How Teacher-Researchers Are Creating a New Form of Educational Knowledge.

A new form of knowledge proposed for a teacher education curriculum is dialogical and grounded in an educational researcher's experience of existing as a living contradiction within the politics of truth of a university. It includes a systematic form of action-reflection cycle and depends for its generalizability on teacher researchers producing descriptions and explanations of their own educational development (their living educational theories) as they explore questions of the improvement of the quality of student learning. These educational theories are considered in Part One. Part Two describes an action research and educational theory case study based on the professional educational knowledge of competent teachers. It is argued that a teacher education curriculum for novice teachers should be related to the educational theories of competent teachers. This is shown in action in the educational theory of a university tutor in an educative relationship with a novice teacher as she forms an educational inquiry, defines her values, and is encouraged to gather evidence on the quality of her pupils' learning. Part Three draws the implications of a living educational theory for a teacher education curriculum and relates it to a practical science "model" and a common-sense "model" of teacher education. (Contains 36 references.) (Author/SLD)
How Teacher-Researchers are Creating a New Form of Educational Knowledge

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ABSTRACT

This paper presents a new form of educational knowledge for a teacher education curriculum. The knowledge is dialogical and is grounded in an educational researchers' experience of existing as a living contradiction within the politics of truth of a university. It includes a systematic form of action reflection cycle and depends for its generalisability on teacher researchers producing descriptions and explanations of their own educational development (their living educational theories) as they explore questions of the kind, 'How do I help my pupils to improve the quality of their learning?'. The nature of these educational theories is considered in Part One of the paper. Part Two consists of a description of an action research and educational theory case study collection which is based in the professional educational knowledge of competent teachers. I argue that a teacher education curriculum for novice teachers should be related to the educational theories of competent teachers. Evidence is presented to show this view in action in the educational theory of a university tutor in an educative relationship with a novice teacher as she forms an educational enquiry, defines her values and is encouraged to gather evidence on the quality of her pupils' learning. Part Three draws out the implications of a living educational theory for a teacher-education curriculum and relates it to a practical science 'model' and a common-sense 'model' of teacher education.
The curriculum of teacher education programmes is a matter of much debate in educational research communities around the world. In particular the role of Universities in teacher education is being questioned by authorities in the United States and Europe. Fenstermacher (1992) has asked, "How can we aid teachers in resolving the tension between systemics and education so that they are better able to address the educative purposes of schooling without becoming mired in the systemics?". His contentious answer is that universities should develop a new vision of teacher education which involves a diminished involvement in pre-service teacher education. His vision is being disputed at this conference by Tom Russell, Hugh Mumby, Anna Richert, Robert Bullough,Jr., and Jeff Northfield in a symposium on The University's role in preservice teacher-education: systemics vs. educative purposes.

The British Government has come to a similar conclusion to Fenstermacher. For different reasons, related to their social market philosophy, they have introduced legislation to move university based programmes of teacher education towards more school-based programmes. A move towards a school-centred curriculum for teacher education is supported by Hargreaves (1990) in his common-sense model of the professional development of teachers. Elliott (1993) has argued against Hargreave's model; in his claim that we should be developing a hermeneutic view of teacher education as a practical science. In Elliott's view higher education has an important role to play in the education of teachers. The teacher education programme at the University of Bath is based on partnerships between schools and the School of Education. I will be explaining below how an educational theory of teacher education originating in Bath University could provide a way of bringing together disparate components of teacher-education programmes into a coherent professional whole.

As this new educational theory has emerged from a break with different traditions of enquiry whilst drawing on their insights, it may help in the communication of new meanings if I draw your attention to some of these traditions.

1) THE NATURE OF EDUCATIONAL THEORY

My initiation into educational theory included three distinct views. The first was that it involved an examination of the metaphysical, epistemological and ethical theses of influential philosophers such as Rousseau, Dewey and Whitehead and then the extraction of some educational implications which could then serve as guiding principles for educational practitioners (Carr, 1979). The second was a view of educational theory as science in which the function of theory in the field of education was seen to be analogous to the function of theory in the field of physics and the other natural sciences (Anderson, 1951). The third was the view that educational theory was constituted by the disciplines of education such as the philosophy, psychology, sociology and history of education (Hirst, P. & Peters, R.S., 1970).

A fourth view has emerged from my own research. This is that educational theory is being constituted by the descriptions and explanations which individual learners are producing for their own educational development as they explore the implications of asking questions of the kind, 'How do I improve my practice?'. It is this view of educational theory which I will show below can produce a curriculum for teacher education. I am thinking of a curriculum which is based in a partnership between the practical knowledge of competent professionals in their educative relationships within schools and the propositional forms of knowledge and educative relationships of professors of education in Universities.

Before I produce a curriculum of teacher education from educational theory I want to explain how you could produce your own living educational theories of your own educational development from action research enquiries of the kind, 'How do I help my pupils to improve the quality of their learning?'.
One way of answering this question would be to consider the concepts of 'pupils', 'learning', 'quality' and 'improvement', and then to relate them in an answer which could draw on theoretical perspectives from psychology, sociology, philosophy and history. The idea underlying this approach is that we could clarify the meaning of the concepts through conceptual analysis in a way which could be integrated back into a practical solution to the question.

I rejected this approach to educational theory in 1971 whilst in the middle of my Masters programme in the psychology of education at the University of London. The rejection came with the recognition that conceptual forms of educational theory could not explain my professional practice as a teacher as I explored the implications of answering questions of the kind, 'How do I improve my practice?', and 'How do I help my pupils to improve the quality of their learning?'. I do not want you to misunderstand me at this point. I am not denying the value of the disciplines of education in the generation and testing of educational theory. What I rejected was the view that educational theory was constituted by these disciplines.

