



Murdoch
UNIVERSITY

MURDOCH RESEARCH REPOSITORY

This is the author's final version of the work, as accepted for publication following peer review but without the publisher's layout or pagination.

The definitive version is available at :

<http://dx.doi.org/10.1080/0159630900100204>

Tripp, D. (1990) The ideology of educational research. *Discourse: Studies in the Cultural Politics of Education*, 10 (2). pp. 51-74.

<http://researchrepository.murdoch.edu.au/34534/>

Copyright: © 1990 Taylor & Francis
It is posted here for your personal use. No further distribution is permitted.

THE IDEOLOGY OF EDUCATIONAL RESEARCH¹

David H. Tripp,
Murdoch University,
Western Australia, 6150.
May, 1988

For too long it has been assumed that the shortcomings and failures of educational systems can be understood in terms of the inadequacies, obstinacies and motivations of individuals...More trust can be placed in approaches which, while recognising the contribution of personal characteristics, lay their major emphasis on the way in which individuals are constrained by the roles which the structure and traditions of the system define for them. (Taylor et al, 1974)

Introduction: the image of the profession

Over the past few years it has become increasingly common for the media to stigmatise teachers by seeking out and sensationalising aspects of any study or research report that reflects poorly on them. The media do not operate autonomously in this, of course, for it is academics who are the main sources of the information that enables them to do so. Whilst many academics are no doubt sufficiently politically naive not to recognise their part in the process (and therefore not to accept responsibility for it), there are others unfortunately, who quite deliberately seek to publicly criticise teachers, and who often do so very unfairly. If one needed a recent example of an intentional and misinformed attack upon teachers, the case of Professor Michael Scriven's use of the media with regard to the manufacture of a crisis in 'teacher literacy' (Tripp, 1988), is a very obvious one.

Quite apart from such extreme instances, however, some reputed and vociferous academics have propelled the 'back to basics' movement on the erroneous myth that the basics were no longer being taught (Pyvis, 1987), other academics have slated teachers in the press in other, perhaps less intentional, ways. Take for example, the main argument that the editor of a new journal entitled, *Language and Education*, was quoted as giving as the reason for yet another new publication:

¹This is an expanded version of some points made in a 1986 paper, *Excellence in teaching: the ideology of educational research*, presented at a symposium Problematizing Excellence in Teaching with W.Green, J. Kenway and S.Willis, at the annual conference of the South Pacific Association for Teacher Education, Perth, Western Australia. My thanks to the participants and Jeanette Maccahn for their help. Since published as Tripp, D. (1990) The ideology of educational research. *Discourse: The Australian Journal of Educational Studies* 10(2) 51-74.

There has been a revolution in our knowledge about language in the past twenty years, and it's highly probable that lots of the practices that are being followed in schools in relation to developing children's language are quite wrong, misguided, even dangerous in their implications for the education of our kids.

That this was published without question or comment shows that it is consonant with current perceptions of school teaching. People complain about the standards of teachers, but with such a public image and professional ethos, it will hardly be surprising if the minimum quality of entrants to programmes of teacher education falls, quite apart from the way poor professional morale depresses the performance of many teachers already within the schooling system. Typically, the reflex response of the locally powerful is to impose more draconian and overt mechanisms of external control. Overt and direct control of teachers further depresses their professional status and morale, thus creating a vicious circle.

As a case in point, Scriven (1986) has suggested that, because minimal competence must come before excellence (though that is debatable with regard to the corporate nature of a profession), one ought, at the same time as striving towards excellence, cull those teachers who do not meet certain testable standards of literacy, numeracy and the like. Such an approach is a very easy way out, because it is a way of blaming individuals which enables the powerful to continue to deny deeper and more important structural questions. If there are indeed illiterate teachers (and, unlike Scriven, I would argue that an inability to spell was no disqualification), then one ought to be asking how it has come about that hitherto such teachers have been accepted into and remained undetected within the system; one ought also to examine the structures which created the ineffective quality control and consciousness within the profession that has condoned the continued presence of the very few incompetent teachers in the system. Investigation of such matters mean we have to deal with the professional socialisation and self-image teachers.

One hypothesis worth exploration in this respect is that which MacKay (1974) developed with regard to the socialisation of children. He pointed to evidence which suggested that it was fallacious to construe children as imperfectly socialised adults when they were in fact perfectly socialised, but to different (children's) group norms. Applying that notion with regard to the debate about excellence in teaching, one might suggest that teachers are not imperfectly socialised to some mythic standards of excellence set by academics and administrators, but are actually perfectly socialised to what must be the only rational norms for the profession, given the conditions and constraints

under which teachers choose the profession, are selected, trained, and have to work.

Whilst research has shown in great detail, for instance, how rapidly teachers make (sometimes incorrect and therefore damaging) judgements about children ([Rosenthal and Jakobson, 1968](#)), that research does not discuss the necessity for making virtually instant judgements when one has thirty-six unknown children to deal with, and how and why the possibilities for getting to know them in such a way that informed judgements may be made, are so severely limited. Even Jackson (1968) did not celebrate the teachers' skill in so quickly making the greater number of correct judgements about pupils' attitudes that they actually did, but dwelt upon the reasons for their errors.

In other words, current norms about what constitutes adequate levels of professional expertise, have been constructed and maintained and largely determined by teachers' rational responses to the way in which they have been treated professionally. Whilst removal of the tiny minority of the poorest teachers (by literacy, numeracy or whatever criteria one chooses) will obviously change the existing norm, it will do nothing but bring further bad publicity and demoralisation to the vast majority of average and good teachers. In fact, the imposition of such controls could only have the effect of further lowering morale, once again concentrating public attention on the poorest teachers in the system, thereby further developing and legitimating the ideology that has been so instrumental in generating and maintaining the very problems with the professional qualities of teachers that such controls are intended to solve.

Answers to how one might go about improving teachers' professional performance must therefore be premised upon an understanding of the nature and roles of ideology in the system. With regard to educational research, the particular aspect I deal with here, it is important to recognise that until one understands the way in which it is one of the key factors in the hegemony of the tertiary and administrative sectors of education (whereas in law and medicine it is the practitioners who are largely self-regulating), certain kinds and courses of action to change that system can not be generated. It is a matter of hegemony, and hegemony has to do with the ways in which subordinated persons and groups consciously and willingly participate in their own oppression (Williams, 1976). In this case, because teaching is a social practice, how it is perceived is principally a matter of consciousness, and it is thus open to ideology in both the sense of a persuasive and pervasive false consciousness and in the sense of the privileging of certain valuing hidden in professional conduct knowledge (Grundy, 1987). Hegemony occurs because the so called facts about teaching are

socially constructed by the dominant groups in their own interests. At its most obvious, the vast majority of educational research perpetrates the false consciousness that children should be protected from their teachers, by casting teachers and their profession in such a bad light.

