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An epistemological transformation in educational knowledge from S-STEP research.

Notes for Jack's introduction to the S-STEP session on Monday 13<sup>th</sup> April, in San Diego.

Since the establishment of S-STEP in 1993, S-STEP researchers have made a significant contribution to the knowledge-base of education.

I shall start the conversation on Monday 13<sup>th</sup> April with some evidence that s-step researchers have answered Schön's (1995) call for a new epistemology. I shall claim that this new epistemology can be made explicit from the explanations given by s-step researchers for their educational influences in their own learning, in the learning of others and in the learning of the socio-cultural formations in which we live and work. I call these explanations living educational theories (Whitehead, 1989, 2009).

I began my research programme into educational theory at the University of Bath in 1973 with the desire to rectify a mistake in the dominant disciplines approach to educational theory. In this approach it was believed that educational theory was constituted by the disciplines of the philosophy, psychology, sociology and history of education. It was also believed that the practical principles I used as a teacher to explain my educational influences in my own learning and in the learning of my pupils were at best pragmatic maxims that had a first crude and superficial justification in practice that in any rationally developed theory **would be replaced** by principles with more fundamental theoretical justification (Hirst, 1983, p. 18).

I just want to dwell in the significance of working with a view of educational theory that would replace the practical principles of educators with principles from the disciplines of education. This was the view of educational theory my tutors worked with in my continuing professional development programmes for an Academic Diploma in the philosophy and psychology of education and then for a Masters Degree in the psychology of education, between 1968-72 at the University of London, Institute of Education. During this time I was working full time as a science teacher and then as a Head of a Science Department in a London Comprehensive School. The tension that moved me from being a teacher of science in a school to being an educational researcher and educator in a university was focused on the mistake in educational theory of believing that the practical principles that educators used to explain their educational influences in learning should be replaced by the principles from the disciplines of education. By a practical principle I am meaning the reasons I give to explain why I am doing what I am doing. For example at times in my working life I have felt my freedom being constrained in a way I felt to be inappropriate and not justified by other principles. Hence I explained my activities in terms of me seeking to live my value of freedom more fully. In explaining why I was doing what I was doing, I used the practical principle of freedom (Whitehead, 1993). My understanding of a discipline of education is of a form of knowledge such as the philosophy, psychology, sociology and history of education in which each discipline can be distinguished from another because of the conceptual framework it uses to explain phenomena and the methods of validation it uses to evaluate the validity of claims to knowledge made from within the conceptual framework.

I want to be clear that my tension with the disciplines approach to educational theory included my pleasure in knowing that my cognitive range and concerns were being extended by my understandings of the theories of the philosophy, psychology,

sociology and history of education. The pleasure in extending these understandings continues to this day. This pleasure was held together with the dismay of being subjected to a mistaken view of educational theory that sought to replace the explanatory principles I used to give life its meaning and purpose in my work in education, with the conceptual frameworks and methods of validation of the disciplines of education. In other words the explanations I gave for my educational influences in learning could not be subsumed under any disciplines of education taken individually or in any combination. However, insights from the disciplines were helpful in the creation of my own living educational theory.

Hence my passion for the self-study of teacher-education practices (s-step) in educational research. It is s-step research that will not permit this replacement. S-step research insists on including the explanatory principles that practitioner-researchers use to give their lives its meaning and purpose, in their explanations of educational influences in learning. This is, of course, not to deny the significance of theories from the disciplines of education. S-step researchers include insights from the theories of the disciplines of education where these are useful in strengthening the validity of their explanations of educational influences in learning. To distinguish the explanations of s-step researchers for their educational influences, from the explanations derived from the propositional theories of the disciplines of education, I call the former, living educational theories.

In claiming that s-step researchers have brought about an epistemological transformation in educational knowledge (Bruce-Ferguson 2008; Whitehead 2008a & b; Laidlaw, 2008; Adler-Collins 2008; Huxtable 2009) I want to focus on the inclusional units of appraisal, the standards of judgment and the logics of this new epistemology.

