the work of teachers in schools rather than an activity carried out on schools by outsiders. This is the idea of the teacher-as-researcher engaging in action research in classrooms or schools (what I will henceforth refer to as teacher research, TR for short). It is an idea that arose from a number of sources, and shares similarities with attempts to reconcile research and action in other fields.[1] It draws on arguments about the nature of research and teaching that have wide significance.

The idea of encouraging teachers to do research on their own schools or in their own classrooms is not a new one. There was a strong teacher action research movement in the United States in the 1950s.[2] Corey, one of its most influential advocates, defines action research as research undertaken by teachers, administrators and others to improve their own practice (Corey, 1949). In this context, action research was strongly associated with the commitment to use scientific method, usually conceived in quantitative terms modelled on the experiment, to solve educational problems; and it was inspired in part by the work of Dewey and the

progressive movement. Dewey believed that scientific recommendations could only be assessed by being applied in practice, and saw the teacher as a research worker testing out educational theory (see Hodgkinson, 1957, pp. 138-9).

In Britain the idea of the teacher as researcher seems to have emerged in the 1960s and 1970s, largely independently of the American action research movement.[3] It arose partly from internally generated curriculum reform within schools (Elliott, 1991a), but also from a shift within the community of curriculum developers and evaluators away from a bureaucratic model in which new curricula were developed centrally by experts, adopted by local authorities, schools and teachers, and assessed by specialised evaluators using quantitative measurement of outcomes. This model was criticised both because it was ineffective in practice and because it was judged to contravene important educational and political values. It was ineffective because often, even when schools and teachers were committed to the curricular proposals, they used them in ways that departed from those intended by the curriculum developers. The result was that although the innovation had effects, perhaps even desirable ones, these were not those that were anticipated and therefore were often not measured. By focussing only on what was intended, evaluators failed to understand what had and had not (and what could have) been achieved. Furthermore, it was argued that this narrow focus reflected an inappropriate conception of human social life, one modelled on the presuppositions about physical phenomena built into natural scientific method. At the same time, attention came to be given to the diversity of perspectives to be found amongst those with an interest in the curriculum development process. The result was the emergence of a variety of new approaches to evaluation.[4]

These changes in perspective led many curriculum researchers to reject one of the basic elements of the bureaucratic model – that teaching involves the specification of objectives to be achieved and the selection of effective means to realise those objectives. More emphasis was placed on the *process* of teaching, as a skilled and locally managed activity. Associated with this was a reassertion of the value of the professional autonomy of individual teachers and renewed emphasis on their key role in curriculum change; this sometimes being located within a wider political framework advocating democracy and/or radical social transformation of some kind.

Curriculum development came to be seen by some, therefore, as primarily concerned with enhancing the professionalism of teachers. It was emphasised that the teacher is (or ought to be) a skilled practitioner, continually reflecting on her or his practice in terms of ideals and knowledge of local situations, and modifying practice in light of these reflections; rather than a technician merely applying scientifically produced curriculum programmes. Given this shift in perspective, the role of curriculum developer and evaluator changed. In many cases, the curriculum researcher now came to be seen as someone charged with

helping teachers to improve their practice through developing their capacities for self-reflection.

An important element of this shift in curriculum studies was the move away from quantitative to qualitative methodology, the latter being adapted from anthropological, sociological and historical research. This was motivated by the concern with processes rather than outcomes, and by the switch in audience from the research community and higher level policy-makers towards teachers and the public generally. Qualitative method, it was argued, could deal better with local circumstances, and presented findings in terms that were accessible and useful to teachers, parents and others. In addition, it was more attuned to the distinctive character of human social life, compared with the previously dominant quantitative methods that had been adopted from the physical and biological sciences (Parlett & Hamilton, 1977).[5]

It seems likely that, in some degree at least, the move within curriculum studies from bureaucratic to professional conceptions of teaching, and from the researcher as developer and evaluator to facilitator, also arose from the application to the researcher–researched relationship of broadly 'progressive' ideas about the teacher–pupil relationship; ideas that were at the heart of many of the early curriculum development projects. The latter were often concerned with encouraging more discovery-based or inquiry-led approaches to teaching, where the role of the teacher was to facilitate learning rather than to transmit knowledge. It is easy to see how such ideas would raise doubts about the validity of a relationship between curriculum developer or evaluator and teachers that seemed closer to the traditional teacher–pupil relationship than to that which was embodied in the curriculum projects being promoted and assessed. There is a sense here in which history was repeating itself. In a critical evaluation of educational action research in the United States, published in 1957, Hodgkinson remarked that action research is a direct logical outcome of the progressive education movement: "After showing children how to work together to solve their problems, the next step was for teachers to adopt the methods they had been teaching their children and learn to solve their own problems co-operatively" (Hodgkinson, 1957, p. 139).

One of the most important figures in these developments in the field of curriculum research in Britain was Lawrence Stenhouse. At the core of Stenhouse's work is a view of the learner, whether child or adult, scholar or teacher, as producing knowledge, and knowledge which is always tentative and open to debate. This reflects commitment to a particular conception of the essential character of humanity, a form of humanism. Stenhouse used at least two models for this ideal, which he saw as corresponding in their basics despite superficial dissimilarities. The first was the humanist scholar (notably but not exclusively the historian). The second was the natural scientist, conceptualised in the terms made popular by Popper (Stenhouse, 1975, pp. 124-5; Stenhouse, 1983, pp. 17 & 19).[6] Stenhouse argues that we are constrained by assumptions and habits built up in the past and that it is the business of education to make us freer and more creative

(Stenhouse, 1975, p. 82). He applied this ideal to pupils in his advocacy of inquiry learning, exemplified in the discussion-based lessons encouraged by the Humanities Curriculum Project (HCP). He also applied the model to the teacher, not just in that the latter was to take the role of a senior learner rather than of an intellectual authority in these discussions, but even more importantly in that he conceived teaching as a process in which the teacher learns how to improve her or his teaching. Furthermore, while Stenhouse denies that there is an epistemological base for the discussion-based approach in HCP (Stenhouse, 1975, p. 93), it seems clear that his position does involve epistemological presuppositions: he sees inquiry learning as teaching the epistemological lesson that knowledge is a human product, not simply a reflection of the world (Stenhouse, 1983, pp. 179-81). For him this seems to have been as important as, if not more important than, the more substantive knowledge which forms the school curriculum.