Following Althusser's (1971) discussion of state apparatuses, such ideologies are resorted to when other more repressive means of control would expose the contradictions of the system, and cause a legitimation crisis for those in control. An appropriate analogy for what's happening in education, is the way in which it is quite possible for someone to assume the position of leader of an expedition, not because he or she actually knows better than anyone else where they are going, but because the would-be leader has been able to convince the others of at least two things: first that they are so incapable themselves that they need someone else to lead them; and second, that even if their leader does not actually know where they are going, then they themselves have even less of an idea about it. This appears to be the case in teaching: because one cannot show objectively that particular policies such as 'best' ways of teaching actually work (Tom, 1984), those who make teachers do one thing rather than another have to rely upon teachers willingly conceding control of their professional practice. It seems that educational research is instrumental in that hegemonic process: first by the way in which it essentially documents and propagates the professional failings of teachers, and second, by the way in which it can be appealed to as a legitimation of external control.

In this paper I want to examine two examples of the way in which there is an ideology in educational research which allows dominant academic research interests to subordinate those of teachers, making academics instrumental in limiting their professional status. The fact that ideology is a very commonly used term with a number of quite specific meanings in the work of different theorists, makes it a very difficult concept to define. But the way in which I want to use the term here, however, is perhaps the simplest, being the sense in which it has to do with people's ideas about what the world is and ought to be like. It includes where those ideas come from, how they become powerful enough to be commonly accepted and taken for granted, and who benefits most from them. Working with that kind of notion, one of the easier ways to determine the nature of a particular ideology, is to contrast the purported with the actual effects of the practice in which the ideology is located. This consideration of the ideology of educational research begins, therefore, with a critique of the way in which the two kinds of research effect teachers.

Educational research

Before dealing the examples, however, some qualifications about the nature of educational research, are necessary. First, although one uses the term educational research as though it were some kind of a single, homogeneous entity, it would be a mistake to treat it as one, for it is in reality something of a loose collection of very different practices serving many different purposes and interests. There are a number of quite different approaches and methods to research are available in the social sciences, and all of them are represented in various forms and to a greater or lesser degree in educational research.

Second, the most obvious product of research is knowledge, but some forms of knowledge are more powerful than others. It is not unreasonable therefore, to speak of certain kinds of knowledge and the research methods which generate them as being 'dominant' at any one time within a particular field such as educational research. Within every field of knowledge, there is an ongoing kind of war as those working with one approach attempt to demonstrate its value over other approaches. Kuhn (1971) showed with regard to scientific research that there are different stages in the war as particular battles are fought and certain gains, successes, losses or reversals are made by the different factions, till eventually one view with its associated assumptions and methods (or 'paradigm' in Kuhn's terms) gives way to another in a scientific 'revolution'. Even in well established sciences, therefore, knowledge issues are never closed and the dominance of the most successful paradigm is never total, but is always being contested and challenged by others. Thus I use the word 'dominant' in much the same sense as one might say that the team which won a football match by five goals to two, dominated the game, though the winners' success was far from unopposed. Education is still perhaps at a 'pre-paradigmatic' stage, however, and Kuhn's ideas do not apply in quite the same ways, rather than 'paradigm', I will use the term 'approach'. But though the conflicts between approaches are likely to be more confused and less clearly defined than conflicts between paradigms (if only because there are more approaches than paradigms), it is nevertheless possible to identify some dominant approaches. As we will see later, in educational research the dominant approach has a quantitative positivistic character which severely disadvantages teachers, but here I want to explore the way educational research commonly relates to teachers and teaching.

One way of doing that is to look at two examples of educational research, one which might be termed 'pure' and the other 'applied'. This 'pure - applied' distinction is not a clear-cut one, but indicates degrees of appropriateness to

different purposes. Generally, pure research is a term used of inquiry which aims at satisfying intellectual curiosity; applied research which aims at finding out how to get things done. In practice the two merge because all research has a habit of developing in ways quite unforeseen at the outset. So-called pure research findings are often seen to have very obvious practical applications, and the reverse is also true. In view of the emphasis I place upon the question of whose interests are being served by educational research, perhaps a more appropriate distinction to make is between research that aims to produce knowledge principally for academics to use in their work, and that which aims to produce knowledge for others such as teachers to use in their work. Such a distinction forces recognition of the amount of educationally funded research that is actually done for academics in other disciplines such as psychology or sociology.

The distinction also allows one to differentiate several kinds of research that meet criteria suggested for 'educological research' (Tripp, 1986/7). On the grounds of whose purposes are being served, one can see differences, for instance, between research which aims to produce a teaching strategy such as the management of learning time, and research which aims to validate a descriptive measure such as teachers' classroom self-observation. Clearly those two projects must contain elements of both pure and applied research making that distinction less useful. So, to reveal the ideology of educational research, let us look at these two examples, contrasting what they purport to be doing with what they actually do, and examine their likely impact upon the professional standing of teachers.

Educational research for academics

The research for the first example is Hook and Rosenshine's (1978) review of the accuracy of teachers' self-reports of classroom interaction. This is a particular kind of academic research, being research on research, or what is more commonly called, 'meta-research'. Hook and Rosenshine took a comparative approach, reviewing research with regard to three kinds of behaviours: those that examined (a) specific behaviours (such as the FIAC categories); (b) dimensions of teacher behaviour (such as the variety of curriculum materials, or encouragement of student responsibility; and (c) teacher style (such as formal or progressive).

The authors found in the first group (a), that not one of the six studies reviewed found a clear relationship between the data obtained from teacher self-reports and that from observational techniques. In the second group (b), they

found that some dimensions investigated in the three studies reviewed yielded 'positive trends', though no dimensions showed consistently positive correlations across different studies. And in the third group (c), the two studies reviewed showed that group characteristics could be accurately determined, though individual teachers could be misplaced.

The general conclusion to be drawn from such a scenario was that self-observation by teachers was not very accurate, and that the more precise and specific the behaviours the less accurate it became. In methodological terms, however, the crucial point is that Hook and Rosenshine based their conclusions about the discrepancies between the two sets of data on the assumption that the observational instruments were accurate: they never considered the possibility that the instruments and not the teachers may be capable of producing any result that was less than perfect, in spite of the fact that the literature abounded with suspicions about the reliability and validity of the very instruments they had taken for objective reality. Medley and Mitzel (1963), for instance, had shown just how unreliable observers could be; Bennett's (1976) study of teaching style, which represented half the data in the third group, had been very seriously criticised (Kitwood and Macey, 1977), and, to cap it all, Borich *et al.* (1978), having examined the five most common instruments used for the measurement of classroom interaction, warned that:

....researchers might well be advised to exercise caution drawing conclusions from studies that use classroom observation systems for which the measurement technique itself accounts for greater variation than the behaviour being measured (lack discriminant validity) or that incorporate behaviours that, when measured by different systems, fail to correlate (lack convergent validity).

