As a science teacher in London Comprehensive Schools (1967-73) I have faced the practical problems of attempting to improve my educational practice. As a lecturer in education at Bath University (1973-79) I have faced the theoretical problems of attempting to make a scholarly contribution to educational theory. I am conscious of a gap between the theory and the practice of education. The nature of this gap has been the focus of concern of several academics over recent years (Clark 76, Dunlop 77, Walking 79). The conclusions of these theorists is that the dominant 'disciplines' approach to educational theory is fundamentally mistaken.

I am sure that all the readers of this journal will be familiar with the view of educational theory which holds that this theory is constituted by the disciplines of education. The dominant disciplines over the past twenty years have been the philosophy, psychology and sociology of education. What this has meant for in-service education is that teachers have been brought to see educational theory, not in terms of explanations for their own educational practice, but in terms of the conceptual frameworks and methods of validation of the disciplines of education.

The purpose of this paper is to argue for a view of educational theory which is based in the educational practice of individual educators. I shall argue that a form of in-service education, which is based on a teacher's practice, should be the knowledge base of educational theory. My central point is simple. I am saying that by reflecting on their practical attempts of answer questions of the form, 'How do I improve this process of education here?', Individual teachers will be able to construct explanations which correspond to their educational practice. I am saying that it is the aggregate of these explanations which constitute educational theory. In order to produce such a theory changes will be needed in the way university academics think about educational theory. I will explore the nature of these changes together with their implications for the increasing number of in-service degrees by independent study which are being developed by our Colleges of Higher Education and our Polytechnics.

I do not wish to create the impression that I believe that the disciplines of education have nothing of value to contribute to the construction of educational theory. What I am about to argue is that educational theory, if it is believed to be constituted solely by the disciplines of education, is simply mistaken. I shall argue that this view of theory should be replaced by one which is focused upon explanations for the lives of individual educators in their educational practice. Allen (1978), in his criticism of the ideas of P. Hirst, makes the point that when an educator has integrated the forms of knowledge into his practice an explanation for his practice will not consist of one of these forms. A different form of explanation will be required to allow an understanding of educational practice. I am suggesting that one such form can be produced from explanations for the lives of individual educators.
What Knowledge is to Count as Theory of Education?

If my view of education theory is accepted then a change will be needed in the knowledge sustained by university academics. I have chosen to focus on the changes needed by these academics for two reasons. The first is that these academics have a dominant influence on what is to count as knowledge. The second is concerned with the failure of many of these academics to explore blatant contradictions in their epistemologies. I assume that my first reason is accepted without the need for any expansion. My second point is directed at those researchers who continue to pursue educational research as if they were generating knowledge which was value free.

The practical activity of education is value-laden. To pick out a process as education requires value judgements. This simple fact must surely be taken seriously by those researchers who pursue educational research from within the disciplines of education as if it were value free. Such academics are not only mistaken but unfortunately, because of their status, have the power to prevent alternative views from being developed. As a person who has experienced at first hand the political judgements of academics as to what is to count as valid knowledge I can only regret that the value of intellectual integrity is not always the value which is applied in the way these judgements are made. The most recent case to be exposed was that of Sir Cyril Burt in his attempts to prevent the dissemination of views which ran counter to his own.

A Theory of Practice Derived from In-Service Education

My own attempt to understand the nature of an educational theory, which could be constructed directly from practice, consisted of a return to the classroom and a case study of my own practical and theoretical explorations of my problem, 'How do I improve this process of education here?'. I gathered data on my practice with video tapes of the exchanges between myself and the pupils and between the pupils themselves. The reasons I gave for changing my practice were focused upon the fact that I experienced the negation of some of my educational values in my practice. For example when I was teaching all my 30 pupils the same thing at the same time I could not allow my pupils any freedom to choose any aspect of their learning. I also could not allow my pupils to pursue enquiries which did not conform to the logic of my lesson. In many cases this meant stifling the imaginative episodes of my pupils thinking. The explanation I gave for my attempts to change my practice was given in terms of a struggle to live my educational values in my practice. By this I mean that the structuring principles in my explanation were educational values. I could say following Peters (1966), that I hold the educational values of freedom, equality, respect for persons, worthwhile activities and the consideration of interests. This does not however give a clear definition of meaning.

To communicate my meaning to you I must point to my practice to show you my values in the practice. Linguistic definition is inadequate as a medium for the clear expression of educational values. These values can only be fully understood in relation to practice. This fact exposes a limitation in the assumption that Journals of
Education can communicate the nature of educational theory purely in linguistic form. This point cannot be over emphasised. What I am saying is that linguistic definition needs to be supplemented by ostensive definition for a clear communication of the nature of educational values. The necessity of ‘pointing to practice’ (ostensive definition), prevents the separation of theory from practice in the constitution of educational theory. Both the meaning of the explanations, which are constitutive of theory, and the methods of testing the validity of the explanations require ostensive definition.