As regards the teacher as reflective practitioner discovering how to improve her or his teaching, Stenhouse's ideas draw on Hoyle's (1970) 'extended professionalism' but go beyond this to involve:

- the commitment to systematic questioning of one's own teaching as a basis for development;
- the commitment and the skills to study one's own teaching;
- the concern to question and to test theory in practice by the use of those skills;
- readiness to allow others to observe your work and to discuss it with them on an honest, open basis.

(Stenhouse, 1975, p. 144)

For Stenhouse, then, the professionalism of the teacher is based on expertise in seeking to understand the world, including one's own practice, not on superior knowledge already gained (Stenhouse, 1983, p. 185). Thus, curricular ideas are to be tested through action, they are the continually developing product of invention and reflection. Closely related to this is the notion of the teacher as artist (Stenhouse, 1983, p. 157).

On the basis of these ideas, Stenhouse criticises approaches to curriculum development and evaluation that run counter to this model of the teacher, for example by specifying curricular objectives to be pursued. He also criticises research that studies classroom interaction for purposes extraneous to the improvement of the teaching in that classroom as irrelevant and/or ineffective (Stenhouse, 1975, chapter 6). It is not clear how far this criticism is intended to run. It is directed primarily at curriculum research and evaluation, though it applies to other kinds of educational research as well. Yet Stenhouse does not seem to extend it to theoretical or basic research. Thus, at one point he envisages a division of labour between teacher researchers and professional researchers in which the existence and role of a more theoretically oriented form of research is preserved. Here teachers would carry out case studies on the basis of the collaborative development of a common language, while professional researchers would seek to 'master this material and scrutinise it for general

trends'. And Stenhouse comments that it is out of this synthetic task that general propositional theory can be developed (Stenhouse, 1975, p. 157).

Many subsequent advocates of TR have tended both to extend the role of the teacher as researcher and to reduce the role of the non-teaching educational researcher to a subordinate one, at most. An example is Carr & Kemmis's book *Becoming Critical* (1986). They draw on critical theory, taking over Habermas's typology of approaches to inquiry, in which each approach is constituted by different fundamental interests. First there is research based on a technical interest, in which the researcher produces knowledge that is then applied to practice. The natural sciences conform to this model being concerned with the instrumental control of nature. And, like Habermas, Carr & Kemmis claim that this technical interest has been overextended in the case of much quantitative research in education, which treats human relationships as subject to bureaucratic manipulation and control. The second form of inquiry, the interpretive approach, is based on a practical interest. Here the aim is to understand and describe the perspectives of the people involved in the events studied. This is more appropriate to the investigation of human social life than the instrumental model, Carr & Kemmis argue, but it fails to take adequate account of the ways in which practical thinking and practice may be distorted by ideology. It is suggested that what is necessary, therefore, is a critical approach. This shares much in common with the practical approach, but at the same time uses science to understand how practical perspectives may be ideologically distorted. Above all, rather than being committed to human understanding alone it is directed towards bringing about emancipation, it is aimed at the construction of a rational, just and democratic society. Indeed according to Carr & Kemmis it should exemplify this in its practice. They recognise different forms of action research, but see emancipatory action research as the superior form and claim to detect a historical shift in this direction.[7]

The work of Stenhouse, Carr & Kemmis and others has provided the basis for a sustained critique of conventional educational research, and has led to widespread advocacy of collaborative and practitioner research. And while it is not always clear whether the latter is intended to replace the former, this often seems to be implied by the arguments employed. In the remainder of this paper I want to examine these arguments as they relate both to research and to teaching.

Criticism of Conventional Educational Research

We can identify several criticisms of conventional educational research deployed by advocates of TR, though these are given varying emphasis by different critics:

- That it is largely irrelevant to the practical concerns of teachers.
- That it is often invalid because it is separated from the object that it claims to understand: notably, the classroom practice of teachers.

- That it is undemocratic in that it allows the views of educational researchers to define the reality in which teachers are forced to work.
- That it amounts to a process of exploitation.

Irrelevance

The claim that educational research is irrelevant to the work of teachers is often supported by the argument that teachers do not read educational research and that even when they do they find it of little interest (Burgess, 1980, p. 171; Kemmis, 1982, p. 11; Hustler et al, 1986, p. 8). It is almost certainly true that most teachers do not read much educational research; indeed most of them probably read it only when it is set as reading for in-service courses. However, it is not clear that this is because they have found it irrelevant and uninteresting. Pressure of time is likely to be more important. And even where there is a negative reaction, we must be aware that, as Cope & Gray (1979, p. 241) remark: "(...) genuine confusion and uncertainty may be mistaken for suspicion and hostility".

Furthermore, these empirical arguments about teachers' responses to educational research cannot provide the basis for a judgement about the relevance of the findings of educational research. After all, how people respond depends on what they expect and want; and those expectations and desires may be well- or ill-founded. For instance, teachers may expect research to provide solutions to the problems that face them in the classroom. Indeed, educational researchers sometimes present their work as solving those problems; doing this perhaps out of a desire to help, but also no doubt because this seems to be increasingly necessary to obtain research funds. But there are good reasons to believe that research cannot routinely solve teachers' problems; certainly not in the sense of providing a set of behavioural rules which, if followed, will avoid or resolve them. There are at least two reasons for this.

First, even if we research a problem we are by no means guaranteed a solution. Progress in research is often slow or non-existent, even in the natural sciences. There is no scientific method that guarantees results. Often a problem is investigated for a long time without much being achieved in practical terms, and discoveries that are made may owe as much to good fortune and to intuition as to method.