Because such very serious doubts about the value and accuracy of the instruments had been voiced in a number of different ways for some time, but still did not appear to enter the reviewers' thinking as a possible explanation, I will be uncharitable enough to suggest that the omission came from deeply held views about the superiority of research instruments over teachers' personal perceptions.

But to reach that conclusion is not to make a personal judgement about the particular researchers in question: they alone were not responsible for the production of the assumptions about the comparative accuracy of the instruments and the teachers. Their set of assumptions is itself produced by and essential to the interests of all researchers: it is a part of the rationale of the research approach in which they were working. If it could be shown that teachers already knew as much if not more about their practice than researchers,

then what price educational research? The main justification for the development of such instruments and their application by professional researchers had to be that the data gained was not only essential, but also could only be obtained in that way.

Relevant to that argument, but beyond the scope of this paper to discuss in detail, is Tom's (1984) critical review of the whole process-product industry's attempt to find out down to the last detail of every specific behaviour just what constitutes the one best way of teaching. Tom's analysis demonstrates very clearly both how such knowledge gained would be used to assess, control and subordinate teachers, and how it has become a self-sustaining enterprise because of, rather than in spite of, its repeated failure to produce the goods.

Researchers, like inventors and explorers, direct their work from beliefs and convictions about the world as much as from previously established research evidence. This is a problem addressed by Feyerabend (1975) in relation to Popper's (1969) 'falsification principle'; it means that failure to prove something does not mean that it is not true: methods, instruments, samples, confounding variables, insufficient time, money or data, can all be blamed for not proving what the researcher a priori knows is true. Thus Tom points out that,

...the inability to derive substantial findings has led most of them (the researchers) to argue for refinements in research technique so that the phenomenon of teaching and its impact upon student learning can be analyzed in more sophisticated ways.

Like the early explorers who went in search of El Dorado, they knew it was there, they just had not found it yet.

In spite of such difficulties, the broad conclusion that more informal self-assessments made whilst in the midst of the incredibly attention demanding business of full-time teaching were less accurate than those of observers using rating scales, was probably correct. Such a finding was, for course, highly predictable, because the instruments used were designed precisely to give outside observers reliable and accurate information about specific behaviours that researchers thought teachers would not be able to judge accurately. Agreeing with such a finding does not mean, however, that the whole did not contain a very misleading implicit message that would have its effect at the ideological level. The never explicitly stated but nevertheless dominant message one receives from the finding, is more than just that researchers cannot really trust teachers' accounts very far at all, and that there is no substitute for professional outside observers in gathering particular kinds of data. The underlying message is that teachers do not appear to know either what is going

on in their classrooms, nor much about what they themselves are actually doing in their teaching.

Behind all of this lies a deeper question: why is it that outside observers would want such accurate information about teacher behaviour? The answer is that a whole industry has been established around the idea that if researchers could correlate teacher behaviours against pupils' achievements, they would have an objective measure of what constituted good teaching. Whilst it is relatively easy to measure a fairly narrow selection of learning outcomes which have been clearly behaviourally stated, it is extremely difficult to measure what contribution what kinds of behaviour of another human being under what conditions of interaction, might have made to that learning. If only researchers could find out more precisely what teachers did in their classrooms, then they would have both sides of the equation.

I'm not sure if it's kinder to suggest that researchers wanted to understand teaching in such a way out of pure academic interest, or in order to enable teachers to apply it to their teaching. Or even, as Reid (1987) suggested, to make their own world more ordered and secure. Who can say? Unfortunately, such deep motivations are not usually explicitly stated in the applications for research grants that have kept the process-product industry afloat for so long in spite of its inability to deliver the contracted goods. But bearing in mind the niggardly expenditure by school district administrations on things like study leave and in-service relief that provide teachers some responsibility for their own professional development, I would suggest that the answer is that such research is usually funded in order that others might be able to use it to control teachers' teaching.

It is tempting here to launch upon a critique of the efficiency of that research approach in its own terms, but to do so would obscure my main point, namely that the positivistic pursuit of such generalisable certainties, though not obtainable even in principle, has been the dominant form of classroom research because it promises technical control over teachers. In Giroux's words,

Since theory functions in the interest of technical progress in the culture of positivism, the meaning of knowledge is limited to the realm of technical interests. (1981:43)

Thus even research that appears to be academic and politically neutral, through its nexus with the purposes of the process-product approach, is knowledge defined by academics in their own interests, either or both in terms of achieving status for their work through the label 'scientific', and/or as the agents of the teacher educators, administrators and policy makers who control the teachers.

Educational research for teaching

The second example that I would like to discuss is a case study in which Angus (1985) examined the transformations necessary for a more 'pure' form of research knowledge to become applied in classroom practice. He took as his case the time on task research, and what he found was the following cycle: researchers began with a commonsense idea that had been around since before the turn of the century (Curry, 1857), namely that the longer the time spent engaged in learning something the more likely it was to be (better) learned. That notion was operationalised into a very complex set of variables purporting to measure learning, concentration and the like. Researching the phenomena generated a multimillion research industry devoted to the issue for more than a decade, during the course of which a number of researchers became rather well known and perhaps not a little richer.

The research findings showed, within a very complex overall picture, that it was true that time on task was positively related to learning achievement. And once that was 'scientifically proved', another kind of industry, the in-service education agencies, stepped in to devise materials and workshop programmes designed to show teachers how to improve such things as their students' time on task. Angus shows how these programmes conceived teaching as a 'relatively technical enterprise' and thus open to outside manipulation through rational intervention, rather than as a complex matter of value and judgement by autonomous professionals. This view enhances the power of the research industry by allowing the individual behaviour of teachers to be prescribed as sets of 'research proves...' rules.

The problem with that approach is, however, that many teachers resist such an approach to practice for at least two good reasons. First, in a very real sense, teachers are themselves the experts on their teaching, and rightly have the attitude: 'I'd like to see you do this job any better, and if you cannot, I reserve the right to ignore your advice'. Second, teachers know that the teaching process is so complex that the enormously reductionist research procedures necessary to measure the mere handful of variables the data can provide, results only in vague and ill-defined main patterns and effects being 'scientifically proved'. Again they rightly respond that: "There is more in heaven and earth...".