### **Units of Appraisal**

The units of appraisal are the explanations produced by s-step researchers for their educational influences in their own learning, in the learning of others and in the learning of the socio-cultural formations in which we live and work. You will find some 30 research degrees at <http://people.bath.ac.uk/edsajw/living.shtml> with this unit of appraisal.

Because the unit of appraisal is an individual's explanation of educational influence in learning and each individual 'I' is responsible for the creation of their own living educational theory I want to clearly distinguish the 'I' in propositional theory from the 'I' in dialectical theories and from the 'I' in living theories. Propositional theories are general explanations that are usually communicated in the form of linguistic abstractions and statements. The 'I' in a propositional theory, is not a living 'I', it is usually subsumed under the general concept of 'a person' and the living 'I' is eliminated from the discourse. An example of this can be seen a key text from the 1960s and 1970s on Ethics and Education, by Richard Peters.

Peters (1966) would ask what was implied for a person seriously asked a question of the kind 'What ought I do to?' In answering the question the living 'I' in the answer was transformed and eliminated in the general concept of a 'person'.

In dialectical theories the nucleus of the 'I' is contradiction in the sense of holding together two mutually exclusive opposites, such as in the experience of being free and being not free, at the same time. Contradictions are the nucleus of dialectics.

In living theories informed by inclusionality the 'I' is not experienced or understood as a discrete body that can be contained in a propositional form or represented with contradictions as its nucleus. In inclusionality the 'I' is experienced and understood as a 'unique confluence of dynamic relationships'(Rayner & Jarvilehto, 2008).

I hope that the distinctions between propositional, dialectical and inclusional experiences of the 'I' helps to clarify that the unit of appraisal I am working with is an individual's explanation of their educational influences in learning in which the 'I' is experienced and understood as an inclusional 'I'.

### **Standards of judgment**

When we judge the validity of a claim to educational knowledge or a belief we hold about the world, we use standards of judgment. In the creation of a new epistemological for educational knowledge I want to suggest, following Laidlaw (1996) that we use living educational standards of judgment. Living educational standards of judgment are values laden. By this I mean that we cannot distinguish something as educational without approving it in the exercise of a value-judgment. The practical principles we use to explain our educational influence are also values-laden for the same reason. As we reflect on the nature of our explanatory standards of judgment in our explanations from an epistemological perspective, we need to understand the values that constitute as 'educational' our explanatory principles and standards of judgment. The distinction I make between an explanatory principle and a standard of judgment, from an epistemological perspective is that my explanatory principles are the principles I use in the creation of my living educational theory. As I reflect on this claim to knowledge, from an epistemological perspective I explicate the explanatory principles as the principles I use to evaluate the validity of my claim to knowledge.

When I think of the values that help to constitute by practices as educational I am thinking of values as flowing with energy that is motivational. I mean this in the sense that I explain my actions in terms of my values. If, for example, I am feeling the denial of values such as freedom, justice, love and compassion, I work towards the greater realizations of these values and explain my actions in terms of the expression of living more fully these embodied values in practice. The meanings of the embodied values are clarified in the course of their emergence in practice and in the form of their communication the meanings of the embodied valued as distinct from their expression in practice are transformed into the living standards of judgment of a claim to educational knowledge, in the living educational theory.

### **Logics**

Following Marcuse (1964, p.104) I understand logic as a mode of thought that is appropriate for comprehending the real as rational. Logic is focused on the way we make sense of something. It is the way we form meaning into comprehensible expressions.

The last 2,500 years have seen a conflict between propositional and dialectical logicians. Drawing on Aristotle's logic propositional thinkers have claimed that two mutually exclusive statements cannot be true simultaneously. Dialectical thinkers have claimed that contradictions are the nucleus of dialectics. Propositional thinkers reject dialectical claims to knowledge as, '*without the slightest foundation. Indeed, they are based on nothing better than a loose and woolly way of speaking*' (Popper 1963, p. 316). Dialectical thinkers claim that propositional thinking masks the dialectical nature of reality (Marcuse, 1964)

The new epistemology for educational knowledge created from s-step research includes a living logic that can draw insights from ideas formed with both propositional and dialectical logic without being drawn into their rejections of the rationality of the other.