I want to suggest a different approach because I believe that educational action-research in teacher education offers a possibility for the reconstruction of educational theory onto a living, rather than a conceptual, base and that this theory can show how to produce a curriculum for teacher education. In my view educational theory is constituted by the descriptions and explanations which individual learners are producing for their own educational development (Whitehead 1989) as they answer questions of the kind, 'How do I improve my practice?'.

In my professional life as an educational action-researcher and teacher educator I can distinguish two concerns. The first was to reconstitute educational theory through studying my own educational development in the context of the politics of truth within my university. The second was to explore the use of the educational theory in my work in teacher education. I think three original ideas have emerged from my research into the nature of educational theory. The first included 'I' as a living contradiction in the claims to educational knowledge which emerge from questions of the kind, 'How do I improve my practice?'. The second included 'I' as a living contradiction in action/reflection cycles, used in exploring such questions of the kind:

I experience a concern or problem when some of my values are negated in my practice. 
I imagine an action plan to improve my practice.
I act and gather evidence on the quality and effectiveness of my actions
I evaluate my actions in relation to their quality and effectiveness
I modify my concerns, ideas and actions in the light of my evaluations.

The third redefines educational theory in terms of the descriptions and explanations which individual learners produce for their own educational development.¹

I imagine that you will identify with these three ideas because you can relate them directly to your own educational experiences. You can test the generalisability of my ideas in a direct relation to your experience. I am claiming that you are like me in experiencing yourself as a living contradiction in your professional practice as an educator. I think you will experience a tension when some of the values you are trying to express in your educative relationships are not fully lived in your practice. I believe that you will recognise the common-sense form of the action/reflection cycles as one which characterises the way in which you have attempted to answer questions of the kind, 'How do I improve my practice?'. I also claim that you have the capacity to describe and explain your own educational development in a way which shows you attempting to live out your values in your practice and shows you extending your cognitive range and concerns as you integrate insights from conceptual forms of theory within your explanation of your educational development.

¹ For a clear introduction to these ideas see Chapter 3 of Jean McNiff's Action Research: Principles and Practice. Routledge 1992.
I also believe that, as educational researchers, you will agree that for such descriptions and explanations to be legitimated as educational knowledge then their validity should have been tested using accepted standards of judgement.

In my own case I have submitted my claim to know my own educational development to a variety of research communities in local, regional, national and international contexts in order to test its validity and to examine the justifications I give for the values and understandings I use to characterise my research as ‘educational’.

My claims to know my own educational development are in the form of descriptions and explanations of my educational development and they include evaluations of past practice, evidence of present practice and an intention to produce improvements which are not yet realised in practice. The standards of judgement I use to test the validity of my claims to educational knowledge include spiritual, aesthetic, moral, scientific, technological, logical, truth and use values.\(^2\) I will say more below about how I justify my selection of such values from a general culture.

In holding on to the value of truth I find acceptable the following four criteria of validity which Habermas (1976) uses in his study of communication and the evolution of society.

i) As I seek to establish an understanding with you I intend my communication to be coherent in the sense that you will be able to distinguish its logical form.

ii) When I make a propositional claim to knowledge I expect to be able to justify it in relation to evidence.

iii) Where my statements involve a value-judgement I expect to be able to justify my values and to clarify their meanings in the course of their emergence in practice.

iv) I also expect you to judge me and my work in relation to their authenticity whilst recognising that this is likely to be a judgement which needs you to experience me in interaction through a sustained period of time.

In my work as a teacher educator and educational researcher I draw my values from the general culture and use these to give a form to my life and to test the validity of my claims to know my own educational development as I constitute my own living educational theory. I use the term culture in the two senses defined by Said (1994). First of all he says that it means all those practices, like the arts of description, communication, and representation, that have relative autonomy from the economic, social and political realms and that often exist in aesthetic forms, one of whose principal aims is pleasure. He then says that the second includes a refining and elevating element, each society’s reservoir of the best that has been known and thought.

Let me give some examples of my identification of the values I use to characterise my practices and development as ‘educational’. Certain individuals have inspired and reinforced the values I seek to embody in my life in education. For example I identify the values of justice, freedom of enquiry, freedom of information, and democracy in the life of John Griffith one of Britain’s leading constitutional experts. His life influenced my own in 1976 when, in the third year of my appointment at the University, I faced the judgement on whether I should be offered a tenured appointment. The University decided that my employment was to be terminated. One of the three grounds given for the termination was that I had disturbed the good order and morale of the School of Education. The information on which this judgement was based was given to the University by a Professor in the School of Education without my knowledge. I was outraged by the claims made against me. A colleague suggested that I contact John

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\(^2\)For an early account of these values see, Whitehead, J. & Foster, D. (1984) Action Research and Professional Educational Development in the Bulletin of the Classroom Action Research Network, No. 6, pp 41-45. This network has been renamed the Collaborative Action Research Network and is coordinated by Bridget Somekh of the University of East Anglia.
Griffith, at that time a Professor of Public Law at London University, because he was an active campaigner for academic freedom and democracy. Having looked at the letter terminating my employment, and with no financial reward, he took up my case with the University and his letters included the following:

The third ground given by the Academic Staff Committee was that he had exhibited forms of behaviour which had harmed the good order and morale of the School of Education. The Academic Staff Committee have refused to substantiate this. This refusal is manifestly unjust, as it is wholly unspecific. The ground might relate to his political opinions, to his personal morality, to his style of dress. Moreover the accusation is that his "forms of behaviour" have actually harmed the School of Education. He is surely entitled to know how he has done so. It is an elementary rule of natural justice that a man shall be told the offence with which he is charged and which, in this instance, has been found proved against him. How, otherwise, can be produce fresh, or indeed any, evidence?