The solution to these problems observed by Angus was to develop an in-service strategy that would 'present research information as a resource framework, non-threatening in nature, that would nourish teacher investigation, problem-solving and self-evaluation as to what was useful' (44). In other words,

to offer the actual research only as a starting point or support for teachers to use to generate their own practical applications within the broad guidelines of general findings.

Whilst the rhetoric of that approach is to take account of teachers' expertise and give them some professional autonomy, it does not in fact serve the teachers well because it is rather a way of allowing the researchers and others to appropriate their expertise: anything successful that the teachers produce as a result of being in-serviced on the research findings can be claimed by the in-service agents as their successful implementation, which can in turn be claimed by the researchers as an equally successful result of their research.

Given teachers' well-founded scepticism of both the research findings and the in-service approach, it was hardly surprising that very little change actually occurred. As Angus's case study shows, allowing the teachers to make their own interpretations of the research findings merely allowed them to maintain the values position with regard to learning time that they had previously held. Angus' observation of a particularly good teacher, Morrison, showed that, although he worked on increasing and improving learning time, 'There were no recognizable remnants of the original research in his work knowledge of how to teach.' Angus' conclusion on that matter is worth quoting here because he writes that:

The case of instructional time can be construed as a story of ingenious composition of common sense understandings regarding time and learning into a scientific formulation, followed by the decomposition of the formulation into common sense prescriptions for practice. Almost nothing of Carroll's unique contribution survived the full journey. The knowledge that was transmitted and guided the classroom applications was essentially the same as the knowledge that had been available in texts for a century or more. During the period of decomposition, ideology rather than theory provided the organising structure which allowed individuals (researchers and practitioners) to decide what was worth knowing and acting upon, and what was not. The executive knowledge that determined what was done was the normative content. (p. 56)

Little comment is necessary. It is clear that in this as the previous case, the educational research has been of more value to the educational researchers than to the teachers.

Like the absence of a systematic overview of the ideology of educational research, it is significant that such obviously important work as Angus' has been rarely done if at all elsewhere. Although one cannot generalise empirically from Angus' work, and within the reservations one must have about any original study, the present argument does suggest that it would be reasonable to

entertain the possibility that the way in which researchers have become the principal beneficiaries of educational research is not confined to the time management enterprise alone. One of the major differences between the two examples, however, is that in its attempt to be practical, this latter research is an example of a kind of asset stripping of teachers' craft knowledge by research. Writing about that process in the context of instructional materials, Apple (1982: 42) made the point that

When jobs are deskilled, the knowledge that once accompanied it, knowledge that was controlled and used by workers in carrying out their day to day lives on their jobs, goes somewhere. ... management attempts ... to accumulate and control this assemblage of skills and knowledge.

In the case of the time management research, something other than the kind of direct deskilling that Apple was concerned with was happening, but it is a process of deskilling nevertheless. It works more through the repackaging of teachers' craft knowledge so that they do not recognise it as their own when it is sold back to them as the products of research. It is a process in which teachers lose both control over and credit for their commonsense ideas or craft strategies. As Angus showed, it is a matter of taking what teachers know and attempt to do anyway, wrapping it up in an explanatory rationale, then offering it back to them mediated by the research so that it appears to be something new and remarkable. Teachers may not realise either the precise mechanism or the politics of what has happened to them, but they are not fooled into believing the theory to be necessary: they ignore it and just use the practical suggestions offered.

When, as is the more common case, the research has practical implications but no practical suggestions are offered, teachers simply ignore it. As Cane and Schroeder (1970) discovered from interviews with nearly a thousand assistant teachers in England, more than 75% had never taken part in educational research, even in training. Or, in the more immediate words of a classroom teacher,

...with all this reality crashing in on me, I don't have time to think about research... If an educational problem arose I would think it through and draw on my own limited experience or consult a more experienced teacher.

Such practices are so normal that concerned researchers have produced a considerable literature about the lack of impact that educational research has had on teachers and teaching.

Unfortunately, apart from a recognition that the way in which research is published prevents teachers from accessing it (a point returned to later), the tendency of those producing the literature, is to continue working from the assumption that teachers ought to employ it. In the philosophy of science this is a very old problem, identified in 1907 by Duhem (see [Franklin, 1987](#)) as the problem of 'localisation'. Briefly, Duhem pointed out that when an experiment produced a result that conflicted with a theoretical prediction, it was very difficult to discover just where there was a problem: had the experiment failed for some technical reason, or was the theory wrong? A conflict between prediction and actual result can only indicate that something is wrong, not where the problem lies. Discovering what is wrong is a matter of looking at the results, the design, the theory and its assumptions, and so on, in order to decide which part of what assumption or belief to alter or abandon. If localisation of failure is a known to be a problem in pure scientific experiment, then it is surely a far greater and more widespread problem in applied social research.

That so few educational researchers have ever recognised that there might be a localisation problem is not simply indicative of poor science, but of the way in which ideology infuses all research. When experiments with teaching methods and curricula fail to produce the expected results or to be widely adopted, not unnaturally the tendency of most researchers is to localise the problems with the teachers. When that localisation is overt, it becomes another way in which the ideology of research damages teachers' professional status. For instance, the recognition that teachers do not often bother even to access the findings of practice orientated educational research, once caused an exasperated colleague to define teaching as 'the state-aided interaction of those who cannot read with those who don't'. Although epigrammatically very witty, without asking why they did not read research, poor science and very unfair.

Research client as research object

Not having looked into the matter closely, the general public might be forgiven for naively supposing that the products of the majority of educational research would be of use to teachers in improving their teaching, and thus to the benefit of their pupils. But both the above examples show how research tends rather to work in the interests of researchers, and how they can marginalise, exclude, or even attack teachers, who therefore resist it. Those tendencies should not be seen as a conspiracy, however, for they are general features of the power and partiality of all knowledge.

As one would therefore expect, the construction of knowledge against the interests of those who are its clients in some respects, is not restricted to teacher education alone, but has been documented in other sites of struggle such as the school curriculum. Interestingly and ironically in respect of this discussion, Goodson (1983), in a historical study, showed how much the same process occurs with regard to school subjects. He examined several subjects only relatively recently included in the secondary curriculum, such as environmental studies. He showed how these subjects originated as answers to please for more relevant and interesting subjects at school, but how, as they became more widespread and thereby legitimate, subject associations and tertiary examining boards took them over and transformed them into traditional academic subjects which were just as alienating, academic and irrelevant, and therefore (through a process of 'boring kids into submission' Goodson, 1984, 1985, 1986, and 1987, no doubt), just as effective at selecting and excluding pupils as were the very subjects they had once sought to displace.

