

How Do I Improve My Practice? Creating and legitimating an epistemology of practice

JACK WHITEHEAD

Department of Education, University of Bath, Bath BA2 7AY, UK; e-mail: edsajw@bath.ac.uk

2023email - jack@livingtheory.org

ABSTRACT This paper is a response to Schön's (1995) call to reflective practitioners for the development of an epistemology of practice. It grounds the epistemology in the experience of 'I', as a living contradiction in the question, 'How do I improve my practice?'. It focuses on four epistemological implications, for the creation of a discipline of education, of placing 'I' as a living contradiction within an epistemology of reflective practice. (1) The inclusion of 'I' as a living contradiction in educational enquiries can lead to the creation of research methodologies which are distinctively 'educational' and cannot be reduced to social science methodologies. (2) The inclusion of 'I' in claims to educational knowledge leads to a logic of the question, 'How do I improve my practice?'. (3) The inclusion of 'I' in explanations for an individual's professional learning can lead to the creation of 'living' educational theories which can be related directly to an individual teacher's educative influence with his or her students. (4) Values can be used as the educational standards which create our disciplines of education.

Schön (1995) writes of introducing the new scholarship of reflective practice into institutions of higher education in terms of becoming involved in an epistemological battle:

It is a battle of snails, proceeding so slowly that you have to look very carefully in order to see it going on. But it is happening nonetheless. (1995, p. 32)

In the story of this reflective snail the battles have continued over some 26 years of engagement in the University. They have been internal as well as external. I am using story in the sense of Connelly & Clandinin (1999) as a way of shaping a professional's identity and as a way of contributing to the professional knowledge landscape.

I want to be clear about the organisational context of my reflective practice. As a university academic in England my research is judged by national assessments.

These include its international influence. One community in which I seek such influence is the Self-Study of Teacher Education Practices (S-STEP) group of the American Educational Research Association. I joined this group at its formation in 1992. I agree with Zeichner's (1998) point. The birth of the self-study in teacher education movement has been probably the single most significant development ever in the field.

Tom Russell in Canada, Fred Korthagen in the Netherlands and John Loughran in Australia have focused their reflective practice and self-studies in their work on initial teacher education (Russell & Munby, 1992; Loughran, 1996; Korthagen & Kessels, 1999). Other self-study researchers in America have emphasised the development of methods of self-study in reflective practice (Hamilton, 1998). Others in England have developed appropriate forms of representation and standards for self-study research (Lomax, 1994) and a recent development has been the creation of living educational theories from the reflective practices of teacher-educators.

Whitehead, in his 1994 AERA address, raised the need for living educational theory. We have thought through this phrase often and assert that this book generally and self-study specifically is indeed an example of living educational theory in two ways. It is living because, as people engage in understanding I, they learn more and their theory changes as they understand more. Further, because they are living what they learn, new knowledge emerged. The work in a special issue of Teacher Education quarterly (Pinnegar & Russell, 1995), provides one example of that, while McNiff's Teaching as Learning (1993) is another good example. McNiff explains action research techniques that might be used to not just create better classroom practice and thus learn as one teachers, but also to conduct systematic study of the practice using action research principles so that educational theory continues to grow. (Hamilton & Pinnegar, pp. 242–243, 1998)

I would add to this group the work of Ghaye & Ghaye (1998) in England. They extend the idea of creating living theories into primary education with a powerful focus on 'Reflection-on-values: being a professional' and 'Reflection-on-practice: resolving teaching concerns'. Lomax (1999) has extended this into Higher Education.

In extending the idea of self-study into my Ph.D. supervision of reflective practitioners I want to contribute to the development of an epistemology of practice. In his writings on this epistemology Schön says that what he means is a form of action research with norms of its own, which will conflict with the norms of technical rationality. What I want to do is to share some of the epistemological standards I have developed from my reflective practices in education.

I see myself as a professional educator in my supervision of the Ph.D. programmes of practitioner researchers. To complete a Ph.D. at the University of Bath the researcher must produce a thesis, which is judged by examiners in terms of originality of mind and critical judgement. In supervising such research I bring these standards into my 'tutorial' conversations.