Second, the circumstances that teachers face in their work and the considerations that must inform their decisions are diverse and variable, and therefore seem unlikely to be amenable to action in accordance with an abstract set of rules. Here I am adopting the view that sound practice cannot amount to the straightforward *application* of theoretical knowledge, but is an activity that necessarily involves judgement and draws on experience as much as (if not more than) on scientific knowledge.[8]

However, that educational research cannot provide solutions to practical problems does not imply that it is irrelevant to practice. Information may be relevant and useful to teachers without providing them with solutions to their problems. I do not pretend that there are no

difficulties with the provision of such information. For example, if the circumstances in which individual teachers work are highly variable, how can generalisations about such situations, or theories about them that abstract away the particularities, be of value? These problems are not easy to deal with (Hammersley, 1992, chapters 5 & 11), but they face the teacher-as-researcher as well as conventional researchers; at least to the extent that he or she is concerned with generalising from past experience to the future and/or with developing collective professional knowledge.

Of course, what I have said here may be accepted, but the argument for TR still pursued by the suggestion that conventional researchers tend to investigate problems of their own formulation rather than those of teachers.[9] This, it seems to me, is only partly true; and even to the extent that it is true it is not necessarily a negative feature of educational research. For one thing, there seems to be an assumption here that the value of the products of educational research resides solely in their value for teachers. For example:

> *(...) the value of [researchers'] contributions lies in the extent to which they support the practical judgement of teachers and increase their capacity to reflect systematically upon the complex situations they confront. (Elliott, preface to Nixon, 1981, p. 1)*

Yet, teachers are not the only audience for educational research, there are other sorts of practitioners involved in the education system as well. Furthermore many of the topics that educational research has focussed on – the effectiveness of different teaching styles, the consequences of class size for pupil performance, the effects of streaming and banding, the potentially self-fulfilling character of teachers' expectations, the prevalence of sexism and racism etc. – are of concern to many teachers. And, over and above this, they probably should be of potential concern to all teachers. What teachers *ought to be* concerned about cannot be decided by what they are *in fact* concerned about. Teachers do not have any exclusively privileged position in deciding what are important educational issues. Thus we should not dismiss the topics pursued by educational researchers merely because no teachers are concerned with them, even if this is true.[10]

In my view, then, the case for the irrelevance of the findings of conventional educational research has not been established. It is clear, too, that the issue of relevance is more complex than it might at first appear. This is not to say, of course, that it is not an important issue and that the relevance of educational research could not be improved.

Invalidity of Educational Research

It is sometimes claimed not just that the findings of educational research are irrelevant, but also that they are often invalid because they are carried out by outsiders.[11] There is only limited force in this argument.

Sometimes it is suggested that only those actually involved in a social situation can truly understand it. This argument is founded on the idea

that direct experience of, or closeness to, a phenomenon gives one valid knowledge of it. Ironically, this is an argument that has often been used by qualitative researchers in claiming the superiority of their methods, and particularly participant observation, over quantitative work. In doing so, of course, they open themselves up to the criticism that because they are not as close to the situations they study as are the actual participants in those situations, their knowledge is less likely to be valid than participants' knowledge. In my view, however, while closeness to and involvement with the phenomena being investigated can be of value, the epistemological assumption that seems to underlie this argument – that knowledge comes from contact with reality – is unsound. This is because all knowledge is a construction: we have no direct knowledge of the world.[12]

There are, though, some more specific and defensible methodological arguments on which the claim that practitioners are best able to understand their own activities and situations could be based:

- That teachers have access to their own intentions and motives, thoughts and feelings, in a way that an observer does not, and so have a deeper understanding of their own behaviour than an outsider could ever have.
- That the teacher-researcher will usually have long-term experience of the setting being studied, and will therefore know its history first-hand, as well as other information that may be required to understand what is going on. It would take an outsider a long time to acquire such knowledge, indeed this may never be possible.
- That the teacher already has relationships with others in the setting and can use these in order to collect further data. Once again, an outsider would need to spend a considerable time in the field building up such relationships.
- That because teachers are key actors in the settings studied in educational research, they are in a position to test theoretical ideas in a way that a mere observer can never do.

Each of these arguments points to an advantage that insiders may have in the sources of information available to them, and I think they have some force. However, for each of the advantages listed above there is a countervailing disadvantage:[13]

- People can be wrong even about their own intentions and motives; self-knowledge is not immediately given and therefore valid. Furthermore, people can deceive themselves about their intentions, motives etc. Indeed, they may sometimes have an interest in such self-deception where an outsider has less reason to prefer one account over another. Also, understanding often requires seeing a phenomenon in its wider context, and this may be particularly difficult for those closely involved in it. It is for this reason that ethnographers stress the importance of maintaining some (at least intellectual) distance from the activities they observe.

- The information that practitioners have about the situations they operate in is a product of experience deriving from a particular role (or a limited number of roles) that will have given access to some sorts of information but not to others. In particular, their understanding of the perspectives of other categories and groups of people involved in the setting may be superficial or distorted. An outside researcher may be able to tap a wider range of sources of information than an insider, and will usually be more able to process that information for the specific purposes of inquiry, and (to some extent at least) in an explicit way that allows for checking by others. The knowledge teachers have will have been processed implicitly and to a large extent on the basis of practitioner concerns, and may involve misconceptions that serve, or are relevant to, those concerns.
- Again, the relationships available to the practitioner will exclude as well as include, and may not include what is necessary for research purposes. Furthermore, some of those relationships may place constraints on the inquiry (for example on what can be observed, what questions can be asked, what conclusions can be published etc.) that an outside researcher would be able to avoid. For example, a teacher doing research in the school in which he or she works is likely to operate under more serious threat of control by senior management or governors than is an outside researcher. This may even extend to what lines of investigation can and cannot be pursued.
- What is required to test theoretical ideas may well conflict with what is needed for good practice. (To deny this is to conflate what is true with what works in a particular situation.) The practitioner may therefore be faced with a dilemma, and as a result may not be able to test her or his ideas. In any case, quasi-experimentation is only one possible research strategy, one with characteristic disadvantages (notably potentially high reactivity) as well as advantages.