Hudak (1986) made a very different ethnographic study of a course in media education, showing how teachers narrowed the boundaries of the discourse until students' interests, experiences and values were largely excluded. And, like the pressures on academics with regard to educational research, there were compelling structural and ideological reasons for the teacher's exclusion of student knowledge in the media course. Again the important point to stress therefore is that because educational researchers are, in a period of normal science such as the past three decades, produced by their approach, so that, though they may be honest and well intentioned individuals with regard to teachers, as a group they tend to serve the hegemonic structures oppressing them.

What better accounts for the way teachers are treated by researchers than a conspiracy theory, is Bell's (1978) notion of 'studying down'. In his well known essay on sociology (but which applies to all forms of research, especially to education), Bell noted that:

Sociology typically looks down the social structure from the top — there are far more studies of workers than there are of owners in capitalist society.... Sociology is done **on** the relatively powerless **for** the relatively powerful. (25)

We know more about shop-lifting, teenage vandalism and pot-smoking than we do about 'the theft of the nation', CIA involvement in Chile, Italy, Greece as well as Australia, and about the heroin trade. (33)

The main effects of studying down on teachers are (a) that teachers are treated as part of the object phenomena of research, and can therefore be excluded from

the research process; and (b) that they cannot therefore be construed as principal clients, and so can be expected to be made to conform (through the political and administrative policies under which they serve) to researchers' definitions, prescriptions and value judgements.

Studying down, therefore, is not just a matter of undisclosed interests, it is a matter of disguised interests. The basic political equation behind all research (and not just evaluation where it is more commonly cited) is 'Who gets to say what about whom for why?' In the case of educational research the public answer to the all important 'why?' is always formally presented along the lines of, 'In order to help teachers to teach better', 'To facilitate improved learning' or such. It is never, 'To make teachers do such and such', or 'To stop this or that'. The undisclosed and disguised interest of researchers' is in defining what constitutes 'better teaching' and 'improved learning', thereby making teachers direct their energies to particular ends legitimated by the particular definitions of others. That is a process of reduction of scope for professional judgement which is replaced by mere application of technical skills. It leads therefore to a form of deprofessionalisation which is more subtle but similar in kind to that which Apple (1982, 1986) exposed so well with regard to 'teacher proof' instructional schemes and textbooks.

Educational research and policy formation

As researchers do not appear to serve teachers well, one might have expected them to serve policy-makers, for it is generally held that a function of educational research is to inform normative decisions about the way the system could operate. Although there are numerous objections to that important and all too uncontroversial use of research, it is not at issue here. I am taking *a priori* that, as Cohen and Garet (disapprovingly) put it:

Analysis is expected to provide objective evidence helpful in agency budgeting and decision-making. The idea is that to the extent administrative action can be based on objective evidence rather than on opinion or contending bureaucratic interests, society will benefit. (1975:38)

Such thinking is likely to be causal in creating the current imbalance between research information that ostensibly serves the administration in its control of teachers, and the amount that serves to enable teachers to take responsibility to improve their own professional practice. It is significant, for instance that,

most research in education is carried out by or for agencies of the state, and with very few exceptions researchers do not view this as questionable and inappropriate. (Cohen and Garet, 1975:38)

It is ironically fortunate therefore, that the record of the contribution of academic research to policy has never been as great as perhaps the locally powerful have thought it ought to be. Thus the other side of the issue is that educational research has so repeatedly failed either to provide policy-makers with the answers they have hoped for in commissioning research, that it is always the first item to be cut in times of fiscal restraint.

Taking the case of academic sociology, in a book entitled: *Why sociology does not apply: a study of the use of sociology in public policy*, Scott and Shore (1979) have documented the way in which social research has failed policy-makers. Their work is important to my present argument because they conclude not only that scholarship, by its search for powerful, parsimonious theories, is an inherently conservative activity, but also that the two worlds of scholarship and action are so radically different from each other in terms of their construction, as to inhibit even the possibility of the application of research to action to any extent. Of the many differences observed, they suggest that:

Most basic is the difference in goals. The academic sociologist's main goal is to further understanding about society; the policy-maker's goal is to initiate programs of social action in order to change society. The problems that the academic sociologist studies originate inside the discipline; the policy-maker is concerned with immediate exigencies in the 'real' social world. Even if the two choose the same problem, the questions they ask about the problem differ... (224)

Although some researchers who have addressed the way in which research relates to policy are less pessimistic ([Anderson, 1986](#)), that is but one of the reasons that differences between research that is useful to teachers, to academic study in the parental disciplines of education, and research useful to policy formation, not only exist, but are inevitable.

An equally important but more insidious reason for the lack of impact of educational research upon policy formation, however, is the problem of actually 'proving' anything at all in educational research. It is that very difficulty which has enabled *What works: research about teaching and learning* (US Department of Education, 1986), posing under the guise of a neutral synthesis of the most useful and best established research findings about teaching and learning, to present what (Glass, 1987:9) has shown to be nothing short of a heavily ideologically laden 'modern ritual seeking legitimation of the Reagan administrations policies'. It was precisely for that reason that Glass (1979) earlier suggested that, in terms of the benefit to human beings that might come from acting upon proven findings, the U.S. government would be far better advised

to divert the whole of its expenditure on educational research to medical research. A sad and difficult conclusion for such a well reputed educational researcher to have made.

The ideology of educational research

However, it would appear to be the case from the argument thus far, that present practices in educational research can serve neither the practitioner nor policy-maker client well. To stay with the main theme of this paper I cannot here pursue the matter of the kind of research that would be more efficacious in policy formulation and administration, but will return to the relationship between educational research and teaching, where an apparent paradox might have appeared to have emerged: how can I claim that educational research is instrumental in the subordination of teachers if, although the research is of a knowledge constitutive interest best suited to control and manipulate teachers, I also claim that, at the same time and by the very nature of the academic enterprise, it must fail to deliver the kind of information upon which policy decisions could be based?

Apart from the fact that ideological practices always contain such contradictions (which is why they can never be utterly determining), the answer to this problem lies in the not so hidden message that characterises the majority of educational research: it is the message of the Hook and Rosenshine paper reviewed above, namely that teachers are so poorly informed, motivated, unintelligent, generally unprofessional and never to be trusted in all kinds of ways, that they need others to tell them what to do just how, why and when. Evidence for this is all too depressingly abundant. Pick up a journal on reading, and you will find that teachers use quite absurd criteria to allocate children to ability groups; look at a paper on classroom interaction and see how teachers judge answers by their perception of the pupils' ability rather than the substance of the argument; look at the formation of self-esteem in children, and find the literature on self-fulfilling prophesy...the list stretches into every aspect of research on teaching.