Loughran has made significant advances in understanding the standards of

reflective practice (Loughran, 1996). He has embraced Dewey's ideas on open-mindedness, responsibility and whole-heartedness as pre-cursors to preparedness for reflection. He has integrated the five phases of a Deweyian reflective cycle (p. 190) in a self-study of his modelling of reflective practice with students on an initial teacher-education programme. He has demonstrated that each student used the three forms of reflection differently: anticipatory, contemporaneous and retrospective.

Squires (1999) criticises the reflective practice paradigm on the grounds that, as a pure process, it tells us nothing specific about teaching or any other profession to which it relates. Loughran's (1996) work meets this challenge by focusing on the substantive content of his own and his students' learning as they seek to become better teachers. I want to extend the understanding of reflective practice which Loughran offers into educative relations with experienced teachers. I hope to do this by focusing on my practice in my supervision of teacher-researchers. In doing this I hope to avoid Fletcher's (p. 242, 1997) criticism of Loughran, when she asks for a more empowering analysis of teachers in school and staff in higher education to discuss and identify the conditions and actions necessary to promote the development of the new teacher.

In the course of my educational enquiry, 'How do I improve my practice?', I have had to exercise my originality of mind and critical judgement in my encounters with 'educational' research methodologies, the logics of education, educational theories, and using values as educational standards.

The nucleus of my epistemology of practice is the inclusion of 'I' as a living contradiction. All I am meaning by 'I' as a living contradiction is the experience of holding together two mutually exclusive opposite values. I am thinking of values such as freedom, fairness, and enquiry. I experience myself as a living contradiction when I recognise that I hold a value such as fairness, yet deny it in my practice.

I will explain four implications of placing 'I' as a living contradictions within an epistemology of reflective practice.

(1) The inclusion of 'I' as a living contradiction in educational enquiries can lead to the creation of research methodologies which are distinctively 'educational' and cannot be reduced to social science methodologies

It took me from 1971 to 1976 (Whitehead, 1985) to understand that a distinctively 'educational' research methodology could be distinguished from social science methodologies and used for exploring questions of the kind, 'how do I improve my practice?' The methodology was based on action reflection spirals of the form:

I experience a concern when my values are negated in my practice.

I imagine a way forward.

I act.

I evaluate.

I modify my concerns, ideas and actions in the light of my evaluations.

I understood this in my practice before I understood it in my theories of methodol-

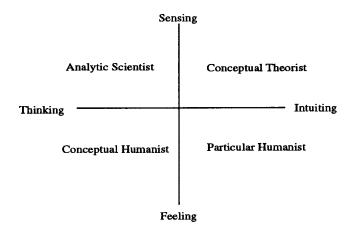


FIG. 1. Mitroff's and Kilman's methodological approaches to the social sciences.

ogy. By 1985 I could theorise about this distinctively 'educational' research methodology with the help of the four-fold classification of methodological approaches to the social sciences of Mitroff & Kilman (1978). This classification distinquished four social science methodologies by their modes of enquiry and preferred logics. They defined their four-fold classification as the approaches of analytic scientists, conceptual theorists, conceptual humanists and particular humanists. They grounded their classification in a Jungian Framework and represented their classification as follows (Figure 1).

Using the above classification, I could see that I had moved through their four methodological approaches as I searched for an appropriate way of exploring the implications of asking, 'How do I improve what I am doing?' However, a report which analysed my enquiry-learning as I moved through these four methodologies appeared to fall outside the classification. This led to an extension in my theorising about a distinctively 'educational' methodology. I suggested that the above action reflection spirals could be used as a basis for the creation of distinctively 'educational' methodologies which contained 'I' as a living contradiction. The spiral is purposely lacking in 'smoothness' to convey that the movement forward is anything but smooth (see Figure 2).

(2) The inclusion of 'I' in claims to educational knowledge leads to a logic of the question, 'How do I improve my practice?'

The logic of an epistemology of practice needs clarification. I understand logic as a form of reason that enables me to understand my own rationality. When I make a claim to believe or to know something, or to explain why something happened, I want to understand the logic of the belief, knowledge or explanation.

In my enquiry, what I needed was a logic of reflective practice which focused on the processes of coming to know through question and answer. I studied the point of Gadamer (1975) that despite Plato we are still not yet ready for a logic of the question. Gadamer led me to Collingwood's (1939) work on question and answer.