In short, I do not believe that being an established participant in a situation provides access to valid knowledge that is not available to an outside researcher. In general, the chances of the findings being valid can be enhanced by a judicious combination of involvement and estrangement. However, no position, not even a marginal one, guarantees valid knowledge; and no position prevents it either. There are no overwhelming advantages to being an insider or an outsider. Each position has advantages and disadvantages, though these will take on slightly different weights depending on the particular circumstances and purposes of the research.

Educational Research as Undemocratic

'Democracy' is a term that can mean many different things, but what often seems to be assumed in criticisms of educational research as undemocratic is some notion of participatory democracy. The complaint is that the voices of educational researchers are heard at the expense of those of teachers.

This is presumably the sense in which Elliott describes some educational research as involving the 'disenfranchisement' of teachers (Elliott 1988, p. 157), and what Nixon (1981, p. 9) has in mind when he refers to the 'paternalism' of traditional educational research. Rudduck (1987, p. 5) hints at the same point:

> *(...) there is an urgent need to analyse the structures that govern the production and distribution of research knowledge and the right to engage in research acts. Teacher research is, at one level, a means of countering the hegemony of academic research which teachers are often distanced by.*

It is claimed that researchers are in a position to publish their views about the nature of education, schooling, teachers and pupils in a way that teachers are not; and that, as a result, researchers contribute to defining the reality in which teachers work in a much more powerful way than teachers can themselves.

This argument seems to me to suffer from several defects. First, it ascribes an implausible amount of power to the written word in relation to teachers and their work situation. While teachers have by no means total control over what goes on in the classrooms and schools in which they work, their power in these domains is substantial, and is certainly far greater than that of most outside researchers. Furthermore, the influence of research on the local and national policies that shape schools is extremely limited. If this were not so, the educational reforms of the late 1980s would not have occurred, since they involve assumptions that run counter to the results of most research over the previous thirty years (Gipps, 1993).[14]

Beyond this, though, I think the model of participatory democracy presupposed by this criticism is open to challenge. In everyday life we do not treat everyone's opinions on all topics as of equal value, and therefore as worth hearing; and with good reason. We judge the likely validity of views on a variety of grounds, and among these we certainly take account of their source. We assign certain sources of information a degree of intellectual authority on particular sorts of topic, on the grounds that there is reason to believe that they are less likely to be subject to error of significant kinds. In the case of research, this authority derives from the fact that it is held to be governed by norms of systematic investigation and rigorous analysis. Of course, this authority is fallible and should be recognised to be so; and it is limited to particular areas and types of issue. Furthermore, researchers are not the only ones who can legitimately claim intellectual authority. The same is also true of teachers, on the grounds of their first-hand experience in schools and their understanding of what is involved in the process of education. That, surely, is a crucial element of what it means for teaching to be a profession. It is true that the intellectual authority of research has sometimes been exaggerated in comparison with that of teachers and other practitioners; but this should not lead us to deny the intellectual authority of research, simply to treat it more circumspectly.

Educational Research as Involving Exploitation of Teachers

The final criticism I will consider in this section is to the effect that conventional research is exploitative, in that it serves the interests of researchers rather than those of the people studied:

> *(...) much educational research, both in principle and practice, remains an activity indulged in by those outside the classroom for the benefit of those outside the classroom. (Nixon, 1981, p. 5)*

One point that it is important to make in response to this is that researchers typically have to request and negotiate access to the settings and groups they study, and this may be blocked at any point. Of course, the extent to which the people studied are able to prevent access by researchers will depend on their position in society generally, and in the particular setting, and on who (if anybody) is sponsoring the research. Thus, when (as is common) a researcher negotiates access to a school via the headteacher, teachers may feel pressure to co-operate. However, it is rare, I suspect, for participants to be forced into co-operation in this manner; there are usually ways in which they can be less than co-operative without incurring the wrath of their superiors (and it is unusual for superiors to be very strongly committed to research). In any event, most educational researchers would respect the wishes of subordinates to refuse access. More often than not, I suggest, researchers are in a relatively weak position *vis-à-vis* most of the people they study, in terms of gaining access to sites and to information in order to do their research. This is not a position that facilitates exploitation.

Very often the charge that researchers exploit teachers amounts to the claim that the sole, or primary, function of research is to further the careers of researchers. Of course, there is no doubt that some researchers (like some teachers) are motivated primarily by careerism; but it does not follow from this that even what *they* produce is of no value. Fortunately or unfortunately, what is of value does not always spring from good intentions; nor do the latter guarantee beneficial results. There is an important difference between the motives that individuals may have for becoming researchers and the function of research as an institution. In many ways this argument returns us to the question of relevance, which I discussed earlier.

Another element of the charge of exploitation is that researchers simply take over the knowledge of teachers and present it as their own. Thus, Carr & Kemmis talk of conventional educational research as expropriating the experience and work of teachers (1986, p. 162). However, while there may be a legitimate question in the case of any study about the 'value added' over and above what teachers already know, anybody who has been involved in research will realise that there is always a considerable amount of work added. The value of that work cannot be easily measured,

but of course exactly the same is true of the contribution that teaching makes to children's learning (Lortie, 1975).

Criticism of Traditional Teaching

Advocacy of TR does not just involve criticism of conventional educational research, but also of traditional conceptions of teaching:

> *(...) it seems probable that a teacher can assume the role of a researcher, but that this will be possible only in an 'open' classroom (...). (Stenhouse, 1975, p. 155)*

In many ways TR is an extension of some of the ideas of the progressive and radical education movements of the 1950s, 60s and 70s. In particular it is based on a rejection of what has come to be called transmission teaching, a form of pedagogy which presupposes that education involves the transfer of knowledge and skills from teacher to pupils. At the same time, it involves a rejection of what Elliott (1991a) calls the craft culture of teaching, in which teaching is treated as an activity whose character is fixed and known. It is argued that traditional teaching should be replaced by a form of pedagogy that is closer in nature to research; and this is proposed on epistemological, pedagogic and/or political grounds.

There are two aspects of the inquiry-based conception of teaching, then. The first relates to the learning in which teacher and pupils engage in the classroom, dealing with substantive curricular topics. The second concerns what we can call the process of practical inquiry, in which the teacher reflects on and modifies her or his classroom practice. In relation to the first, TR involves advocacy of learning as inquiry, in relation to the second a conception of teaching as an activity that should be subjected to continual monitoring and improvement. Discussions of TR vary in how much emphasis they give to these two aspects, though generally there is more emphasis on the second than the first. I shall look at each in turn.