Some eighteen years of continuous campaigning later John Griffith has demonstrated yet again his commitment to freedom of information. Writing in The Observer Newspaper he challenged the passionate adherence to secrecy shown by a number of British Government ministers who appeared to be prepared to let innocent men go to jail rather than reveal that government guidelines concerning the sale of arms to Iraq had been changed without the knowledge and hence consent of Parliament. This is now a matter of national concern and an enquiry led by Lord Justice Scott is due to report in the Summer of 1994.

It seems inconceivable that Ministers would, in order to preserve secrecy and confidentiality in their administrative procedures, have been prepared to allow innocent men to be sent to prison. Yet this would have been the most likely result if the immunity certificates had been upheld by the courts. Nothing that Ministers have said to the Scott inquiry indicates that they would have shrunk from such a consequence. (Observer, 27/2/94, p.27)

In the dialogical form of his correspondences John Griffith reveals his commitment to the values of justice, democracy and freedom of enquiry and information. These values are drawn from our general culture. I use such values to characterise and to test the validity of my claims to educational knowledge in both personal and public dialogues. Another example of values drawn from the general culture are in a discussion paper produced by the National Curriculum Council which suggested that school values should include telling the truth, keeping promises, respecting the rights and property of others and taking personal responsibility for one's actions. Bullying, cheating, deceit and cruelty should be rejected. (TES 4/3/94, p7.)

I am also aware of the significance of conversations and correspondences in educative relationships. I am thinking of both the internal dialogues one can carry on with oneself as well as with others. Dialogical forms of representation are the exceptions (Griffiths, 1992) rather than the rule in journals of educational research. Yet so much good quality education requires dialogue. I think Polanyi (1958) was right when he wrote about the need to strip away the crippling mutilations of centuries of objectivist thought. Everything I have presented above is grounded in my work as an academic educational researcher within a University. I agree with MacIntyre (1991) that there is much to do if the University and the Lecture are to be reconceived in a way which can develop Universities as forums for constrained disagreement for the revitalisation of moral enquiry. I see the creation and testing of living forms of educational theory as a form of moral inquiry which could help to revitalise the University and still hold to the value of Universities as places of enlightenment through research.

I now want to turn to the educative relationships between teachers and pupils and to use the above view of educational theory to show how it could provide a coherent view of teacher education. I am thinking of an integrated view of professional development which embraces both continuity and progression and matches process to content as required by Hargreaves (1993), throughout the phases of pre-service, induction and continuing professional development.
2) CREATING NEW FORMS OF EDUCATIONAL KNOWLEDGE FROM TEACHERS' RESEARCH INTO THEIR EDUCATIVE RELATIONSHIPS

In 1979, Brian Green successfully submitted an M.A. dissertation on Personal dialectics in educational theory and educational research methodology to the University of London. This was the first higher degree whose form and content integrated a living approach to educational theory. Since then, action research case studies have been accredited for PhD, MPhil, MEd, advanced diploma and advanced certificate awards and as part of the pre-service teacher education programme. These form the action research and educational theory case study collection in the School of Education of the University of Bath (Reason, 1993). Because educational researchers in the United States may not be familiar with the view of educational knowledge embodied in this case study collection (Whitehead 1993, pp.105-140) I will outline the work of some of its contributors.

Kevin Eames is Head of English and a teacher researcher at Wootton Bassett School in Wiltshire, England. He has established a school-based action research group with colleagues in the school and the University of Bath (Eames, 1990). Over the past ten years in MPhil (Eames 1987) and PhD programmes he has researched his educative relationships with pupils and colleagues and developed a dialectical and dialogical view of educational knowledge. In a recent publication from the Collaborative Action Research Network, on the role of self in action research, Eames (1993) draws on examples from his educative relationships to set out an argument for a form of action research with a coherence and logic based on a dialectical form of educational knowledge. Erica Holley and Andy Larter are teachers at Greendown School in Wiltshire, England. Holley (1993) has analysed her educative relationships with a pupil, a class and a colleague in a way which shows her success in enabling individuals to speak in their own voices and to exercise some degree of autonomy in the process of improving the quality of their own learning.

Larter's (1987) MPhil develops a dialogical form for representing an educational enquiry. This should be of interest to all those who wish to follow Eisner's (1993) analysis of the need to develop new forms of representation in educational research. Larter shows what it means to exist as a living contradiction in his response to being handed a racist poem by one of his students. Whilst wanting to engage his pupil in rational discourse, a video-tape of the interaction shows Larter's body language communicating messages which are in conflict with his desired intention. Larter responds to seeing himself as a living contradiction by creating a dialogical form for representing his educational development. In his later work Larter (1994) has examined the tensions between his attempts to help to form a school-based action research group and the responses of University tutors. His analysis reveals fundamental differences in power and epistemology between his dialogical educational knowledge grounded in educative relationships in schools and the educational knowledge legitimated within the university.