One of the reasons for this state of affairs is simply that the education of a nation is a site of constant and vigorous ideological and political struggle and contestation. So called facts do not simply exist as entities in a social vacuum. Facts have meaning only when recognised and understood by people, as Berger and Luckmann (1966) pointed out, so they always exist within ideological structures. Any description is therefore open to multiple interpretation: even

something as concrete as a new road may be seen as beneficial progress to one, but appear as disastrous environmental destruction to another.

In the case of education, facts are not only a great deal less material, but they are more heavily mediated by viewpoint. Such is the nature of social reality, yet researchers working in a social field like education, very seldom examine the values that inform the way in which they attach meaning to the facts they generate. Thus systematic, detailed and direct empirical information about educational researchers' values and world view, though crucial to policy interpretation, is significantly rare in the literature. Most educational researchers (Tripp, 1986/7), are insufficiently reflective about and self-evaluative of their work. With far less excuse, they appear to be just as professionally unaware of the implications of their beliefs and actions as the teachers they condemn for professional unawareness.

However, even with such reservations in mind, it is not often possible to gainsay the findings of research: there is no doubt that there are some poor teachers in the profession, and that all teachers sometimes make mistakes; and when carefully documented, one has to accept the findings as true within the given value system. But it is a matter of balance: in contrast to the predominance of (even ethnographic) work such as Rist's (1973) damning *The Urban School*, research in praise of teachers is, with a few notable (Australian) exceptions such as Connell's (1985) *Teachers' Work*, and Comber and Hancock's (1987) *Developing Teachers*, virtually non-existent.

The real ideology of educational research takes the form of what Gerbner and Gross (1972) termed 'symbolic annihilation' with regard to television. For example, on television the normal 1:1 ratio in the sexes is skewed to something in the order of 4:1 in favour of males (Durkin, 1985). Although it has been shown that females will mediate and resist this imbalance (Hodge and Tripp, 1986:94), nevertheless, cultivation of attitudes and perceptions does result from the continual presentation of such bias. Whereas, through the false portrayal of women's roles, television may skew our world picture towards the belief that a woman's place is in the home when she isn't out being a helpless victim, educational research, through an even more marked absence of skilled and professional teachers, skews our world picture towards the idea that, left to their own devices, teachers would, knowingly or not, do all kinds of damaging things to children.

What we have, therefore, is a cyclic process in which educational research plays an important role. It claims teachers' successes as its own, and sets standards for teachers which are unrealistic in terms of the conditions of their

work. There is then an imbalance between information about good and poor teaching. By publicly providing more information about their shortcomings, teachers are perceived to lack adequate professional standards and standing, and so require greater outside control. Outside control reduces professional autonomy, and poor public image depresses self-image and morale. Both adversely effect the performance of serving teachers and discourage others who seek professional work from entering the profession. The average of professional excellence is therefore reduced, and more teachers are found by researchers and the press to be inadequate. It is a slow but steadily downward spiral, and one which is being exacerbated by, for instance, politically motivated panics about 'falling standards' in education.

Research approaches and communicative competence

If this process is as real as I have suggested, then it is surprising that teachers have, by and large (though with a few notable exceptions such as [Freeman, 1986](#)), unprotestingly allowed it to happen. One reason is that teachers are simply not in a position to do much about it. What teachers have to do is, for the most part, directly or indirectly decided for them by others. As [Bell \(1978: \)](#) pointed out, '... the people who do the defining in our society are the powerful - with a little help from their friends, the social scientists'. Then there is hegemony: teachers actively encourage a number of external controls. But hegemony can only work if people do not understand what is happening, and so that must be part of the answer. But there is another powerful way in which the existing system maintains and propagates itself to the detriment of teachers without provoking their criticism, and thus remaining largely immune to it. Educational research has adopted for its dominant approach, statistical methods which construct what counts as knowledge in particular ways, and place research above and beyond teacher critique. This and the non-educational nature of educational research which I deal with elsewhere (Tripp, 1986/7), are closely coupled, because together they are mutually dependent and reinforcing. The approaches themselves are more appropriate to other disciplines than they are to a form of educational research that would be within reach of, and of value to, teachers. Thus research approaches, in determining the nature of what is considered to be appropriate criticism, determine also who can criticise the research.

Dealing with the matter of the research approach then, it is clear that positivist 'agricultural-botany' psycho- and socio- statistical methods are the dominant form of research in education (Parlett and Hamilton, 1975; Cronbach,

1975; Carr and Kemmis, 1983). That is not to say that other forms, such as hermeneutics do not co-exist; clearly they do, but the point is that particular quantitative strategies are not only the most prevalent, but they also have the greatest status, especially if effort in terms of dollar cost or number of research degree dissertations are taken as units of magnitude. This is so is no mere accident, for the positivist approach is not only the most manipulative, but it is also the form least accessible to teachers in two ways.

First, it largely prevents classroom teachers from doing their own research. They are seldom able to access the kind of samples the method demands, let alone to find the time and interest to master the highly technical and elaborated techniques necessary to process the enormous amounts of data required. But the number of teachers who leave the classroom to become very successful researchers, bears witness to the fact that it is not due to any lack of academic ability that full-time classroom teachers do not perform important research in the positivist approach: it is simply that the conditions of the normal teaching situation strongly discourage if not actually prevent them from doing so.

Second, and this is perhaps more important, the positivist approach, like all specialisms, has developed its own language and world view to such an extent that one requires a long initiation into it before one can understand the connections between the data and conclusions, let alone to be able to critique the research. It is a approach which renders the majority of teachers and not a few teacher educators, communicatively incompetent (Habermas, 1970). As a group, teachers are not able either to generate or communicate ideas about educational research so well as the educational researchers. This is largely the result of two difficulties they face. First, they do not enjoy the same opportunity to be heard by the powerful; second, they do not really speak the specialist language sufficiently fluently.

With regard to the first, teachers are seldom if ever given a chance to explain to researchers what they are doing in their classrooms and the implications it has for educational research. In contrast, through courses, lectures and the literature, researchers have constantly open to them the opportunity to explain to teachers the implications of their findings for classroom teaching. Even when teachers do attempt to communicate with researchers, they don't always listen. As a case in point, Joyce King and four of the five teachers involved in the study gave up a Saturday morning to present a round table session at the 1986 AERA conference. Apart from myself, and one other academic who passed by to ask if he could collect a copy of the paper, no one came to the session. By rights, the title *African-American teachers' thinking as action knowledge and emancipatory*

pedagogy. should have produced a good attendance. As there was no serious clash with other sessions on similar topics, it seems it was lack of a well-known name attached to the session that kept people away. Yet how could those in such positions become well known to researchers if researchers did not come to listen to them? Communicative incompetence is usually the result of such a lack of opportunity rather than a specifically linguistic deficit; and linguistic ability is more than anything else, itself a product of the opportunity to communicate.