Learning as Inquiry

Associated with TR is a minimisation, if not a denial, of any fundamental difference in role between teacher and pupil. Thus, Stenhouse sees both pupils and teachers as researchers. At the same time, though, TR is dedicated to extending the professionalism of teachers by involving them in research. In short, advocates of TR seem to combine elements of what can be broadly described as progressivism with a commitment to teacher professionalism. We must ask whether these two tendencies are mutually compatible, and also whether TR offers a convincing account of the nature of learning.

The first issue can be dealt with more rapidly than the second. There seems to be a tension, to say the least, between the promotion of teacher professionalism by advocates of TR, on the one hand, and their playing down of the difference in role between teacher and taught on the other. Of

course, how sharp this tension is depends on the extent to which the minimisation of differences between teacher and student is carried and the form it takes. Advocates of TR are often not very clear about this, and no doubt they differ considerably in their views about it. For these reasons we can do little more than point to the problem here.

The criticism of traditional teaching that is implicit, and sometimes explicit, in TR centres on the treatment of knowledge and of pupils by the teacher. First, there is rejection of the assumption, said to be built into conventional forms of teaching, that knowledge is something produced elsewhere by experts whose validity is certain. Stenhouse, in particular, emphasises the tentative and personal character of all knowledge. He does not deny the role of specialist research communities in producing knowledge (albeit knowledge that must be tentative in its status), but he emphasises that what should take place in the classroom is a collective exploration of issues into which knowledge from outside would be fed, and in a way that does not take its validity for granted. Furthermore, particularly on issues about which there is no general consensus, the discussion should be open-ended, not guided by the teacher to some foregone conclusion. More than this, no intelligible conclusions should be ruled out by the teacher.[15]

Despite a personal preference for this mode of pedagogy, I believe it is a mistake to see it as making learning a form of inquiry. There may often be great value in putting children and students in situations that are analogous in key respects to those of scientists or historians, both because of what this can teach them and because it may increase their motivation. However, this remains a simulation; as those who are involved are often only too aware (Atkinson & Delamont, 1976). Indeed, that it is a simulation is what allows it to be a fruitful learning experience. By setting up the parameters of the situation in particular ways, the tasks facing students can be made both manageable and fruitful given the time, skills, knowledge and other resources available to them. In this respect, even in discovery-based approaches the teacher remains a teacher rather than simply a senior learner (as in Stenhouse's formulation). And, contra Stenhouse, the teacher's authority in this respect must be recognised by learners. A teacher must be 'an authority', not just 'in authority'.[16]

More than this, though, at the root of Stenhouse's ideas about inquiry learning, and indeed of those of some other advocates of TR, there seems to be a conception of inquiry as completely open and 'democratic', in which nothing is fixed, everything is and should be open to question and investigation. And yet the import of much recent work in the history and philosophy of science has been to stress the extent to which, and respects in which, scientific research is relatively closed, in which its pursuit depends on much being taken for granted until further notice. This is one of the messages, for example, of Kuhn's book *The Structure of Scientific Revolutions* (1970), a message that has tended to be overlooked by many social scientists.[17] In short, the advocacy of inquiry learning, by

Stenhouse and others, may be based on false assumptions about the nature of inquiry.

Teaching as Practical Inquiry

The other aspect of the criticism of traditional teaching by advocates of TR is that concerned with the attitude that teachers adopt towards their classroom practice. Again, I want to question both the extent to which teaching should be seen as a form of inquiry and the model of inquiry assumed.

There is, of course, a sense in which teaching, as a form of practical activity, does involve inquiry. When faced with a problem in their work, teachers may collect and process information about it with a view to finding out why it arose and how it can be handled. This may be done on-the-spot in the classroom or later when there is a respite. Similarly, teachers may sometimes reflect on their work in a less problem-oriented way, asking questions of a kind that are similar to those which preoccupy the various social science disciplines and philosophy. It is not unreasonable to see this too as a form of inquiry, though it may differ from what a researcher would do in tackling the same questions.[18]

Two points are worth making about this. One is that inquiry in this sense is by no means restricted to teachers. From this point of view, we are all researchers, to one degree or another, in the various roles we play. In fact, interpreting inquiry in this way, it becomes difficult to distinguish it from human perception and cognition in general. Consequently, it is not clear how this concept of inquiry can provide the basis for an extension of teacher professionalism. Of course, to some degree what is involved in TR is a desire to make this kind of everyday inquiry amongst teachers more systematic and rigorous. This may be valuable, but caution is required. First, as I noted earlier, reflection and inquiry, however 'systematic' and 'rigorous', are not guaranteed to produce advances in useful understanding. The outcome of all research is uncertain. Furthermore, the products of systematic inquiry will not necessarily be better than the presuppositions built into traditional ways of doing things. It is a modernist fallacy to assume otherwise.[19] Second, the desirability of reflection and inquiry on any particular occasion is a matter of judgement. They are not automatically of value. For one thing, inquiry involves opportunity costs: it takes time and resources that could be used for other things.[20] Moreover, there seems to be implicit in TR a conception of rational action that is highly intellectualist in character, as if the rational response to a problem is always to seek to resolve it through inquiry. This is by no means always the case (Lindblom & Cohen, 1979), and especially not given that teachers operate under great pressures of immediacy and complexity (Jackson, 1968; Doyle, 1977).