I am drawing your attention to the living educational theory approach being developed in the continuing professional development of teachers. I also want to emphasise the importance for this approach of a university academic contributing original insights about the nature of the theory together with the necessity of grounding teachers' professional knowledge in a relationship between their educative relationships with their pupils and the construction of their own living educational theories. I think that the construction of this knowledge-base from the continuing professional development of teachers can then be directly related to the construction of a curriculum for pre-service teacher education. The way I intend to show how this can happen is by presenting below the evidence from a novice teacher and her tutor which shows the novice teacher forming and exploring an action enquiry. I then want to set c two curriculum models for teacher education before showing how a living educational theory approach is developing in a teacher education programme in the School of Education of the University of Bath.

Pre-service teachers have contributed their action research special studies to the above case study collection. These are studies of the students' attempts to answer questions of the kind, 'how do I help
my pupils to improve the quality of their learning?'. Russell (1993) has argued from the basis of the authority of experience that this question should be fundamental for all teacher education programmes. Hargreaves (1993) however, says that much trainee talk with supervisors and mentors consists of a different question of the form, 'what do I do when....,' in which the trainee is desperately searching for those recipes that the experienced teachers appear to employ quickly and effectively through their tacit understanding of situations. Hargreaves says that trainees have a predominant concern: to learn (at least) how to survive in a real classroom and (at best) to manage a classroom successfully. He asks is it not possible that trainers (as experts usually are) deeply concerned with values rather than just competence and seek to induct trainees into values (including ethical issues) at too early a stage, before the trainee has acquired basic competence, whereas the trainee (or novice) is searching for, and needs to acquire, basic professional common-sense knowledge before being ready to interrogate and refine values to question this knowledge. Before I outline a living educational theory approach to teacher education I want to offer some evidence from the educative relationships between a novice teacher and her tutor which emphasises the importance of the question, 'how do I help my pupils to improve the quality of their learning?'

In the case study below Moira Laidlaw, a university tutor, provides support for Sarah Darlington, one of last year's novice teachers in a way which shows how, through conversation, such a question can be formed and its implications explored. Sarah's concern is on improving her understanding and action with her pupils for the benefit of their learning. Moira's emphasis is on establishing an educative relationship within which she can realise her educational values. In the dialogue below Moira also stresses the importance for improving practice and for constructing educational knowledge in focusing on what constitutes an improvement in the quality of learning, and to what end that educational knowledge is formed and developed.

In relation to an action reflection cycle the dialogues move towards a well formed educational enquiry of the kind, 'how can I help my pupils to improve the quality of their learning?'. They include a focus on educational values and most importantly they work at the gathering of evidence which will enable a judgement to be made on the quality of pupils' learning. The extracts are taken from a more extensive analysis of Moira's educative relationships with her students and from Sarah's account of her exploration of her question. This account includes a detailed action plan on how she intends to live her values in practice. In the extracts below, Sarah's contributions are in italics, Moira's reflections are in plain type.

Introducing Sarah,

'When I started my second teaching practice, I had already decided I wanted to do an action enquiry. I felt then as I do now, that I tend to be naturally introspective and that evaluation, in one sense, comes easily to me. Whenever student teachers get together, we always end up discussing how we did it, how we could do better, how someone else did it. The case study provides a much more detailed and analytical one than most conversations could offer. (Darlington, 1993, p.1)

This comment from the beginning of her write-up shows the level of her self-insights, and rationale for adopting an action research approach to professional development. We had already talked about data collection, and the importance of the emergence through the accounts and in practice of the learners' own voices. By this I mean a form of expression which reveals an autonomous commitment to a line of learner-initiated enquiry, which may indeed take the form of questioning the teacher/tutor or suggesting lines which the teaching might follow in order to enhance the learning experience. Sarah wrote to me with a focus for our first one-to-one meeting, and said:

*I want to talk to you about data collection which is worrying me. I've already thought about my own diary, pupils' learning logs, questionnaires, and National Curriculum levels. I'm not sure if video and tape-recorders in the classroom are appropriate.* (14.3.93)
I was concerned that in her letter to me her question, 'How can I make the National Curriculum more accessible, enjoyable and challenging to my Year Eight class?' was unmanageable in scope for a ten week teaching practice.

**How can I enable Sarah to focus educationally in order to improve the quality of learning?**

This was the question which I asked myself at the beginning of our conversation on 18th January 1993. It was clear to me that she had already begun the process of reflection linked to some form of practicable action. For the sake of length I have edited some of the conversation, but have attempted to keep the central meanings intact.

This is how our conversation started:

SD: When I wrote to you at the 'imagining the solution' stage, a question I had in my mind, was, what does differentiation mean in English as opposed to any other subject? How do you implement differentiation in English? And it seemed to me from my limited experience that the area where it really comes into play is when the kids start writing.

ML: What makes you say that?

SD: I say that because everyone can respond to literature at some level.

ML: That's very clear. I don't necessarily have to agree or disagree. It's your enquiry. But I wouldn't say that I had noticed that it necessarily manifests itself in the writing more than in other areas... I think there are subtleties which manifest themselves just as meaningfully in the way they say things. The way they listen... My question would be, what is it in the processes that you are engaged in, Sarah, that have actually moved a child from point a) to point b)?

Sarah's comments reveal how much she has reflected upon her need to understand the way in which her pupils learn. She takes control of the conversation right from the beginning, and my opening comment is designed to enable her to expand on what she understands as a way of coming to understand better. I also stress her ownership of what she's doing, but am prepared to challenge her from an English-teaching point of view. From this point she goes on to give examples of why it is the writing that she wants to focus on. About her question (on which she had written to me prior to our meeting) she says:

SD: It's too huge. I cannot do that in four weeks.