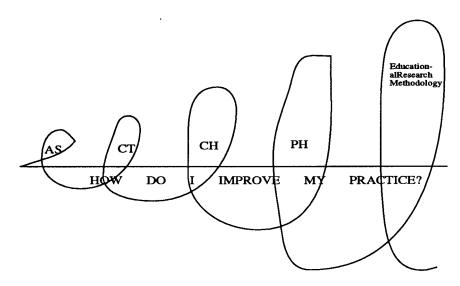


FIG. 2. A spiral representation of the development of an educational methodology which cannot be reduced to a social science.

Unfortunately, like Ilyenkov (1997), Collingwood died before he could develop this logic in a systematic way. Perhaps I might be more fortunate!

In exploring my logic of question and answer I used the ideas of both Popper (1963, 1972) and Medawar (1969) on the logic of scientific enquiries. I also used Kosok's (1976) approach to linearising a non-linear dialectical process, to characterise my living logic of educational enquiry.

I used Popper's schema for the growth of scientific knowledge. In Popper's view this growth starts from some problem, proceeding to a tentative solution or tentative theory which may be partly or wholly mistaken and which is subject to error elimination through critical discussion or experimentation.

I was particularly impressed with Medawar's critique of Popper's disavowal of any competence to speak of the creative acts in scientific enquiry. Medawar explained, from his experience as a Nobel Prize winner, that in his enquiries, creative and critical phases alternated and interacted. In his view a scientific enquiry started as a story about a possible world, a world we invent, criticise and modify as we live so that it ends by being a story of real life.

What I wanted was a logic of reflective practice which could remain open to the possibilities which life itself permitted. I wanted a logic of reflective practice which did not eliminate the traditional logic of propositional theory and discourse.

Table I shows the analysis of the nine research reports I produced between 1972 and 1981. I characterised my logic of reflective practice in Kosok's terms as a process of transformation that reveals transition structures as nodal points of self-reflection. When I think of transition structures, I am thinking of the propositional theories from the traditional disciplines of education with their distinctive conceptual frameworks and methods of validation. These acted as heuristic frameworks on which I exercised my creativity in moving my enquiry forward. It

TABLE I. Developing an educational methodology for the enquiry, 'How do I improve my practice?'

Report	1 1972	1 2 1972 1975a	3 1975b	4 1976	5 1977	6 1978	7 1979	8 1980	9
Medawar's phase of scientific enquiry	Critical	Critical Creative	Critical	Creative	Critical	Creative	Creative Critical Creative	Creative	Critical
The Popperian Schemas Mitroff's and Kilman's	S1 Analytic scientist		S2 Conceptual theorist		S3 Conceptual humanist		S4 Particular humanist		S5 Educational methodology
Social science Classification	AS		CT		СН		PH		Outside the Mitroff and
									Kilman classification

is difficult to communicate the significance of the analysis in this table within the word limits of a Journal article. I have placed an extended analysis of its significance in the 'Living Theory' section of my action research homepage (http://www.actionresearch.net).

The third assertion which emerged from my inclusion of 'I' as a living contradiction in my reflective practices concerns the capacity of individuals to create their own living theories to explain their own learning.

(3) The inclusion of living contradictions in explanations for an individual's professional learning can lead to the creation of 'living' educational theories

Having embraced the idea of 'I' as a living contradiction in my reflective practice, developed an appropriate methodology and become clearer about my logic of the question, I wondered about the nature of the educational theories which could be created by such contradictions. I proposed the idea that living educational theories could be constituted by the descriptions and explanations which individual learners produced for their own learning as they asked, researched and answered questions of the kind, 'How do I improve my practice?' (Whitehead, 1985). The idea that such theories were 'living' theories was grounded in 'I' as a living contradiction and the idea that individuals could produce valid explanations for their own learning. The idea of 'living' theories was further reinforced by the idea that the explanation for an individual's present practice would include an evaluation of the past practice and an intention to create something better in the future which the individual was committed to working towards.