Another danger is that the conception of rigour that is applied to teachers' practical inquiry by some advocates of TR is derived from disciplinary research and may not be appropriate. In the context of different

activities, for example research as against teaching, different things will be treated as fixed and as open to question, and often quite rightly so. And this will be related to different evaluations of the costs of various sorts of error. This raises a paradoxical possibility: that rather than TR being an extension of teacher professionalism at the expense of researchers, as I suggested earlier, in practice it could represent a form of researcher imperialism: the inappropriate imposition of research considerations on the practice of teaching. There is a hint of this when Carr & Kemmis (1986, p. 2) suggest that the professional development of teachers requires that they adopt "a research stance" to their teaching; or when Stenhouse (1975, p. 142) proposes "an educational science in which each classroom is a laboratory, each teacher a member of the scientific community". Part of the appeal of TR is probably that it gives teachers access to a high status label for their work. Given the extent to which teaching as an occupation has been degraded in status terms, coming to see oneself as not just a teacher but a researcher could be appealing. Indeed, one can see it as a professionalising strategy, as the advocates of TR clearly do.[21] However, it is worth noting that this strategy effectively involves at least an acknowledgement of the low status of teaching, as conventionally understood, if not a reinforcement of it. In my view we should be concerned instead with raising the status of teaching as an activity directly, rather than seeking to do so by appeal to the status of research (whose status is, in any case, equivocal).

Finally, while some elements of teaching may constitute a sort of inquiry, there is much more to teaching as an activity than these, and the other parts ought to be valued more highly. There are skills involved in managing classroom relationships, in diagnosing learning difficulties, in knowing when to press on with an activity and when to call a halt etc., that are not in any simple sense inquiry skills. I suspect that it is not so much that advocates of TR overlook these other aspects of teaching, as that they believe that for teaching to be rational it must be founded on principles that have been subjected to systematic reflection and justification, and which form a rationally comprehended whole. Carr & Kemmis (1986) come close to this in the following, despite their qualifications:

> *(...) a primary task for any research activity concerned to adopt a scientific approach to educational problems is to emancipate teachers from their dependence on habit and tradition by providing them with the skills and resources that will enable them to reflect upon and examine critically the inadequacies of different conceptions of educational practice (...). This does not mean that 'practical' ways of thinking must be abandoned in favour of some 'theoretical' mode of thought. What is being abandoned is an unreflective attitude so that a more critical, scientific attitude can be adopted towards established educational creeds. Hence, science does not replace existing theories of educational practice so much as improve them, by subjecting the beliefs and justifications which sustain them to criticism. For it is only by so*

> *challenging current educational certainties that the interpretations and judgements of educators will become more coherent and less dependent on the prejudices and dogma that permeate unreflective educational thinking. (Carr & Kemmis 1986, p. 124)*

In a similar way, Stenhouse (1983, p. 158) argues that much teaching is habitual and that what must be developed are cultural habits that "we can defend and justify". Yet the idea that to be rational, desirable etc. practices must have been subject to reflexive examination and proven to be justified is by no means obviously true. Indeed, it is a point of view that has been rejected even as it applies to research (Tully, 1989). There are good reasons to believe that no practice can be founded on explicitly formulated and justified assumptions. As Wittgenstein argues, at the bottom of any practice is action not knowledge (Wittgenstein, 1969; Morawetz, 1978).

Furthermore, what is involved sometimes in TR is not just an overly intellectualist conception of teaching that extends teacher professionalism into the realm of research, but also a proposed transformation of teaching in other directions as well. One of the most extreme examples of this is again to be found in the work of Carr & Kemmis (1986). They see critical action research as effectively part of a counter-hegemonic struggle designed to transform society in the direction of participatory democracy, which they regard as the most rational form of political and social organisation. Here the role of the teacher is extended much further than in the case of Stenhouse. He or she becomes a member of an expanding action research community, incorporating parents and others, that is committed to transforming society:

> *Action research can thus establish conditions under which it can identify and expose those aspects of the social order which frustrate rational change, and provide a basis for action to overcome irrationality, injustice and deprivation. It does so by creating conditions in which the self-critical communities of action researchers commit themselves to rational communication, just and democratic decision-making and access to an interesting and satisfying life for all. (Carr & Kemmis, 1986, p. 197)*

The authors themselves describe this proposal as utopian, but they claim that there is no justifiable alternative (Carr & Kemmis, 1986, p. 223). It is certainly utopian in the sense of being of doubtful feasibility, but whether it is utopian in the sense of being desirable is another matter; and Carr and Kemmis provide little explicit argument in support of that claim.

Conclusion

In this paper I have examined the idea that educational research should take the form of teachers carrying out research in their classrooms and schools, this being seen not as an extra activity added on to their teaching but rather as a transformation of that teaching. In the first part of the paper

I argued that while teacher research can be useful, it does not substitute for educational research of a more conventional kind. I looked at each of the arguments directed against conventional research: that it is irrelevant to practice, that it is invalid, that it is undemocratic, and that it involves exploitation of teachers. In each case I argued that these are not convincing.

In the second part of the paper I looked at the other side of TR: its implications for teaching. I suggested that it represents a broadly progressivist critique of traditional teaching, yet that there seems to be a potential conflict between this and the conception of TR as extending teacher professionalism. I examined the two respects in which TR portrays teaching as a form of inquiry: as discovery learning or discussion-based lessons in the classroom, and as a form of practice involving and perhaps founded on critical reflection and inquiry. I argued that in neither respect can teaching be usefully regarded as isomorphic with inquiry. While simulation of inquiry is one useful technique that teachers may use, it is only one of many, and its value is crucially tied to the fact that it is a simulation. Similarly, I suggested that while, like other activities, teaching does involve processes of reflective inquiry, these often, and rightly, take a different form from conventional educational research. Furthermore, they by no means exhaust what is involved in teaching. Nor is the idea that teaching must be fully self-reflexive, forming a coherent whole founded on explicit and justified principles, a convincing one.

It has not been my intention in this paper to argue that teachers should not engage in reflection and inquiry. Far from it. To some degree, and in some forms, this is likely to be of value from both a practical and a research point of view; though it must be said that the space for it in the lives of teachers today is probably even less than it was in the past. Rather, my aim has been to counter the proposal that the roles of teacher and educational researcher should be integrated, which is implied by much advocacy of TR. In my view this is undesirable from the point of view of both research and teaching.

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Notes

[1] Similar ideas are to be found in applied anthropology (van Willigen, 1986), 'new paradigm' research in social psychology (Reason & Rowan, 1981), in feminist methodology (Mies, 1983), in some areas of industrial sociology (Gustavsen, 1986) and of management studies (Torbert, 1983), and in the field of adult education and development studies (Hall et al, 1982; Latapi, 1988).