Linguistic ability is also a problem, however, for the approach not only employs a great many very specialist concepts (rotation of orthogonals, f-ratios), but it also distorts the ideas teachers do have into quite alien and oppositional meanings. This last point is most obvious in the use of a term such as 'significant': all too often statistically significant trends in large samples account for such miniscule differences in terms of the total variance, that, educationally speaking, they are literally insignificant either to outcome variants (Goodlad, 1979: 347) or to teachers' practice. Such trends may still be legitimately termed significant by researchers, and are published as such (*see for example the research on the interaction of television and reading in Hodge and Tripp, 1986:164*).

Teachers tend to resist this situation which is so impossibly weighted against them, not only by leaving educational research to the professional educational researchers, but also by ignoring published research, seldom even meeting let alone engaging the researchers in discussion. Because such asymmetry and distortion is a hallmark of power, there is good reason for regarding problems in exchanges between researchers and teachers as a matter of politics rather than merely about the opportunities for and media of communication. As Sharp (1980) wrote,

An ideal discourse is premised upon a situation of justice and equality between speakers, whereas most politically significant communication takes place in contexts where there is an asymmetry of power to control the content, direction and outcome of linguistic exchanges. (146)

Clearly teachers are greatly lacking in such power, and so are rendered communicatively incompetent.

Thus teachers cannot publicly oppose educational research in the academy or the media. They can neither deal with it in its own terms, nor present alternative and oppositional answers. Teachers are reduced to privately dismissing and ignoring most educational research, a form of resistance which further opens them up for criticism of their professional standards.

Conclusion

Having referred earlier to some of the evidence that there is a legitimation crisis in the educational system for which teachers are taking most of the blame, one has to ask why it is that the blame is being placed on schools and school teachers. In logical terms, responsibility for the failure of a system lies with, and is conventionally accepted by, the policy and executive levels of the management hierarchy. In the case of education, however, responsibility and hence blame has been shifted onto those lowest in the system, the classroom teachers. They have become the scapegoats for the perceived failings of the whole system. Amongst the mechanisms whereby this has been achieved, is the two interconnected roles of educational researchers. Not only have they provided the wrong kind of knowledge, but they have then appeared as the casters of pearls before swine. If teachers can be made out to be sufficiently professionally incompetent, then systemic failure will be seen to have occurred in spite of the best efforts of an able and dedicated management.

Legitimation crises are complex affairs, and one aspect is that they tend to work negatively: very few people adopt a wholly sceptical position to life, because we all like to believe in something. Legitimation crises are not therefore so much about the matter of who is to be believed when things are going badly, as they are about who is to be disbelieved. This is because legitimation works through processes of 'over-crediting' to a greater or lesser extent all the potentially creditable positions, the dominant position being the most overcredited. That is why Gouldner (1976:6) suggested that 'to have 'credit' is to be believed in advance of demonstration', the corollary being that people require evidence to disbelieve.

In the present legitimation crisis in education, it is the administrators, researchers, academics and other policy forming experts who have always been assumed to be right about educational matters, and so have never been publicly questioned or called upon to demonstrate their effectiveness. Teachers, on the other hand, have constantly been called to account about all kinds of matters and in all manner of ways ranging from corporal punishment to school uniform and sexist readers. With some help from the powerful, that interrogation has led to evidence upon which people founded their disbelief, and so, by a process of elimination, left those in control of the system in a position of largely blameless credibility.

The fact that this is the current state of affairs is not the result of some conspiracy on the part of the powerful, though they have naturally tended to maintain and increase their advantage. Why it is so is in the main due to the fact that every person in the nation has, for a large part of their formative years, been

in a very close working relationship with teachers. There is no refuge from public scrutiny for teachers because they and their work are so intimately known to the public. As a pupil, everyone has seen all teachers make some mistakes, and known other examples of teachers, however tiny the minority, who have been unfair, lazy or incompetent. People use such experiences to mediate their judgements of the credibility of the information they receive from the media. The work of the powerful, on the other hand, has never been exposed to such public scrutiny, they have never been familiar to the public, and people assume that they have attained their positions precisely because they were better educationalists than the majority of school teachers. To redress such an imbalance in public perception means providing more accounts of good teaching, and to developing methods in and through which teachers' own accounts of their practices can be heard. As I have suggested elsewhere (Tripp, 1987/8), one way in which that might be done is through more teacher centred and controlled educational research in which the teacher is both more active in the production on knowledge and is seen as the principal client.

Summary

In this paper I have suggested that teachers are not well served by the products of educational research. It has an ideology which tends to denigrate teachers in a number of different ways, deprofessionalises them, and legitimates control of them by others. Teachers are not able to resist these processes, partly because they cannot do their own research, and partly because they are so severely communicatively disadvantaged by the dominant positivist research paradigm that they cannot critique the research of others. In the current legitimisation crisis in education, educational research plays an instrumental role in an allocation process whereby teachers are seen by the community as those most to blame for public dissatisfaction caused by dissonance between the community's expectations of the educational system and what it actually delivers. The way to overcome these difficulties is by insisting of forms of research in which teachers can co-operate with researchers on equal terms.

REFERENCES

- Althusser, L. (1971) *Lenin and philosophy and other essays*. Harmondsworth: Penguin.
- Anderson, D. (1986) Where do the questions come from? For whom are the answers intended? *Australian Educational Researcher*, 13, 1, 5-25.
- Angus, M. (1984) *Transformation of knowledge about teaching*. Mimeo paper drawn from doctoral dissertation completed in Education at Stanford University. Available from the author at the West Australian Department of Education, Royal Street, Perth, W.A. 6001.