She is quite adamant about that so I am able to seize the initiative, because it appears that she is ready to start formulating her question, something which in my own Guide (Laidlaw, 1992) I stress as being of paramount importance in terms of both setting out and having a benchmark from which the enquirer can measure subsequent insights.

ML: So how can you phrase a question that shows that your own educational development has helped in the learning of at least one pupil in your care?

SD: In connection with writing, do you think?

ML: What do you think? That's the point. That's what you've come up with, so I suggest we look at that.

My initial question is clear and focused. Sarah's response shows some insecurity ("do you think?") and my reply indicates my belief in both her responsibility and my respect for her. I think at this stage there is
a real sense of enquiry beginning. I go on to say:

ML: And maybe now we need to phrase that into an action enquiry question.

The 'maybe' is gentle and Sarah from here goes on to talk about something she has done with her 'target' group. She is clearly not quite ready yet to begin to phrase the question. She talks about her concern to give the children worksheets as a single way of differentiating, and about her concern to give children tasks at which they can succeed in order to fuel their motivation and self-esteem. Our conversation then continues:

ML: I think for this study you are going to have to concentrate on a very few children.

SD: I think you're right. I've written down here, 'target just one?' There's this lad, Hugh, and he's very low ability. I could work with him, but there's a child at the other end of the spectrum, the brightest, very lazy. It would be a real challenge trying to support one end and at the same time stretch the other end. One or the other?

ML: If you're moved to make a choice, then I suggest you make a choice.

It seems to me that in this part of the conversation, Sarah is showing again her capacity to understand the educational and administrative implications deeply (target just one?) yet at the same time wondering how this can be put into practice. My reply confirms her ownership of what she does (and her responsibility for making decisions), acknowledges her right to come to her own conclusions, and yet offers a way forward. She then responds:

SD: And now I think I do have to concentrate on just one pupil, a weak learner. I see. Yes.

So again I come back to my agenda in this conversation which is about how I can enable Sarah to focus educationally. The formulation of an action research question is part of a generative process (see McNiff, 1988, 1992) and thus needs to be handled with real care, for the wording, the coming to understand what the question entails, seems to me in my experience as a facilitator of action enquiry, to gain epistemological and ontological significance. By this I mean a significance which reaches further than mere semantics and delves into not only what can be understood through the processes which are inaugurated in its name, but also the nature and validity of the conclusions drawn from such a process. I have also found that the questions I pose about my practice determine what values I am able to live out and that they reveal much about my view of the world. Therefore forming the question is not simply a pathway to practice, but to knowledge, living out one’s values and coming to understand what is valid and significant about that knowledge.

ML: So let's talk about your question, then. I think now the time is better. With words that are going to release your creativity rather than restrict it. How can you form this question that is going to take into account all the elements that you are concerned about?

By phrasing my question in this way, Sarah can focus on any aspects that seem to her to be important. And this she does:

SD: We've got writing. We've got one end or the other and I'm moved to Hugh. I think I need to go away and think about that. It's going to be either supporting or stretching, don't you think? Does that seem right? I think there is something about making the curriculum available.

ML: Making the curriculum available, that is an important point. After all you are an English teacher. And your report will be required to show evidence of learning about English.

Sarah lists what she thinks are the key points at this stage in her developmental thinking. My repetition
of her point about the curriculum is crucial, and as I say to her later, 'in our case-study collection (1991-93) we have none which reveal evidence of both curricular and personal learning'. As a student teacher and future full-time teacher, Sarah is going to be accountable for the quality of her English pedagogical skills. She is on a teacher education course as well as conducting an action enquiry: indeed the two processes share a great degree of confluence. I go on to stress:

ML: It isn't just about a pupil taking responsibility for her or his learning, it's also learning about what? And that's why I think that your emphasis on the NC attainment targets is very relevant here. It's one way you can measure success.

SD: So are you saying that I should have a question of the kind, 'How can I help so and so?', or 'How can I help a person's learning in this Green issues module?'

ML: The way you phrase and focus that will determine not only the data you can collect, but also your own educational development and the way you can take this forward, this knowledge and understanding, into your future career.

SD: So I think I have to make a decision now about which child.

ML: Yes.

Sarah shows a high level of sophistication in her response to my comments. She recognises that the validity and meaningfulness of what can be developed, begins to become apparent from this early stage if it is seen as significant on many levels. Indeed she confirms this insight in her final write-up:

'Action Research is a bit like throwing a stone into a pool. Even a small stone can produce wide-reaching ripples. For me, the small stone of my question has developed my thinking about the way I see myself in the classroom and about how I relate to the many individuals in my classroom.'

(Darlington, 1993, p.13)

And in the conversation:

SD: Depending on the child I choose, will also determine the kinds of statements and knowledge I can have. Supporting, I keep saying supporting. This is about getting them to the next stage. They are learning. You could perhaps have a question like, 'How can I help so and so develop his learning in this module, or this aspect of work?' I suppose that would do. That is quite tight, isn't it?

ML: Yes, except 'learning' is huge.

...... Sarah takes my point about the hugeness of the 'learning' notion and laughs for the first time in the discussion. We go on then to talk about whether she should concentrate on writing in her question. In her final report she writes:

'I am glad that the action research question I finally chose did not restrict me to looking at writing only.' (Darlington, 1993, p.12)

A few moments later she says (taking control by summing up so far):

SD: We have been talking about the behaviour viewpoint, and with the writing, in one piece he might be able to achieve level three, but in the next level four. Although that looks like an improvement, I don't think that's necessarily so. It's not enough. Yes, and I think that perhaps I am tending to think not about the evidence of what they are learning [but] how I am differentiating. Do you see what I mean?
ML: Yes, I do.