If this view of educational theory is accepted then one implication is that articles on the production of educational theory will have to be supplemented with other data, for example on video or audio tape, than that presented in linguistic form. A further implication of this idea is that criticism, which has a primary role in the testing of theory, will be directed not only at linguistic statements in the explanation but at the individual who is offering the explanation for his own form of life.

I will now make some suggestions on the nature of In-Service education which could provide an epistemological basis for the construction of an educational theory based on educational practice.

First it must be school focussed in the sense that it is grounded in the actual educational practice of the educator in the classroom with his/her pupils. The primary task of the providers of in-service support is to elicit an open response by the teachers on the nature of their problems. It may be said, in criticism of this approach, that the teacher may not identify his problems correctly. The implication being that the provider of the support can in fact identify the problems correctly. This may in fact be the case but to impose the provider's problems onto the teacher is, I suggest, the route to certain failure. The emergence of a set of shared problems is the most crucial element in the provision of in-service support. In my experience, these problems emerge over time, not often in an hour, or a day, but sometimes over months. The definition of the shared problems, and the deepening understanding of the participants, of the nature of each others problems, usually happens as the providers and the teachers become increasingly aware of each others practices, what each has to contribute to the joint exercise and most importantly, how far the teachers can trust the providers and each other. Everyone who has engaged in school focused in-service education will know that this is a most delicate area, at the centre of which is the process of evaluating the in-service activity. In a trusting atmosphere teachers will engage in the most savage self criticism of their own practice. Once, however, the hierarchical nature of political controls appear in the evaluation, and by this I mean the participation, in the in-service support, of Heads, Advisors, Inspectors or Lecturers, who are viewed by the teachers in terms of their institutional power rather than as critical friends whose primary concern is to support them in his/her attempts to improve her practice, then the openness is replaced by a defensiveness which prevents any movement forward in the teacher’s educational practice.
In the case of my own research, reported in this Journal (Whitehead, 1977), the in-service support lasted over a period of two years and resulted in the teachers bringing about highly significant changes in their practice. By highly significant I mean that they were able to move from a position in which their educational values were negated, to a position in which their values were realised in their practice. The point that educational change can be understood in terms of attempts by individuals to overcome their experience that some of their educational values were being negated is perhaps the single most important idea to emerge from my research and it undermines the epistemological basis of the disciplines approach to educational theory. It undermines this approach at its strongest point: that is its logic. What it does is to demonstrate that education is a process in which individuals are changing and that the logic which can comprehend change, in terms of negating the experience of a negation, is a dialectical logic. The formal logic of the disciplines approach does not include a dialectical logic. I will illustrate the importance of this idea by asking you to reflect on your own attempts to improve a process of education for your pupils. I am assuming that your attempts to improve your practice are rational and have the psychological form of the explanation below. If your reflections indicate the explanation should have a different form and content then my assumption is mistaken and the construction of an educational theory of the form advocated above will not occur.

An Explanation for my Educational Practice

1) I experience a problem because some of my educational values are negated.
2) I imagine a solution.
3) I act in the direction of the imagined solution.
4) I evaluate the actions.
5) I modify my actions/ideas in the light of my evaluations.

I take it that this is the traditional model of rational problem solving with the addition of the first point about problem formation. This addition is crucial for establishing a logic of educational theory which contains formal logic within a dialectical form of enquiry. What is new about this form of explanation is that the structuring principles of the explanation are educational values as they are expressed in an individual's form of life. What is also radically different in this form of explanation is that the 'l's of individual educators are contained in the explanation as conscious and causal agents of change. This inclusion transforms the traditional view of a scientific explanation of human action. I am saying that the scientific study of educational practice should not conceptualise the individuals who constitute the practice in terms of concepts or abstract generalities. Rather I am saying that they should be understood in terms of their qualities of being individuals. In my view, educational theory, as general, will exist in the aggregate of explanations for the form of life of individual educators in their educational practice. The responsibility for the construction of educational theory, on the base of this form of in-service education, rests with the educators themselves and the providers of the support. The providers have the difficult task of developing the support services which will enable the teachers to explore the
practical and theoretical implications of questions of the form, 'How do I improve this process of education here?'.