[2] Norris (1990) traces the idea of the teacher-as-researcher even further back, to the early work of Ralph Tyler.

[3] The American movement was part of a broader tradition of action research that is still influential in other fields, see for example Argyris et al (1985, chapter 1). An early article in British sociology of education advocating teacher research, which was influenced by the work of Argyris, seems to have had little impact in that field or elsewhere (Bartholomew, 1973). However, Kemmis (1988) suggests that there may have been a link between the American movement and developments in Britain via the influence of the Tavistock Institute in London. For a useful discussion of the British teacher as researcher movement, see (May 1982).

[4] See Hamilton et al (1977), Simons (1987) and Norris (1990). Given my focus here on TR, I will not be giving attention to the changes that resulted in the field of educational evaluation. See Elliott (1991b) for a useful discussion of the relationship between democratic evaluation and the teacher action research movement.

[5] In this respect recent versions of TR contrast with the older American action research tradition, which as I noted relied on a more traditional quantitative conception of research method. This difference parallels changes in educational research generally, and in the social sciences as a whole, where quantitative method has come under increasing criticism and qualitative method has become more widely advocated and adopted.

[6] Skilbeck (1983) sets Stenhouse's humanistic methodology in a wider context.

[7] John Elliott takes a similar view to Carr & Kemmis in some respects, balancing the idea that teachers must be empowered to investigate their own practices and circumstances with a recognition of the cultural and social constraints on the development of such investigations. However, he criticises the critical research model for its privileging of the position of the researcher and failure to recognise the scope for radical reconstruction within the practical tradition (Elliott, 1988 and 1991a). There are still other variants of TR; some of which emphasise the professional development of teachers more in terms of their personal development, see for example Whitehead (1989), McNiff (1992; 1993).

[8] This is an idea to be found in much recent writing about education, for example Schwab (1969), Schön (1983; 1987), Hirst (1983), and Carr (1987). It is worth emphasising that, contrary to what is sometimes implied, conventional educational researchers do not typically assume that practice is the mechanical application of research findings. Some come close to this, for example Lieberman in his discussion of *Education as a Profession*; though even he recognises that teachers may need to engage in practical research themselves (Lieberman, 1956, pp. 192-5). Others, for example Gage (1963) and Van Valen (1962), see a continuum between educational research and the practical inquiries carried out by teachers.

[9] See for example Carr & Kemmis (1986, pp. 108-9 & 117).

[10] Kelly (1985, p. 144) makes the same point, in the course of advocating action research. She comments: "The issues which teacher researchers study tend to be

questions of classroom management rather than socially or sociologically important problems. I do not accept that action research should be restricted to the questions which are important to practitioners, or that the practitioners' viewpoint is necessarily 'right'". Carr & Kemmis formulate their argument in terms of educational problems arising out of or being grounded in educational practice. Yet, given that they share Kelly's 'critical' orientation, it is not clear what would and would not count as an educational problem for them, or even what are legitimate grounds for deciding this.

[11] See, for example McNamara (1980) and Kemmis (1988, p. 45). See also Hammersley (1981).

[12] For a discussion of what I take to be the implications of this point, see Hammersley (1992, chapter 3).

[13] See Burgess (1980) for a discussion of some of these problems.

[14] Of course, one might argue that present times are exceptional, that at other times educational research has been more influential on policy. This is true to a degree, but I think it is clear that research has rarely if ever been the decisive factor in shaping educational policy, and it is probably a mistake to think that it ever would be.

[15] It should be noted that Stenhouse, who is one of the most explicit of the advocates of TR on this issue, does not claim that discussion-based or inquiry-based lessons are the only element of teaching. Indeed, he argues that there is even a role for transmission of factual information.

[16] For a discussion of this distinction and its significance, see Flathman (1989).

[17] But not by philosophers: it was the focus of the debate between Popper and Kuhn, the former advocating what I have called here an open view of science. See Lakatos & Musgrave (1970).

[18] Of course, schoolteachers, like teachers in higher education, do sometimes work as researchers in a more conventional sense. This highlights that what is at issue here is not so much teachers-as-researchers but teacher research as practical inquiry: the key issue is the nature of the research rather than who does it.

[19] This fallacy is even to be found in writers, like Elliott, who stress that teaching always takes place within a framework of practical understandings (compare Elliott, 1988, with Elliott, 1991a).

[20] To believe that reflection and inquiry are always good is another common fallacy, a fallacy to which researchers are especially prone.

[21] See, for example, Carr & Kemmis (1986). Though this strategy relies on a rather old fashioned and much criticised conception of professionalism; see, for example, the discussions in Becker (1970) and Johnson (1972).

References

Argyris, C., Putnam, R. & Smith, D.M. (1985) *Action Science*. San Francisco: Jossey Bass.

Atkinson, P. & Delamont, S. (1976) Mock ups and cock ups: the stage-management of guided discovery learning, in P. Woods & M. Hammersley (Eds) *School Experience*. London: Croom Helm.

Bartholomew, J. (1973) The teacher as researcher, *Hard Cheese*, 1, pp.12-22.

Becker, H.S. (1970) The nature of a profession, in H.S. Becker (Ed.) *Sociological Work*. Chicago: Aldine.

Burgess, R.G. (1980) Some fieldwork problems in teacher-based research, *British Educational Research Journal*, 6, pp.165-73.

Carr, W. (1987) What is an educational practice?, *Journal of Philosophy of Education*, 21, pp.163-75.

Carr, W. & Kemmis, S. (1986) *Becoming Critical*. Lewes: Falmer.

Cope, E. & Gray, J. (1979) Teachers as researchers: some experience of an alternative paradigm, *British Educational Research Journal*, 5, pp. 237-51.

Corey, S. M. (1949) Action research, fundamental research and educational practitioners, *Teachers' College Record*, 50, pp. 509-14.

Doyle, W. (1977) Learning the classroom environment, *Journal of Teacher Education*, 28, pp. 51-5.