SD: That's why some of the things I am thinking about might not be appropriate. It's about me not the pupils.

ML: But it's about both. Action Research is about professional development and pupil learning.

Her astuteness that apparent improvement may not be so easily articulated enables me then to reassure her categorically that what she is about is twofold. She writes about the importance to her of this reassurance:

'It was quite a surprise when it dawned on me that my development was relevant to the research too. Moira talked about [this].'

I could then challenge her further:

ML: This is something that I am going to bring up in the Validation meeting, but I think I will say it here. Don't worry about when you hear it. It's quite a question. 'In an account of your professional development, what evidence do you have that your pupils are learning anything of value and that they are taking some responsibility for their learning?'

This was something that Jack Whitehead (in his capacity as my Ph.D. supervisor) and I had formed the day before. Our discussion had shown me potently how crucial it is to evolve a generative question with my students, but that their own response to a wide-reaching formulation could also help them to focus within carefully constructed parameters. I think the above question is an opening up to the students of the perceived values of democracy in action, to the assumption that ownership of learning promotes an improvement in that learning, and that their professional development is framed by their response to those factors. Sarah's reply is prompt.

SD: Read it again!

ML: (Reads it again.) I am going to challenge you with it, because I think that's where our professional development should be tending. Towards a greater understanding of pupil learning. Therefore the quality of your pupils' learning is probably going to be heightened if they are taking some responsibility for it. Does that make sense?

She is now able to say the following:

SD: I think it is one of the jobs of an educator: to try and develop more autonomy amongst children. If you give them that, this responsibility, then ... it will carry on into adult life and you're teaching them so much more than just English. Also you're teaching them something about the value of the curriculum, the value they're getting out of it.

Sarah writes in her final report:

'I feel that I have demonstrated fully in the preceding pages that Hugh did take responsibility for his own learning. But did he learn anything of value? First I needed to ask, ‘whose value?’ (Darlington, 1993, p.33)

Hugh had written (which Sarah cites):

'I have done my research very well when they [sic] was not enough information but I wrote a letter to esso house [sic] asking them for some info on cars and pollution and they sent me some.' (11.4.93) ............
Conclusion

Reflective practice seems all the rage at the moment. In our School of Education we talk to our students about reflective practice. It is written in to our course and tutorial handbooks for example, but nowhere within the main stream of the course is the vital nature of focusing on coming to understand the complexity of the educational practice through dialogue, sufficiently emphasised to my mind. Writers like Donald Schón (1983, 1987) describe and propose many ways in which educators reflect and formulate their rationale for practice. He does not specifically advocate a dialogical approach. Indeed he writes almost entirely using conceptual models and nowhere do we see how his concepts achieve a practicable reality.

I have described the nature of living educational theories and drawn your attention to an action research and educational theory case study collection which has been constituted from the living educational theories of teachers at different stages of professional development. Extracts from a case study in the collection showed the living educational theory of a university tutor in action in her educative relationship with a novice teacher.

I now want to examine how a teacher education curriculum can be constructed from living educational theories and to relate the living theory approach to a practical science 'model' and a common-sense 'model' of professional development.

3) CONSTRUCTING TEACHERS' EDUCATION CURRICULUM FROM LIVING EDUCATIONAL THEORIES

Three approaches to the construction of a teacher education curriculum are considered below. The first is derived from a practical science 'model' of professional development, the second is derived from a common-sense 'model' and the third is a 'living educational theory'.

Elliott's practical science model of professional development

At the centre of Elliott's (1993) curriculum for pre-service education are five modules which he suggests could sequence the novice teachers' learning experiences. He uses Dreyfus' (1981) five-stage model of the development of a capacity for situational understanding, to classify four phases of experiential professional development. These phases move through Novice to Advanced Beginner to Competent to Proficient to Expert. In the basic phase of the novice-advanced beginner Elliott says that:

Module 1 would largely consist of an observational research phase based on a series of assignments designed in the higher education context and supervised jointly by academics and school staff.
Module 2 would consist of a case-study-based core-curriculum in the higher education context.
Module 3 could consist of a period of direct classroom experience under the collaborative supervision of school training staff and higher education tutors.
Module 4 would take place back in the higher education context and focus again on an educational issues agenda using case studies.
In Module 5 students would return to the school-context for a final period of direct experience. They would be required to undertake a case study research assignment, but one which focused on the interface between their own teaching and the organizational and occupational culture of the school.

Elliott does not combine his modular programme with any requirement to learn specialist subject knowledge on the grounds that the possession of such knowledge should be a prerequisite of acceptance into a professional training programme. He gives his reasons for using the terms 'practical science' to characterize his perspective on teacher education in terms of locating the emergence of the image of the 'teacher as researcher' in the broader context of changes in the occupational cultures of
the public service professional more generally. The 'modules' above are 'derived' from a 'practical science' perspective which is located in the occupational cultures of the public service professional. When I criticised Elliott's view of rationality (Whitehead, 1989), I gave my reasons in terms of a tension between propositional and dialectical forms of knowledge.

I believe that Elliott is making a mistake in his view of rationality. He subscribes to a view of rationality which leads him to use a propositional form of discourse in his characterisations of educational theory. What I am advocating is that the propositional form of discourse in the disciplines of education should be incorporated within a living form of theory. This theory should not be seen in purely propositional terms. It should be seen to exist in the lives of practitioners as they reflect on the implications of asking themselves questions of the kind, 'how do I improve my practice?': (Whitehead 1989)

In the development of his 'practical science' approach, Elliott is still using a propositional form of discourse to 'derive' his curriculum for teacher education. In the living educational theory approach below I suggest that teacher researchers are capable of creating a curriculum for teacher education which is grounded and constructed from education itself, rather than derived from a 'practical science' or any other conceptual form of understanding including the common-sense model below.