Taking Ryle's (1949) point that efficient practice precedes the theory of it, I want to point to the place which contains evidence of my reflective practice as a professional educator in which I solely or jointly supervised, 'Living Theory' Ph.D. Theses and Masters Dissertations.

The Homepage http://www.actionresearch.net (Whitehead, 1999b) includes the Living Theory, Theses and Dissertations of Cunningham (1999), Kevin Eames (1995), Moyra Evans (1995), Moira Laidlaw, (1996), Pat D'Arcy (1998a), Erica Holley (1997), Hilary Shobbrook (1997) and Loftus (1999).

Two of the titles will serve as indicators of my influence:

- How can I create my own living educational theory as I offer you an account of my educational development? (Laidlaw, 1996).
- How do I as a Teacher-Researcher contribute to the development of a living educational theory through an exploration of my values in my professional practice? (Holley, 1997).

In making this point about efficient practice, I do not intend to imply that these Theses and Dissertations show that 'I have educated these individuals'. In my view they have educated themselves. However, I do want to explain my educative influences on the learning of these reflective practitioners.

(4) We can use our values as educational standards to create our disciplines of education

In many ways the issue of the nature of educational standards is the most complex in my enquiry. There is a global interest in standards of professional practice. A number of government organisations such as the Teacher Training Agency in the UK and the Ontario College of Teachers have published linguistic descriptors of standards of professional practice (Whitehead, 1999a). My understanding of the ways in which values could be used as standards of judgement in creating my discipline of education emerged from my two enquiries, 'How do I live my values more fully in my practice?' and 'How can I help you (students) to improve your learning?'

Initially the first question focused on the way I could use my value of academic freedom in an explanation of my own learning as I engaged with the politics of knowledge within the University of Bath. The meanings of the value of academic freedom emerged in the course of my critical reflections on my practice as I responded to the experiences of attempts to terminate my employment, to stop me challenging the competence of examiners of two Ph.D. Theses and to discipline me for my activities and writings (Whitehead, 1991,1993). This movement into the politics of knowledge reinforces Schön's point about the epistemological battles taking place around the legitimation of the new scholarship. It will be interesting to see to what extent the content of a journal of Reflective Practice reflects such battles to its readers.

I imagine that some of the epistemological battles will focus on the power relations which support particular interpretations of the educational standards of originality of mind and critical judgement which are used by reflective practitioners to create and legitimate their discipline of education.

One of my difficulties in communicating the meanings of these educational standards concerns the fact that they are part of my knowing-in-action (Schön, 1995) and are resistant to clarification through language alone. Let me explain this difficulty through my experience of contradiction in my spiritual need for recognition:

Human beings seek recognition of their own worth, or of the people, things, or principles that they invest with worth. The desire for recognition, and the accompanying emotions of anger, shame and pride, are parts of the human personality critical to political life. According to Hegel, they are what drives the whole historical process. (Fukuyama, 1992, p. xvii)

The desire for recognition which is helping to move on my enquiries may be understood in the way Fukuyama (1992) uses the term 'Thymos':

The existence of a moral dimension in the human personality that constantly evaluates both the self and others does not, however, mean that there will be any agreement on the substantive content of morality. In a world of thymotic moral selves, they will be constantly disagreeing and

arguing and growing angry with one another over a host of questions, large and small. Hence thymos is, even in its most humble manifestations, the starting point for human conflict. (pp. 181–182)

In seeking recognition in this thymotic sense of 'spiritness' (Fukuyama, 1992, p. xvi) I want to overcome a tendency to megalothymia in the sense of a search to be recognised as superior to others.

What makes the educational standards of reflective practitioners differ from traditional, 'linguistic' standards is that the living standards are embodied in the lives of practitioners and require ostensive definition to communicate their meanings. I am indebted to Moira Laidlaw for the insight that the meanings of the values I use as my educational standards are themselves living and developmental in the course of their emergence in practice (Laidlaw, 1996).

In using values to discipline my reflective practice I want to both embrace and distance myself from Squire's (1999) ideas on teaching as a professional discipline. Squires addresses seven different paradigms of teaching: teaching as a commonsense activity, teaching as an art, teaching as a craft, teaching as an applied science, teaching as a system, teaching as reflective practice, and teaching as competence. He offers well-grounded critiques of each paradigm, before offering another paradigm of 'Teaching as a professional activity'. I do embrace the three questions which form the three dimensions of his model in terms of instrumentality, contingency and procedurality: What do teachers do? What affects what they do? How do they do it?