Elliott, J. (1988) Educational research and outsider–insider relations, *Qualitative Studies in Education*, 1, pp. 155-66.

Elliott, J. (1991a) *Action Research for Educational Change*. Milton Keynes: Open University Press.

Elliott, J. (1991b) Changing contexts for educational evaluation: the challenge for methodology, *Studies in Educational Evaluation*, 17, pp. 215-38.

Flathman, R. (1989) *Towards a Liberalism*. Ithaca: Cornell University Press.

Gage, N. (1963) Paradigms for research on teaching, in N. Gage (Ed.) *Handbook of Research on Teaching*. Chicago: Rand McNally.

Gipps, C. (1993) The profession of educational research (presidential address), *British Educational Research Journal*, 19, pp. 3-16.

Gustavsen, B. (1986) Social research as participative dialogue, in F. Heller (Ed.) *The Use and Abuse of Social Science*. London: Sage.

Habermas, J. (1987) *Knowledge and Human Interests*. Cambridge: Polity Press.

Hall, B., Gillett, A. & Tandon, R. (Eds) (1982) *Creating Knowledge: a monopoly?* New Delhi: Society for Participatory Research in Asia.

Hamilton, D., Jenkins, D., King, C., MacDonald, B. & Parlett, M. (Eds) (1977) *Beyond the Numbers Game: a reader in educational evaluation*. London: Macmillan.

Hammersley, M. (1992) *What's Wrong with Ethnography?* London: Routledge.

Hirst, P.H. (1983) Educational theory, in P.H. Hirst (Ed.) *Educational Theory and its Foundation Disciplines*. London: Routledge & Kegan Paul.

Hodgkinson, H.L. (1957) Action research: a critique, *Journal of Educational Sociology*, 31(4), pp. 137-53.

Hoyle, E. (1970) Educational innovation and the role of the teacher, *Forum*, 14, pp. 42-4.

Hustler, D., Cassidy, A., & Cuff, E.C. (Eds) (1986) *Action Research in Classrooms and Schools*. London: Allen & Unwin.

Jackson, P. (1968) *Life in Classrooms*. New York: Holt, Rinehart & Winston.

Johnson, T. (1972) *Professions and Power*. London: Macmillan.

Kelly, A. (1985) Action research: what is it and what can it do?, in R.G. Burgess (Ed.) *Issues in Educational Research: qualitative methods*. Lewes: Falmer.

Kemmis, S. (1982) Introduction, in Action Research Curriculum Course Team (Eds) *The Action Research Reader*. Deakin: Deakin University Press.

Kemmis, S. (1988) Action research, in J. P. Keeves (Ed.) *Educational Research, Methodology, and Measurement: an international handbook*. Oxford: Pergamon.

Kuhn, T.S. (1970) *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.

Lakatos, I. & Musgrave, A. (Eds) (1970) *Criticism and the Growth of Knowledge*. Cambridge: Cambridge University Press.

Latapi, P. (1988) Participatory research: a new research paradigm?, *Alberta Journal of Education*, 34, pp. 310-19.

Lieberman, M. (1956) *Education as a Profession*. Englewood Cliffs, NJ: Prentice Hall.

Lindblom, C. & Cohen, D. (1979) *Usable Knowledge*. New Haven: Yale University Press.

Lortie, D. (1975) *Schoolteacher*. Chicago: University of Chicago Press.

McNamara, D. (1980) The outsider's arrogance: the failure of participant observers to understand classroom events, *British Educational Research Journal*, 6, pp. 113-25.

McNiff, J. (1992) *Creating a Good Social Order through Action Research*. Poole: Hyde Publications.

McNiff, J. (1993) *Teaching as Learning: an action research approach*. London: Routledge.

Morawetz, T. (1978) *Wittgenstein and Knowledge: the importance of 'On Certainty'*, Amherst, MS: University of Massachusetts Press.

Nixon, J. (Ed.) (1981) *A Teacher's Guide to Action Research*, London, Grant McIntyre.

Norris, N. (1990) *Understanding Educational Evaluation*. London: Kogan Page.

Parlett, M. & Hamilton, D. (1977) Evaluation as illumination: a new approach to the study of innovatory programmes, in Hamilton et al (Eds) *Beyond the Numbers Game: a reader in educational evaluation*. London: Macmillan.

Reason, P. & Rowan, J. (1981) *Inquiry: a source book of New Paradigm research*. Chichester: Wiley.

Rudduck, J. (1987) Teacher research, action research, teacher inquiry: whats in a name?, in J. Rudduck, D. Hopkins, J. Sanger & P. Lincoln (Eds) *Collaborative Inquiry and Information Skills*, British Library research paper 16. Boston Spa: British Library.

Schön, D. (1983) *The Reflective Practitioner*. New York: Basic Books.

Schön, D. (1987) *Educating the Reflective Practitioner*. San Francisco: Jossey Bass.

Schwab, J. (1969) The practical: a language for curriculum, *School Review*, 78, pp. 1-24.

Simons, H. (1987) *Getting to Know Schools in a Democracy*. London: Falmer.

Skilbeck, M. (1983) Lawrence Stenhouse: research methodology, *British Educational Research Journal*, 9, pp. 9-20.

Stenhouse, L. (1975) *An Introduction to Curriculum Research and Development*. London: Heinemann.

Stenhouse, L. (1983) *Authority, Education and Emancipation*. London: Heinemann.

Torbert, W.R. (1983) Initiating collaborative inquiry, in G. Morgan (Ed.) *Beyond Method*. Beverly Hills: Sage.

Tully, J. (1989) Wittgenstein and political philosophy: understanding practices of critical reflection, *Political Theory*, 17, pp. 172-204.

Van Valen, D.B. (1962) *Understanding Educational Research*. New York: McGraw Hill.

van Willigen, J. (1986) *Applied Anthropology: an introduction*. Boston: Bergin & Garvey.

Whitehead, J. (1989) Creating a living educational theory from questions of the kind, 'How do I improve my practice?', *Cambridge Journal of Education*, 19, pp. 41-52.

Wittgenstein, L. (1969) *On Certainty*. Oxford: Blackwell.