Hargreaves' (1993) Common-sense Model of the Professional Development of Teachers

This model is based on Hargreaves' belief that teachers have two dominant concerns which he defines as sectors that are part of every teacher's professional knowledge and professional development. He says that the first sector concerns their performance as a teacher, and the second that of the performance of pupils. He divides each sector into the following segments:

Teacher performance sector (with five segments)

I) Class management: the teacher's authority, and ability to control and organize the classroom.
II) Pedagogy: the content and methods of a lesson, involving selection, presentation, sequence and pace.
III) Continuity and coherence; the link between lessons to make up a course or scheme of work; links between subjects; links between year groups.
IV) School structures and cultures; the structure of the whole curriculum and how it is allocated between groups; staff cultures and styles of working.
V) The school in the context of the education system; the different types of school and their interrelationships and relations with other aspects of the education system as a whole.

Pupil performance sector (with five segments)

I) Pupil behaviour and conformity; acceptance of teacher authority and manageability.
II) Pupils' abilities and motivation; their differentiation along these dimensions.
III) Pupil progression; the form and context of pupil learning and achievement.
IV) The social context of pupils; their family background, race, gender and social class; family and community environment; pupil cultures.
V) The wider social, economic and political environment; the ways in which pupils are shaped by these.

Hargreaves suggests that it is after trainee teachers have acquired the professional common-sense knowledge in the first two segments of both sectors that they achieve a level of professional confidence with makes them more ready to progress to the remaining three segments as part of their professional growth.

Hargreaves questions whether Elliott is right to insist upon observational research assignments and
discursive analysis for the new trainee with only very gradual immersion into direct experience. He asks whether it would be better to let many trainees acquire their basic professional knowledge, under known good teachers as supportive mentors, before expecting them to research, discuss and deliberate in a highly sophisticated way. He also asks whether progression in professional development is not so much a simple sequence of stages from novice to expert, but rather a more complicated process by which there is progress within as well as between segments. Hargreaves acknowledges that Elliott's model provides continuity through process, but criticises it for being too vague on progression which demands attention to content. Hargreaves points out that his own model offers a way forward on progression by content. He concludes by acknowledging that a coherent model of professional development embraces both continuity and progression and matches process to content. I agree with Hargreaves that progression in professional development involves progress within as well as between segments. I also agree that much novice teacher talk with supervisors consists of questions of the form, 'what do I do when....?'. However, I also know from twenty years experience of pre-service teacher education that novice teachers are also concerned to improve the quality of their pupils' learning. Whilst there is much to be said for a 'common-sense' model because it stresses the basic professional knowledge which novice teachers need to survive and answer, 'what do I do when....?', Hargreaves does not explain how common-sense knowledge can develop the qualities which are required for exploring questions of the kind, 'how do I help my pupils to improve the quality of their learning?'. A living educational theory approach can do both.

A living educational theory approach to professional development.

I now want to show how a living theory approach to professional development can embrace both continuity and progression and match process to content in a way which combines the strengths of both the Hargreaves and Elliott models within the discipline of education. The context for the development of this approach is a new postgraduate teacher education programme which conforms to government guidelines on the following 'Teacher Competences' for novice teachers and a Continuing Professional Development Action Research Programme for advanced beginners, competent, proficient and expert teachers at the University of Bath. The Department for Education in England has published a range of 'competences' which it expects of newly-qualified teachers. These are listed under four headings; subject knowledge/subject application, class management, assessment and recording of pupils' progress, and further professional development. In the School of Education at Bath we have integrated the competency statements into the following eleven 'aspects of teaching': lesson preparation and planning; lesson presentation and structure; teaching strategies; classroom organisation and management; relationships with pupils; assessment and recording of pupils' progress; your role as group tutor; knowledge of subject; your wider professional role; self evaluation and target setting: extended professional development.

This list of 'aspects of teaching' is accompanied by descriptions of what is meant by becoming competent in each aspect. It is given to the students not as a check-list but as a set of targets which they should aim to achieve during the course. The structure and phases of the PGCE programme below were developed in partnership with teachers from our local schools. The following description of the course is taken from the course handbook for the 1993/94 academic session. There are a number of claims in this description such as the claim that students' programmes are more individualized in the consolidation phase than in the induction phase which are at present being evaluated by a course evaluator.
<table>
<thead>
<tr>
<th>Autumn</th>
<th>Spring</th>
<th>Summer</th>
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<tr>
<td><strong>Serial 1</strong> in the Homeschool</td>
<td><strong>Block 1</strong> in the Homeschool</td>
<td><strong>Serial 2</strong> in the Homeschool</td>
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<tr>
<td>Weeks 1 to 8</td>
<td>Weeks 9 to 14a</td>
<td>Weeks 14b to 22</td>
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<tr>
<td>School 3 days/week</td>
<td>School 2 days/week</td>
<td>School 3 days/week</td>
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<td>Bath 2 days/week</td>
<td>Bath 5 days/week</td>
<td>Bath 5 days/week</td>
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<td>[Half-term in Bath]</td>
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<tr>
<td><strong>Induction Phase</strong></td>
<td><strong>Consolidation Phase</strong></td>
<td><strong>Extension Phase</strong></td>
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The Homeschool is central to the course and the work of the novice teacher is based around a subject department and a year team. There are up to ten novice teachers working in subject pairs in each Homeschool. The second block placement which takes place in the Complementary school, is the point at which the judgements are made about whether or not the student has achieved the required level of practical competency. The course is divided into the induction, consolidation and extended phases of professional development.