Yet, I do want to distance myself from Squires' professional discipline of teaching. We are both university teachers. Squires acknowledges that he has developed a model of teaching, not of education (p. 25). He treats educational aims as a variable that may affect the process of teaching and learning. In my view of my university teaching as a form of educational enquiry, I experience my existence as a living contradiction in terms of my educational values. They are the logical point of departure for my analysis. In other words I hold the view of educational values as intrinstic to my teaching rather than instrumental.

There are such a plethora of contributions to new paradigms that I want to avoid offering ideas in a way that can be interpreted as engaging in a battle or paradigm war. I want to avoid such conflict, but I suspect Schön (1995) may be right about the conflicts with those who are sustaining forms of technical rationality. Donmoyer (1996) asks what is a journal editor to do in an era of paradigm proliferation. Anderson & Herr (1999) have written in terms of the new paradigm wars. I am offering my paper within a view of my teaching as a form of educational enquiry. I am hopeful that I might make a peaceful contribution to reflective practice research by emphasising that I am inviting critical judgements in the spirit of moving my enquiry forward. This may indeed involve you showing where my ideas are mistaken. If the spirit which moved you to respond is informed by the values of care, compassion and pleasure in enquiry, it may be that we can help each others' enquiries to move on without engaging in a 'paradigm war'.

I now want to move my enquiry on by situating my texts as representations of

their failure to represent what they point towards but can never reach (Lather, 1994). In researching my questions, 'How do I live my values more fully in my practice?' and 'How can I help you (students) to improve your learning?', I am searching for ways of representing the influence of my spiritual, aesthetic and ethical values in my educative relations. In situating my texts in relation to my values and what they point towards I am now moving my reflective practice into dialogical and multi-media forms of representation.

To clarify the meanings of my educational standards as they emerge through my reflective practice I will focus on the contradictions which were experienced by my students and myself as I violated our spiritual and aesthetic values. In a paper showing my collaborative practice with a Ph.D. researcher (Delong & Whitehead, 1997) we analyse how I violated my spiritual commitment to the I–You relationship we both value. I did this as I insisted, in a validation exercise, that a 'validation' group focused solely on her 'text':

... in the validation meeting of the 27 Feb, 1997, I can be seen on a video-tape of the session, explaining to the group that we would focus on the text and that the aim was not to focus on the writer of the report but on what was actually written.

However, in the introduction to the report Jackie Delong had explained the importance of relationships in her enquiry. In establishing the 'ground rules' for the validation exercise as focusing on the narrative of her educational development as 'text', I totally denied the implications of her own insistence on the importance of relationships. Another example in which I experience myself as a living contradiction!". (Delong & Whitehead, 1997, p. 4)

My understandings of my aesthetic standards are developing from my experience of their denial with Pat D'Arcy, another Ph.D. researcher (D'Arcy, 1998a). In my 'Yes-But' responses to her work (D'Arcy, 1998b) I violate in the following way. D'Arcy's (1998a) values of giving aesthetically appreciative and engaged responses to the writings of others.

Drawing on the work of Rosenblatt (1985, p. 297), D'Arcy describes the ways in which the term aesthetic can apply to different stages in the reading process. She makes the following points about these stages in terms of stance, transaction, evocation and response. She says that the stance which the reader chooses to adopt from the moment she starts to read the story can be aesthetic, in the sense that the reader is prepared to be responsive to: 'the qualitative overtones of the ideas, images, situations and characters'. The transaction which the reader makes with the text becomes aesthetic, in the sense that it is 'what the reader is living through during the reading event'. In Pat's view the evocation—what the reader 'makes' of the story inside her head, during the act of reading—is also aesthetic in the sense that it becomes another story rising out of the transaction that is taking place.