- Apple, M. (1982) *Education and power*. Boston: Routledge & Kegan Paul.
- Apple, M. (1986) *Teachers and Texts*. New York: Routledge and Kegan Paul.
- Bell, C. (1978) Studying the locally powerful. In C. Bell and S. Encel (eds.). *Inside the whale*. Sydney: Pergamon.
- Bennett, N. (1976) *Teaching styles and pupil progress*, London: Open Books.
- Berger, P.L., and T. Luckman. (1966) *The social construction of reality*. Harmondsworth: Penguin.
- Borich, G. D., D. Malitz & C. L. Kugle. (1978) Convergent and discriminant validity for five classroom observation systems: testing a model. *Journal of Educational Psychology*, 70, 2, 119-128.
- Cane B. and C. Schroeder (1970) *The Teacher and Research*. Hove: N.F.E.R.
- Carr, W. & S. Kemmis. (1983) *Becoming critical: Knowing through action research*. Geelong (Australia): Deakin University Press.
- Cohen, D. K. & M. S. Garet. (1975) Reforming educational policy with applied research. *Harvard Educational Review*, 45(1) 17-43.
- Comber, B. and J. Hancock (1987) *Developing Teachers: a celebration of teachers' learning in Australia*. North Ryde: Methuen.
- Connell, R. *Teachers' work*. Sydney: George, Allen and Unwin, 1985.
- Cronbach, L. (1975) Beyond the two disciplines of scientific psychology, *American Psychologist*, 30, 116-135.
- Curry, J. (1857) *The principles and practice of early infant school education*. Edinburgh: Thomas Constable & Co.
- Durkin, K. *Television, sex roles and children*. Milton Keynes: Open University Press, 1985.
- Feyerabend, P. K. *Against method*. London: New Left Books, 1975.
- Franklin, A. (1987) *The neglect of experiment*. Cambridge: Cambridge University Press.
- Freeman, P.L. (1986) Don't talk to me about lexical meta-analysis of criterion-referenced clustering and lap-dissolve spatial transformations'. A consideration of the role of practising teachers in educational research. *British Educational Research Journal*, 12(2) 197-206.
- Gerbner, G. & L. Gross. (1976) Living with television: the violence profile. *Journal of communication*, 26 (2) 173-199.
- Giroux, H. (1981) *Ideology, culture and the process of schooling*. London: Falmer Press.
- Glass, G. V. (1979) Personal communication, Perth.
- Glass, G.V. (1987) What works: Politics and research. *Educational Researcher* 16(3), 5-10.
- Goodlad, J. (1979) *Can Our Schools Get Better?* *Phi Delta Kappan* 60(5), 342-347 (quoted in Yssledyke J.E. and S.L. Christenson, *Remedial Education*, 1987, 8(3), 17-23).
- Goodson, I. (1983) *School subjects and curriculum change*. London: Croom Helm.
- Gouldner, A.W. *The Dialectic of Ideology and Technology: The Origins, Grammar and Future of Ideology*. London: Macmillan
- Grundy, S.J. (1987) *Curriculum: Product or praxis*. Lewis: The Falmer Press.
- Habermas, J. (1970) Systematically distorted communication: towards a theory of communicative competence. *Inquiry*, 13.
- Hodge, R. I. & D. H. Tripp. *Children and television: a semiotic approach*. Oxford: Polity, 1986.
- Hook, C. M. B. V. Rosenshine. (1979) Accuracy of teacher reports of their classroom behaviour. *Review of Research in Education*, 49, 1-11.

- Hudak, G (1987) Student knowledge and the formation of academic discourse: A case study. In J. Smyth (ed.) 1987 55-72.
- Jackson, P. (1968) *Life in Classrooms*. New York: Holt, Rinehart & Winston.
- Kuhn, T. S. (1970) *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- Kitwood T. & M. Macy. (1977) *Mind that child*. London: Writers and Readers Publishing Co-operative.
- Mackay, R.W. (1974) Conceptions of children and models of socialisation, in H.P. Dreitzel (ed.) *Recent Sociology*, No. 5., London: Macmillan. Revised in R. Turner, *Ethnomethodology*, Harmondsworth, Middlesex: Penguin.
- Medely, D. M. & H. E. Mitzel. (1963) Measuring classroom behaviour by systemic observation. In N. L. Gage (ed.), *Handbook of research on teaching*. Chicago: Rand McNally.
- Parlett, M. & D. Hamilton. (1977) Evaluation as Illumination. In D. Hamilton, et al. (eds.) *Beyond the numbers game*. London: Macmillan.
- Popper, K. (1969) *Conjectures and refutations*. London: Routledge & Kegan Paul.
- Pyvis, D. (1986) *The Literacy Deabate: A Case Study*. B.Ed. (Hons) dissertation, Murdoch University, W.A.
- Reed, W. A. (1981) The deliberative approach to the study of curriculum and its relation to critical pluralism. In M. Lawn & L. Barton, *Rethinking curriculum studies*. London: Croom Helm.
- Rist, R. (1973) *he urban school: a factory for failure*. Cambridge (Mass.): MIT Press.
- Rosenthal, R. L. Jakobson. (1968) *Pygmalion in the classroom*. New York: Holt, Reinhart & Winston.
- Scriven, M. (1986) Response to D. Phillips address at the annual conference of the South Pacific Association of Teacher Educators, Perth.
- Scott, R. A. & A. R. Shore. (1979) *Why sociology does not apply: a study of the use of sociology in public policy*. New York: Elsevier.
- Sharp, R. (1980) *Knowledge, ideology and the policits of schooling*. London: Routledge & Kegan Paul.
- Taylor, P.H., W.A.Reid, B.J.Holley and G.Exon, (1974) *Purpose, power and constraint it the primary school curriculum*. London: Macmillan.
- Tom, A. (1984) *Teaching as a moral craft*. New York: Longman.
- Tripp, D. H. (1986/7) *Power, interests and Education: Towards Educology*. Revised and expanded version of parts of Excellence in teaching: the ideology of educational research, paper presented at a symposium *Problematizing Excellence in Teaching* with W.Green, J. Kenway and S.Willis, at the annual conference of the South Pacific Association for Teacher Education, Perth, Western Australia.
- Tripp, D.H. (1987/8) On collaboration: Teachers, self assessment and professionalism. Paper presented at the annual conference of the Association for the Study of Curriculum, Chester, U.K. To appear in *Cambridge Journal of Education*, 1988
- Tripp, D.H. (1988) Who's To Blame for the Great Educational Crisis? A series of three short articles: (1) Teachers and the Media; (2) Teachers and Experts; (3) Teachers and Teacher Educators. Mimeo from the author at Murdoch University.
- U.S. Department of Education (1986) What works: Research about teaching and learning. Washington D.C.
- Williams, R. (1976) *Keywords*. London: Fonatana.
- Goodson, I. (1988) The Making of the Curriculum. Lewes: Falmer.

Apple, M. (1986) *Teachers and Texts*. New York: Routledge and Kegan Paul.
Pickering, A. (1987) What to believe (review of Franklin's *The neglect of experiment*). *Times Educational Supplement*, 24th. July, 19.