My own thinking has often moved on through my imagination as I encounter a tension, conflict or contradiction. My understanding of a living logic moved on from a tension in the work of Ilyenkov (1977) on dialectical logic. At the end of his inspiring work on dialectical logic Ilyenkov was left with a problem he could not answer before he died, 'If an object exists as a living contradiction, what must the thought be (statement about the object) that expresses it?'. In the introduction to his book on dialectical logic Ilyenkov expressed his commitment to write logic. I think that the commitment to write logic, rather than to study his living logic in his practical life, ensured that he would be caught within the writing of propositional and dialectical statements in a way that left him with no way of answering his question, apart from trying to write an answer.

I now want to break with the propositional and dialectical thinking in my presentation and focus on visual representations of educational practice and the explanations of educational influences in learning of s-step researchers from which a new epistemology for educational knowledge has been created with living explanatory principles, standards of judgment and living logics.

I'll begin with a video-clip of my own educational practice as an s-step researcher in a Ph.D. supervision. Here is a brief clip of a supervision session with Jacqueline Delong before the successful completion of her doctorate. The clip is taken at the end of a week of supervision and we are talking about an improvement in the Abstract to the thesis, when there is a pooling of our life-circulating/life affirming energy and understanding in a spontaneous expression of laughter over a point Jacqueline raises about me not having responded to her work in terms of wisdom.



<http://www.youtube.com/watch?v=w2kdOfRKfYs>

What I see being expressed in this clip is something that is omitted in propositional and dialectical discourse. I am thinking of the meanings of the expression of flows of the embodied energy and values that constitute the energy-flowing and valued-laden practical principles that educators express in their educational practices with their students. I want to be clear here. I am claiming that visual narratives of the educational influences in learning of educators can communicate the meanings of these energy-flowing and values-laden explanatory principles in explanations of educational influences in learning. You can access Jacqueline Delong's (2002) thesis at <http://www.actionresearch.net/delong.shtml> and her latest post-doctoral writings on *Building a culture of inquiry through the embodied knowledge of teachers and teacher educators in aboriginal and non-aboriginal contexts* (Delong, 2009) at <http://www.jackwhitehead.com/delong/jdAERA09Paperfinal.pdf>

I think that I might also be able to communicate the significance of visual narratives in communicating the meanings of energy-flowing and values-laden explanatory principles in an epistemology for educational knowledge through comparing two of my publications on living educational theory some 20 years apart and looking at the points about visual narrative in a living theory methodology.

The first is the most influential of my publications on the generation of living educational theories in the Cambridge Journal. You can access the text here:

<http://people.bath.ac.uk/edsajw/writings/livtheory.html> (Whitehead, 1989)

The second is the March 2009 paper in Action Research on living theories in the journal Action Research:

<http://www.jackwhitehead.com/jack/jwartheory0309.pdf> . (Whitehead, 2009)

The third is in the first issue of the Educational Journal of Living Theories on a living theory methodology at:

<http://ejolts.net/node/80> (Whitehead 2008c)

I want to focus on the significance of the live urls in pages 92-95 of the paper on living theories in Action Research for the generation of a new epistemology, starting with page 92:

*This evolution of living theories is shown in the theories being generated by researchers at Nelson Mandela University (Wood, Morar, & Mostert, 2007). These researchers are exploring the implications of asking, researching and answering their questions concerning the movement from rhetoric to reality as they enquire into the role of living theory action research in transforming education. Wood et al. demonstrate an understanding of the importance for the action researcher of exploring the implications of seeking to live their ontological values as fully as possible in their professional practice. These insights, about the importance of expressing and researching embodied values that give meaning and purpose to life, have also been integrated into the living theories of educators associated with the University of Limerick (2008), such as those above, and those associated with the University of Bath.*

*The significance of these living theories that have been generated by action researchers from an inclusional perspective is that they have established a new*

*epistemology in the Academy in terms of living units of appraisal, standards of judgment and logics. The importance of understanding a unit of appraisal is that this is whatever is being judged in terms of its validity. The standards of judgment are what we use to do the judging. The importance of logic is that it is a mode of thought that is appropriate for comprehending the real as rational.*

In distinguishing the new epistemology for educational knowledge through its units of appraisal, living standards of judgement and living logic I have found most helpful Rayner's (2006) ideas on inclusionality.