She believes that the *response* which the reader can then choose to make, with reference to the virtual text that he or she has created during the act of reading, will also be aesthetic in the sense that it recollects the thoughts, feelings and impressions

that were activated in the reader's mind as her eyes took in the words on the page. She asks:

Do the responses which the teachers and I made, indicate that we were able to evoke our own virtual texts? (D'Arcy, pp. 185–186, 1998a)

D'Arcy believes that the response which the reader can then choose to make, with reference to the virtual text that he or she has created during the act of reading, will also be aesthetic in the sense that it recollects the thoughts, feelings and impressions that were activated in the reader's mind as her eyes took in the words on the page. The important point about an appreciative response, if it is to be aesthetic rather than merely analytic, is that the responder can now look carefully at the original text, bearing their own engaged virtual text in mind and RELATING it to what the writer has written.

D'arcy really wanted me to pay careful attention to HER text, in relation to how I had engaged with it. It was this engagement with and appreciation of HER version that she was missing.

In a paper on 'The importance of loving care and compassionate understanding in conversations which sometimes become infused with irritation, frustration and anger' (Whitehead, 1998b), we make the following points as we seek to understand how my 'Yes-But' response denied both of our aesthetic values in failing to evoke my virtual text from D'Arcy's stories:

I think Pat is right at the end of her latest letter to me to say that she is still waiting to see if I have learnt anything from her. If she had seen me chairing two validation groups at Kingston University ... I think she would have seen a failure on my part to have learnt the lesson about the importance of engaged and appreciative responses. Yet, I did recognise this as a problem, a year earlier, in a joint presentation with Jackie Delong to AERA in 1997, (Delong & Whitehead 1997). I say this to emphasise that not all action research accounts are 'victory narratives'. Some of my own involve some 'painful' learning, especially when they are grounded in the experience of having helped to create some pain and distress, not to mention despondency and rage in others. Feel Pat's irritation in ALWAYS, ALWAYS ALWAYS from you! In her letter below.

Pat to Jack

I've called this on my 'save as' file 'Yes, but ...'. It's an attitude of mind that runs contrary to everything I've been trying for in my enquiry—i.e. to shift from that analytic 'Yes, but ...' to a response which seeks to recognise what has been achieved and to be explicit about those achievements in a way that motivates the writer to write some more and to develop her ideas and feelings further. It's the typical kind of written response that teachers make to a completed piece of work, it's the kind of response that I received

from Alan S and from Stephen R after my presentation—and ALWAYS, ALWAYS, ALWAYS from you!

From the base of these contradictions I intend to move on by integrating insights on the ways my living contradictions influence my reflective practice and contributions to educational knowledge. My colleague, Sarah Fletcher is contributing to my enquiry as I test out the value of seeing these living contradictions in terms of multiple-selves (Fletcher & Whitehead, 1999). I find myself moving towards the insights of Somekh & Thaler (1997) on the importance of participatory action research, in which dialogue and discussion between the participants are central to the process of defining commonly accepted research questions (the 'we' questions). I agree with their point that to succeed in this difficult endeavour, of breaking down established routines of interaction and what, in effect, are taboos established by the culture and traditions of the group, it is essential to have an understanding of the multiple nature of the many 'selves' involved:

Rational planning and decision-making are doomed to failure in the face of the remarkable complexity of human motivation, encompassing interlocking disappointments, hurts, confusions, affections and aspirations. (Somekh & Thaler, p. 158, 1997)

In moving on my reflective practice I will bear Day's (1998) point in mind:

... there is still limited evidence of action research which combines both the story, the different selves of the teacher, the action and change. Collaborative researchers who themselves may be ideologically committed to particular purposes and practices of teaching, must work with the emotional and intellectual selves of teachers who may have different beliefs, values and practices from their own. They must learn to listen to dissonant voices which may not always be comfortable. (Day, 1998, p. 272)

I am thinking of bearing his point in mind as I engage with the legitimation of an epistemology of practice. This will require fundamental shifts in the organisational learning of universities. I imagine that this is going to require a participatory form of enquiry with others (Reason, 1994; Skolimowski, 1994). In working towards a participatory approach for such an epistemological change the publication of this paper and your responses to the ideas may, hopefully, be part of the process of legitimating more extensively, an epistemology of practice in the Academy.

References

ANDERSEN, G.L. & HERR, K. (1999) The new paradigm wars: is there room for rigorous practitioner knowledge in schools and universities, *Educational Research*, 28 (5), pp. 12–21.