The Induction phase is based in the University and in the Homeschool in a serial placement (weeks 1 to 8) and a block placement (weeks 9-14a). This phase, whose prime purposes are to raise awareness of a teacher's work in school, and to begin the development of generic teaching skills and an understanding of the professional skills associated with teaching, sees the introduction of many fundamental ideas relating to learning to become a teacher. Through a carefully-structured series of exploratory activities in the Homeschool, which are integrated with the programmes in the University, the novice teacher explores issues, practises skills and develops competences both through direct practical involvement with teachers and children, and through a systematic review of their own work.

The Consolidation phase involves a second serial placement in the Homeschool (weeks 14b-22) which, in considerable part, is a preparation for the subsequent block placement in the Complementary school (weeks 23-29). The students' programmes are more individualized than in the Induction phase, and their primary purpose is to draw from the experience of the Induction phase in order both to build on personal strengths, and strengthen less well-developed areas. Once again, both through direct practical involvement with teachers and children, and through a systematic review of their own work, they explore these issues, continue to practise skills and further develop competences. The block placement in the Complementary school affords a substantial period of time in which they can concentrate on the development of teaching competences, and during which such competences can be verified and formally assessed.

The Extension phase is the final part of the course (weeks 30-36) and its prime purpose is build on their classroom experience and growing expertise and to extend this into a more rounded experience of their role as a teacher. The focus of the extension phase is an individually negotiated programme of professional development based in the Homeschool and supported by school and University Tutors.
working in a partnership within the school. Whilst students are offered opportunities in a community-focused programme, primary school liaison and a curriculum project, the focus is on their own professional development programme.

Over the past two years, as the old programme at Bath gave way to the new programme, some university tutors have been gaining experience on how to support novice teachers in the creation of their own living educational theories grounded in action research case studies of the kind, ‘how do I help my pupils to improve the quality of their learning?’ Twenty of these case studies are being used to help this year’s students to create their own living educational theories during the extension phase of this year’s programme.

The living theory approach to professional development began, as I outlined in part one, in the educational action research of a university academic studying his own educational development in the context of the politics of truth within his university. It was then integrated into the action research of competent teachers as they researched their own professional development in their educative relationships with their pupils and in their relationships with the wider forms and fields of knowledge. In the final phase it moved to novice and beginning teachers, as they researched aspects of their own professional development in their educative relationships with their pupils. The living educational theory approach to professional development values the case study approach advocated by Elliott (1993) and others (Shulman, 1992 and Rudduck, 1991). It also incorporates a view of a teacher as a reflective practitioner. This is included in a systematic form of action reflection cycle within a teacher’s educational theory. The living theory approach can be contrasted with the edited collection of contributions to the conference on conceptualizing Reflection in Teacher Development held at the University of Bath in 1991 (Calderhead, J & Gates, P., 1993). This collection follows James Calderhead’s (1988) conceptualizing of the professional learning process.

The living theory approach acknowledges the value of Hargreaves’ views on the need for early contact with pupils and mentors in schools, especially in relation to i. and ii. of the segments in the teacher and pupil performance sectors. However, the living theory approach appears to extend the models proposed by Hargreaves and Elliott in that it establishes a direct link between the professional knowledge of competent practitioners the conceptual theorising of academics and the educational enquiries of novice teachers of the kind, ‘What do I do when ....? and ‘How do I improve my practice?’. The living theory approach can also integrate contributions from conceptual theorising about the reflective practitioner within the action/reflection cycles without being reduced to a conceptual form. The action research case studies of competent and reflective teachers in the collection at Bath show how both theory and practice can be integrated in practical educational enquiries with a dialogical and dialectical form, ‘How can I help my pupils to improve the quality of their learning?’.

My purpose in suggesting that educational researchers should create a dialogical form of knowledge (Larter, 1987) which can integrate conceptual forms of knowledge is to emphasise that each individual can create a living educational theory for themselves. In some small way each teacher and teacher educator can, in their educative relationships, help to live more fully the values which can improve the world and by submitting accounts of their educational development for public evaluation and accreditation as valid contributions to educational knowledge. The pre-service teacher educational programmes can last one year. This can leave some forty years of professional life to create one’s educative relationships and contributions to a new form of educational knowledge in which individual teachers can research their own questions of the form, ‘how do I help my pupils to improve the quality of their learning?’.

At the present time educational knowledge is legitimated in our universities mainly as conceptual, rather than living, forms of knowledge which are integrated in educational enquiries of the kind, ‘How do I improve my practice?’. Encouraging teachers to become practitioner researchers will not on its own transform the educational knowledge-base of universities. Such a transformation involves an engagement with the fundamental issues of power and validity which I have considered elsewhere.
(Whitehead 1993). Nevertheless I think the development of educational knowledge, if it is to engage
directly with improving the world, needs to be seen to be actively constructing our lives as educational
researchers, teachers and teacher educators, from the living base of our values, competences and
understandings in educative relationships.

In the words of Yevtushenko (1962):

Don't worry. Yours is no unique condition,
your type of search and conflict and construction,
don't worry if you have no answer ready
to the lasting question.
Hold out, meditate, listen.
Explore. Explore. Travel the world over.
Count happiness connatural to the mind
more than truth is, and yet
no happiness to exist without it.

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