For Rayner, *"At the heart of inclusionality, then, is a simple but radical shift in the way we frame reality, from absolutely fixed to relationally dynamic. This shift arises from perceiving space and boundaries as continuous, connective, reflective and co-creative, rather than severing, in their vital role of producing heterogeneous form and local identity within a featured rather than featureless, dynamic rather than static, Universe."* (p.72).

Rather than thinking of standards of judgment in terms of propositional or dialectical statements the new epistemology is understood in terms of relationally dynamic standards of judgment that are continuous, connective, reflective and co-creative.

Such standards of judgment can be understood in relation to answers to particular kinds of educational questions, such as those asked by Claire Formby, Marie Huxtable and Christine Jones.

Claire Formby has asked, researched and answered:

*How am I integrating my educational theorizing firstly with the educational responsibility I express in my educational relationships with the children in my class, but also with the educational responsibility I feel towards those in the wider school community?*  
(Formby, 2008, <http://www.jackwhitehead.com/tuesdayma/cfee3draft.htm> )

*How do I sustain a loving, receptively responsive educational relationship with my pupils, which will motivate them in their learning and encourage me in my teaching?*  
(Formby, 2008, <http://www.jackwhitehead.com/tuesdayma/formbyEE300907.htm> )  
(Whitehead, 2009, p. 93).

What has emerged from asking, researching and answering such questions, especially the latter question, is the inclusional standard of judgment of a loving, receptively responsive educational relationship. The 'I' in the question continues to exist as a living contradiction in experiencing the negation of educational values, sometimes internally and sometimes in the sociocultural formations in which the question is asked. For example, such a living contradiction exists between the educational assessment of the teacher in relation to her pupil's talents, and the application of Standard Assessment Tests to the pupils. The standard assessment tests are applied by government agencies with an oppressive intensity that contradicts the emancipatory intent of the educator exercising evaluative judgments in relation to the pupils' learning, with educational intent. The answers to Formby's questions integrate insights both from propositional theories that are useful and critical evaluations of national policies that are influencing practice.

Before considering the influence of the politics of educational knowledge on the legitimation of the new epistemology, I want to draw attention to the significance for the new epistemology of accounts produced by Marie Huxtable and Christine Jones, two friends and colleagues who work respectively as a Senior Educational Psychologist and Inclusion Officer in Bath and North East Somerset - the equivalent of a North American School Board. Both are professional educators engaged in self-studies for their doctorate and masters degree respectively.

Marie Huxtable's (2009) multi-media account of improving practice and generating knowledge can be accessed from:

<http://www.jackwhitehead.com/huxtable/mariehuxtablepaper170309.htm>

In this paper Huxtable analyses the educational influence of Sally Cartwright in working with her 17 year old students on their extended projects. These are projects in which students ask and answer questions of interest to them and which can be accredited in examinations that count in selection for University. The account includes video-clips of both Cartwright and her students in public presentations of their extended projects. Huxtable explains her educational influence and support with Cartwright in terms of the energy-flowing and values-laden standards of judgment that she uses to give meaning and purpose to her life and work in education. The living standards of judgment are inclusional in the sense that they are relationally dynamic and receptively responsive to the educational needs of both teacher and students. They also include insights from both propositional and dialectical thinkers in the generation of the living theory.

The MA dissertation Christine Jones has submitted for examination provides an answer to her question, 'How do I improve my practice as Inclusion Officer working in a Children's Service?'