In submitting my ideas for your critical judgement I am asking you to reflect on the way you attempt to educate your pupils and students and to compare the explanation you give for your own practice with my own. I have claimed that you become conscious of a problem when you experience the negation of some of your educational values. You then imagine a solution. In the disciplines approach it is held that the first step in your attempts to solve a practical educational problem must be to break it down into its logically distinct components (Peters, 1977). I am claiming that the first step in your own attempts to solve your problem was to imagine a solution which you then acted upon, evaluated and modified. In this process you may have drawn upon the insights from the different disciplines and tried them out in your practice. I have argued that the explanation which you give for your own practice is what should constitute educational theory. Whilst it is impossible to present, in such a brief article, the detailed working out of such a theory, I will explore what I see to be the implications of such a view for some of the in-service degrees by independent study which are currently being designed in our Colleges of Higher Education and our Polytechnics.

School Based Degrees

In an attempt to improve education within school several of our Institutions of Higher Education are looking at the possibility of designing degrees which are 'school focused' in the sense of being based upon the graduate teacher's educational practice. It is my contention that these degrees offer the possibility of beginning the production of the form of educational practice. In my own experience of in-service education I have encountered scores of teachers in the Avon area who wish to engage in a course of study which would emerge from their own attempts to improve their practice and whose content could gain universal recognition as of a first degree or higher degree standard. The way in which this could be achieved is quite simple. I am however under no illusion that the political problems of overcoming the powerful interest groups who are determined to continue their support for the disciplines approach, will not be immense. What could be done is that teachers, selected by the Institution of Higher Education, the Local Authority or by self selection could enrol on a degree course which was designed as a programme of independent study into questions of the form, 'How do I improve this process of education here?'. The teachers programme of work could be agreed as realistic and validated by the same procedures which have been established by the North East London Polytechnic (Burgess and Adams, 1980). To satisfy the university requirements, that the work of the student should make a scholarly contribution to the study of his/her subject, the teacher must present an explanation for his/her practice. The criteria of judgement of the explanation would include a demonstration of the influence of his/her activities on the process of improving his own educational practice.

In the Schools Council Mixed Ability Exercise (Whitehead, 1976), one of whose aims was the development of a network of in-service support for teachers, I constructed
several explanations for the lives of the teachers involved in the exercise. A group of
the participants, including advisors from the L.E.A. and Schools Council, formed an
'Evaluation Group', and subjected my explanations to criticism. I found that I had to
modify the nature of my explanations because of the power of the rational arguments
which were critical of my explanation. I had used models and a language which were
inappropriate for the construction of an explanation for the lives of the teachers. A
reconstructed explanation was accepted by the participants as corresponding to the
lives of the teachers. I make this point to emphasise the importance of an Evaluation
Group in providing critical support for the construction of explanations. To assist
teachers in their in-service degrees by independent study I am sure that it will be
necessary to form Evaluation Groups for the purpose of subjecting the teacher's
explanations for his/her own practice to critical scrutiny.

The normal procedures which Universities use in their system of external examiners
could be used in the final assessment of the quality of the teacher's contribution to
the production of educational theory. As I have said the procedures are simple.
They are grounded in the values of rationality itself. The view of educational theory
which dominates our universities claims the mantle of rationality. I am saying that a
simple reflection by you, on the nature of the rationality which is involved in your
attempts to educate your pupils and to improve the process of education, will
demonstrate the irrationality of a position which refuses to allow the production of
educational theory to be structured on the basis of the attempts of individual
educators to live their educational values in their practice. It is my contention that the
providers of in-service support have a responsibility to education to ensure that those
universities who have failed to uphold, in their school and Institutes of Education the
tradition of intellectual integrity should not be supported until they have adopted a
rational approach to the production of educational theory.

And now forward from 1977 to 1980. I will now ask you to identify again with my
experience of existing as a living contradiction in the workplace. I have asked you to
test the validity of the explanatory principle, in my claim to know my educational
knowledge, that I value my work as a University Academic in making original
contributions to educational knowledge. In my early work with teachers and pupils in
the 1977 paper I showed that I valued their capacity for asking questions and
believed in their freedom to pursue their enquiries. I also valued my own capacities
and freedom to do the same. I held these values together with the following
judgements that I had not shown a capacity to conduct original enquiries nor a
capacity to test my own ideas or those of others. I had to hold the values together
with an instruction that I was not free to question the competence of my examiners
under any circumstances. When you read later of a Senate Working Party's
conclusion that I had been subjected to pressures which might have contrained a
less determined individual, do look back on the judgements which follow, to see if you
agree that two explanatory principles in my educational development have been my
commitment to expressing originality and to the academic freedom to ask questions
and to report my enquiries in a public arena.