ARISTOTLE (1952) On Interpretation, in: *Aristotle II*, *The Great Books* (Chicago, University of Chicago Press).

COLLINGWOOD, R.G. (1939) An Autobiography (Oxford, Oxford University Press).
 CONNELLY, F.M. & CLANDININ, J. (1990) Stories of experience and narrative inquiry, Educational Researcher, 5, pp. 2-14.

- CUNNINGHAM, B. (1999) How do I come to know my spirituality as I create my own living educational theory. PhD Thesis, University of Bath. http://www.actionresearchnet, Living Theory Section.
- D'ARCY, P. (1998a) The Whole Story ... Ph.D. Thesis, University of Bath.
- D'ARCY, P. (1998b) The Ups and Downs of my relationship with Jack Whitehead. Paper to the Second International Conference of the AERA, S.STEP- SIG. Hersmonceaux, England. August, 1998.
- DAY, C. (1998) Working with the Different Selves of Teachers: beyond comfortable collaboration, Educational Action Research, 6(2), pp. 255-273.
- Delong, J. & Whitehead, J. (1997) Educative Relations with Jackie Delong: A collaborative enquiry into a Ph.D. researcher and supervisor relationship. A paper presented at AERA, March 1997, in Chicago, U.S.A. (with Delong, J.).
- DONMOYER, R. (1996) Educational research in an era of paradigm proliferation: what's a journal editor to do? *Educational Researcher*, 25(2), pp. 19–25.
- EAMES, K. (1995) How do I, as a teacher and educational action-researcher, describe and explain the nature of my professional knowledge? Ph.D. Thesis, University of Bath.
- EVANS, M. (1995) An action research enquiry into reflection in action as part of my role as a deputy headteacher. Ph.D., Kingston University, in Living Theory Section.
- FLETCHER, S. (1997) Modelling Reflective Practice for Pre-Service Teachers: The Role of Teacher Educators. Essay Review, *Teaching and Teacher Education*, 13(2), pp. 237-243.
- FLETCHER, S. & WHITEHEAD, J. (1999) How are we improving our teaching as teacher educators as we research ourselves as living contradictions and multiple selves in our educative relationships with our students and social contexts? Paper presented at BERA, 99, University of Sussex.
- FUKUYAMA, F. (1992) The End of History and the Last Man (London, Penguin).
- GADAMER, H.G. (1975) Truth and Method (London, Sheed and Ward).
- GHAYE, A. & GHAYE, K. (1998) Teaching and Learning through Critical Reflective Practice (London, David Fulton).
- HAMILTON, M.L. (Ed.) (1998) Reconceptualizing Teaching Practice: self-study in teacher education (London, Falmer).
- HAMILTON, M.L. & PINNEGAR, S. (1998) Conclusion, in: HAMILTON, M.L. (Ed.) Reconceptualizing Teaching Practice: self-study in teacher education (London, Falmer).
- HOLLEY, E. (1997) How do I as a teacher-researcher contribute to the development of a living educational theory through an exploration of my values in my professional practice? M.Phil., University of Bath, in Living Theory Section.
- ILYENKOV, E. (1977) Dialectical Logic (Moscow, Progress).
- KORTHAGEN, F.A.J. & KESSELS, J.P.A. (1999) Linking Theory and Practice: changing the pedagogy of teacher education, *Educational Researcher*, 28(4), pp. 4-17.
- KOSOK, M. (1976) The systematization of dialectical logic for the study of development and change, *Human Development*, 19, pp. 325-350.
- LAIDLAW, M. (1996) How can I create my own living educational theory as I offer you an account of my educational development? Ph.D. thesis, University of Bath, available from the Living Theory Section of http://www.actionresearch.net
- LATHER, P. (1994) Fertile obsession: Validity after poststructuralism, in: GITLIN, A. (Ed.) Power and Method: Political activism and educational research, pp. 40-41 (London, Routledge).
- LOFTUS, J. (1999) An action enquiry into the marketing of an established first school in its transition to full primary status. PhD Thesis, University of Bath. http://www.actionresearch.net, Living Theory Section.
- LOMAX, P. (1994) Standards, criteria and the problematic of action research, *Educational Action Researcher*, 2(1), pp. 113-126.
- LOMAX, P. (Ed.) (1999) Creating Educative Community through Educational Research. AERA Seminar, Montreal, April 1999 (Kingston, Kingston University).