You can access the dissertation at:

<http://www.jackwhitehead.com/cjmaok/cjma.htm>

Here is how Jones describes her dissertation in the Abstract:

#### **ABSTRACT**

*This dissertation examines my embodied knowledge and development as an Inclusion Officer working in a Children's Service as I focus on making a contribution to educational knowledge. In making this contribution, I have used visual narratives. This dissertation focuses on my personal knowledge and experience as an Inclusion Officer as I inquire into my question, 'How do I improve my practice as an Inclusion Officer?' In making my personal knowledge public, I believe that I am contributing to educational knowledge by using a living theory methodology for exploring the implications of questions such as, 'How do I improve my practice?' and by clarifying the meanings of inclusional standards of judgement from a perspective of inclusionality. Inclusionality (Rayner, 2004) may be described as a relationally dynamic and responsive awareness of others which flows with a desire to live values*

*of care, compassion, love, justice and democracy. I explicate the inclusional way in which I like to work with others, how my practice is based on the values I hold and how this is reflected in my relationship with other educators working in a Children's Service and schools.*

*In undertaking my inquiry, I have adopted a living theory methodology (Whitehead, 2008a) in the sense that I am bringing my embodied knowledge into the public domain as an explanation of my educational influences in my own learning, in the learning of others and in the learning of social formations. Using video, I clarify the meanings of my inclusional values and how they are formed into living standards of judgment, whereby I and others can judge the validity of my claim to knowledge.*

If you browse down the contents you will come to the heading Contents of CD Rom - Video-clips. I do hope that you will access the first brief clip on 'Chris speaking to colleagues about a childhood memory'. As you watch this clip and hear what Jones is saying, I think you may empathise with the feeling of humiliation that Jones felt on being reprimanded by the teacher. I think you might also appreciate the nature of the energy-flowing and values-laden response from Jones as she explains how this formed her desire to be a teacher.

To conclude this presentation on an epistemological transformation in educational knowledge I want to focus on the politics of educational knowledge because of the influence of power relations in the sociocultural formations of universities that are influencing the legitimization of the new epistemology.

### **The Politics of Educational Knowledge**

The influence of the politics of educational knowledge in legitimating what counts as educational knowledge in universities and other organizations has a long history. Galileo was shown instruments of torture to make him recant something that he knew to be true in relation to the earth's movement around the sun. This knowledge contradicted the view propagated by the Catholic Church that the sun moved round the earth as the centre of the universe. It took over 300 years for the Church to publicly acknowledge its mistake.

In 1983 Paul Hirst acknowledged the above mistake in the disciplines approach to educational theory in thinking that the practical principles used by educators to explain their educational practices would be replaced in any rationally developed theory by principles with more theoretical justification.

In 1991 a research committee in a UK University asked a self-study researcher, who had included 'I' in the title, to remove this personal pronoun from the title. Following internal and external pressure self-study researchers were permitted to include 'I' in their research titles.

In 1980 and 1982 I experienced the rejection of two of my doctorates from the University of Bath with the statement from the University Registrar that the University Regulations did not permit me to question the competence of my examiners under any circumstances. This kind of regulation was common in UK Universities at this time. The regulations were changed in 1991 to permit questioning



of examiners' judgments on the grounds of bias, prejudice or inadequate assessment. Again this change required external pressure from European legislation.

As I have said above and I think it bears repeating, propositional thinkers can reject dialectical claims to knowledge as without the slightest foundation (Popper, 1963, p. 316). Dialectical thinkers claim that propositional theorists are masking the contradictory nature of reality. The rejection by proponents of these logics of the rationality of the other's position still continues to fuel the paradigm wars. Hence it is to be expected that introducing a third logic of inclusionality, in a new epistemology of educational knowledge, will be met by a mixture of bemusement, curiosity, hostility and outright rejection by those in positions of power in the Academy to decide what counts as valid educational knowledge.

I make this last point to emphasise that the generation and legitimation of living educational theories takes place in contexts that have been influenced by different historical traditions and sociocultural influences and that these contexts are in a continuous process of transformation. It may feel at a particular moment in time that a particular set of power relations will continue to exert their influence. Yet from a historical perspective we can see that such power relations exist in a transition structure that is in a continuous process of transformation. What gives me hope today is the pooling of our life-circulating energy and values-laden living theories as we persevere in enhancing the flow of our energy, values and understandings that carry hope for the future of humanity and our own.

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