4) How do we know that what the researcher says is true? - a question of validity.

I continue to be committed to the importance of establishing the validity of a claim to knowledge as an explanation of educational influence in learning. Whilst being introduced to the importance of validity in my initial research as a positivist scientist, following my first degree in science in 1965, I continued to value the importance of validity in my dialectical claims to knowledge and the importance continues in my use of living inclusional values as explanatory principles and as educational standards of judgement. I also continue to be influenced by Popper's (1975) point about the importance of the idea of mutual rational control by critical discussion and use this as a principle of communication in the use of validation groups.

Now I hold that scientific theories are never fully justifiable or verifiable, but that they are nevertheless testable. I shall therefore say that objectivity of scientific statements lies in the fact that they can be inter-subjectively tested. The word 'subjective' is applied by Kant to our feelings of conviction (of varying degrees)..... I have since generalized this formulation; for inter-subjective *testing* is merely a very important aspect of the more general idea of inter-subjective *criticism*, or in other words, of the idea of mutual rational control by critical discussion." (Popper, 1975, p.44)

In considering the validity of a claim to knowledge a standard of judgement is used to evaluate the validity of the claim. In developing an epistemology for educational knowledge it is important to clarify the nature of the standards of judgment that are appropriate for evaluating the validity of the claim:

Whitehead, J. (2011) *Developing A Relationally Dynamic Epistemology For Educational Knowledge* - Presentation at the British Educational Research Association Conference, 7th September 2011. Retrieved 20 November 2019 from https://www.actionresearch.net/writings/jack/jwbera11dr040911opt.pdf

I continue to advocate the use of questions I derived from Habermas' (1976, pp. 2-3) four criteria of social validity, in validation groups of some 3-8 peers that are established to subject draft explanations of educational influences in learning to the mutual rational controls of critical discussion.

- i) How do I improve the comprehensibility of my explanation of educational influence in learning?
- ii) How do I strengthen the evidence I use to justify the claim to knowledge I make in an explanation of educational influence in learning?
- iii) How do I deepen and/or extend my sociohistorical and sociocultural understandings of their influences in my explanations of educational influence in learning?
- iv) How do I enhance the authenticity of my explanation in the sense of showing that I am living the ontological values I claim to hold as fully as possible?

Some researchers, such as Winter (1989), prefer to focus on rigour rather than validity. In 1995 a group of my doctoral researcher supervisions encouraged me to produce what they called the advanced bluffers guide for educational action researchers, for improving the quality of professional practice and creating living educational theories for cultural renewal. You can access this at https://www.actionresearch.net/writings/jack/95contents.pdf . In the third cycle on action research, relevance, rigour and validity, Peggy Kok (pp. 76-82) explains how to improve the rigour of her research into improving her practice by drawing on Winter's six criteria of rigour (see https://www.actionresearch.net/writings/jack/cycle3.pdf ) on dialectical and reflexive critique, plural structure, multiple resource, risk, theory practice transformation.

My ideas on validity continue to be influenced by Collingwood's insight:

Whether a given proposition is true or false, significant or meaningless, depends on what question it was meant to answer; and any one who wishes to know whether a given proposition is true or false, significant or meaningless, must first find out what question it was meant to answer (Collingwood, 1991, p. 39)

Questions of the kind, 'How do I improve my practice?' can rightly be seen to require an answer to 'how' questions in terms of methodology and/or methods. In Living Theory research the answer also includes an explanation of educational influence in learning. This is because in Living Theory research, the 'how' is related to 'why'. In answering 'how' questions, Living Theory researchers improve their practice by drawing in insights from their explanations of educational influence.

In helping to strengthen the validity of a living-educational-theory I often focus on the data that is used as evidence to justify a claim to have influenced the educational learning of others. I find the question, 'What evidence is there that shows and explains the educational influence a Living Theory researching is having in the learning of others?, a useful question to ask in helping to strengthen the validity of the explanation. Another question I find useful is 'what evidence is there that shows and explains the educational influence a Living Theory research is having in the learning of a social formation?'

## References

Collingwood, R. G. (1991) An Autobiography, Oxford; Oxford University Press

Popper, K. (1975) The Logic of Scientific Discovery. London; Hutchinson & Co.

Winter, R. (1989) Learning from Experience. London; Falmer.