- LOUGHRAN, J. (1996) Developing Reflective Practice: Learning about Teaching and Learning through Modelling (London, Falmer).
- McNiff, J. (1993) Teaching as Learning: An Action Research Approach (London, Routledge).
- MEDAWAR, P. (1969) Induction and Intuition in Scientific Thought (London, Methuen).
- MITROFF, I. & KILMAN, R. (1978) Methodological Approaches to Social Science (San Francisco, Jossey-Bass).
- PINNEGAR, S. & RUSSELL, T. (1995) Self study and living educational theory, Teacher Education Quarterly, 22(3), pp. 5-9.
- POPPER, K. (1963) Conjectures and Refutations, p. 321 (London, Routledge and Kegan Paul).
- POPPER, K. (1972) The Logic of Scientific Discovery, 3rd edn, p. 44 (London, Hutchinson).
- REASON, P. (1994) Participation in Human Inquiry (London, Sage).
- ROSENBLATT, L. (1985) The Transactional theory of the Literary Work: Implications for Research, in: C.R. COOPER (Ed.) Researching Response to Literature and the Teaching of English (Norwood, NJ, Ablex).
- RUSSELL, T. & MUNBY, H. (1992) Teachers and Teaching: From classroom to reflection (New York, Falmer).
- RYLE, G. (1949) The Concept of Mind (Harmondsworth, Penguin).
- SCHÖN, D. A. (1995) The New Scholarship requires a New Epistemology, Change, November/ December, 1995.
- SHOBBROOK, H. (1998) My Living Educational Theory Grounded In My Life: How can I enable my communication through correspondence to be seen as educational and worthy of presentation in its original form? M.A. Dissertation, University of Bath, http://www. actionresearch.net in Living Theory Theses.
- SKOLIMOWSKI, H. (1994) The Participatory Mind: A New Theory of Knowledge and of the Universe (London, Penguin).
- SOMEKH, B. & THALER, M. (1997) Contradictions of Management Theory, Organisational Cultures and the Self, Educational Action Research, 5(1), pp. 141-160.
- SQUIRES, G. (1999) Teaching as a Professional Discipline, p. 17 (London, Falmer).
- WHITEHEAD, J. (1985) The analysis of an individual's educational development, in: M. SHIPMAN (Ed.) Educational Research: Principles, Policies and Practice (London, Falmer).
- WHITEHEAD, J. (1991) A Dialectical Analysis of an Individual's Educational Development and a Basis for Socially Orientated Action Research. Proceedings of the First World Congress on Action Learning, Action Research and Process Management. Vol. 1, 1991 (Brisbane, Acorn Press).
- WHITEHEAD, J. (1993) The Growth of Educational Knowledge: Creating your own living educational theory (Bournemouth, Hyde).
- WHITEHEAD, J. (1998a) How do I know that I have influenced you for good? Proceedings of the Second International Conference of the AERA Self-Study of Teacher Education Practices, SIG (Kingston, Queens University).
- WHITEHEAD, J. (1998b) The importance of loving care and compassionate understanding in conversations which sometimes become infused with irritation, frustration and anger: Conversations & Correspondences with Pat D'Arcy. Paper to the International Teacher-Researcher Conference, La Jolla, April 1997.
- WHITEHEAD, J. (1999a) Creating a new discipline of educational enquiry in the context of the politics and economics of educational knowledge. Paper presented at the BERA symposium at AERA Montreal, April 1999. Kingston Hill Research Papers, 1999 (Kingston, Kingston University).
- WHITEHEAD, J. (1999b) Jack Whitehead's Action Research Homepage at http://www. actionresearch.net. See the curriculum proposal on an action research approach to educational leadership in the Masters Programme section of the Homepage.
- ZEICHNER, K. (1998) The New Scholarship in Teacher Education. Vice-Presidential Address to Division K, AERA, April, 1998, San Diego, Educational Researcher, 28(9), pp. 4-15.