

## **Chapter 6 – Issues of validity and exercising my educational influence**

This account is based on a self-study of my practice as I attempt to reduce the dissonance that I experience as a result of the gap between my values and my practice as I work as a teacher of ICT and as an ICT consultant. Because I see this self-study as research, in common with other researchers, I am attempting to develop new understandings about ideas and practices. In the first section of this chapter I show that any conclusions I come to are reasonably fair and accurate and can form the basis for claims to knowledge. As the theory I am developing is a living theory of practice I will outline new practices that have developed as a result of the projects that underlie this work. I will produce evidence of the quality of these new practices and show how they relate to my ontological values. In this way I will show how I am reducing the dissonance that I experience when my values are denied in my practice. I will explain how my thinking has shifted and that I am now aware of how I have come to develop my living theory of practice. I will produce evidence of the development of my living theory of practice and I will relate this development to my ontological values. Finally I will account for my educational influence, in relation to my learning, my colleagues' learning, and the education of social formations. I will address the need to justify practice in the light of the morality of exercising educational influence.

### ***Issues of validity***

In his examination of the difficulties faced by a journal editor in deciding what type of work merits publication, Donmoyer indicated that within the field of educational research there is little consensus about what research and scholarship are and what research reporting and scholarly discourse look like (Donmoyer 1996: 19).

Today there is as much variation among qualitative researchers as there is between qualitatively and quantitatively orientated scholars. Anyone doubting this claim need only compare Miles and Huberman's (1994) relatively traditional conception of validity ("The meanings emerging from the data have to be tested for their plausibility, their sturdiness, their confirmability – that is, their validity" (p.11)) with Lather's discussion of ironic validity: Contrary to dominant validity practices where the rhetorical nature of scientific claims is masked with methodology assurances, a strategy of ironic validity proliferates forms, recognizing that they are rhetorical and without foundation, postepistemic, lacking in

epistemological support. The text is resituated as a representation of its “failure to represent what it points toward but can never reach.....” (Lather, 1994, p.40-41). Given their profoundly different views of validity, it seems unlikely that either Miles and Huberman or Lather would apply “appropriate” criteria in assessing each other’s work.

(Donmoyer 1996: 21)

Disagreement around the theme of quality and validity in qualitative research has continued and various views have been expressed (Bullough and Pinnegar 2001; Feldman 2003; Feldman 2007; Heikkinen, Huttunen and Syrjälä 2007; Lincoln and Guba 1985; Saunders 2007 *inter alios*). The uncertainty regarding the matter of quality has had the effect that practitioner research is not recognised as having strong validity because the practitioner research community, itself, has not worked out ways of establishing validity (Furlong 2000; 2004). However, attempts to suggest methods of establishing validity continue apace. New concepts to replace those of reliability and validity include credibility, persuasiveness, interactivity, vulnerability, therapeutic value, verisimilitude, compellingness, explanatory power, moral persuasiveness (Ellis and Bochner 2000: 752-760; Hatch and Wisniewski 1995: 129). Heikkinen, Huttunen and Syrjälä (2007) have drawn on Winter’s (2000) earlier suggestion of two principles – the dialectical principle and the reflexive principle – to propose five principles that can be used to evaluate the quality of action research. These are historical continuity, reflexivity, dialectics, workability and evocativeness. Feldman has criticised principles of this sort because they tend to focus on the quality of the report rather than the quality of the research (Feldman 2003). Reports can be credible, persuasive, life-like and so on, independent of the quality of the research that was done (Feldman 2007: 22). Feldman suggests a widening of the definition of validity beyond the use of metrics and measurement as a means of providing us with a way to talk about qualitative studies having validity.

Whitehead (1997) responded to Donmoyer’s difficulty around the ‘Balkanisation of educational research’ by suggesting that a way forward could be found by relating to each other within a spirit of educational enquiry which is aimed at creating educational theories which have the capacity to produce valid explanations for our educational development and for our educational influence on those we teach. Whitehead goes on to suggest that such educational knowledge will include values as explanatory principles and will integrate insights from traditional propositional theories in the creation of explanations for the

educational development of individuals and the educational influence of a teacher with a student. He suggests that we may learn how to test the validity of such claims to educational knowledge through using multimedia presentations of evidence (Whitehead 1997). In subsequent work Whitehead's position has been developed more fully (Whitehead 2004).

The Whitehead-Lomax-McNiff action research community consider a researcher's claim to have generated their 'living theory' as valid if it shows how it is grounded in a robust evidence base, and can be tested against values-constituted living standards of judgement. The validity of the claim can further be tested by subjecting it to specific social criteria (Habermas 1987), that demonstrate that the claim is comprehensible, faithful to the situation, expresses truthful intentions, and can be reciprocally and mutually justified within the research community. A living theory is justified when it suggests a course of intellectual and imaginative action that improves a person's understanding of practice or situation, supports healthier relationships, and engaged learning (Rearick 1999). Whitehead and McNiff's (2006) more recent work on validity suggests that validation can be gained by grounding your claim in personal validation and social validation. Personal validation can be based on aesthetic, ontological and moral values: the sense that it feels right or being satisfied, in myself, that my claim is justified. Personal validation is dependent on relying on your internal processes of critical reflection to validate your beliefs (Whitehead and McNiff 2006: 103). Personal validation is supported by Polanyi's point that we can take a decision to understand the world from our own point of view as individuals claiming originality and exercising our judgement with universal intent (Polanyi 1966: 327). Social validation is based on the researcher's responsibility to others to act according to democratically negotiated rules. Social validation for my work has been sought through a series of mechanisms throughout the research. In the early stages of my research I met with a group of fellow researchers who gave accounts of our practice and critiqued each other's practice. The LCA team provided critique in relation to the work with the LCA group. The Setanta steering group at regular meetings critiqued the work in relation to the Setanta project. The NCVA Action Learning group critiqued each other's practice as part of the process of improving practice.

### ***Transforming my values into living critical standards of judgement***

While attempting to establish that my conclusions are ‘reasonably fair and accurate’ I draw on ideas from Whitehead and McNiff (2006: 97-111) about social and ethical validity and on the underpinning criteria taken from Habermas (1987). I am going to explain to you how I have taken care methodologically to ensure that you know how I am going to make judgements about my work. I am going to articulate my standards of judgement. The standards of judgments that I use are grounded in my values. I am going to show how I transfer my abstract values into living standards of judgement and how I will use these standards of judgements to assess the quality of my practice, the quality of my research and the validity of my claim that I know my practice. In this sense there are two sets of standards of judgement. There are standards of judgement in relation to practice and standards of judgement in relation to research.

I have explicated my values in relation to my work and my research. The values which I have identified – justice, natality, plurality – are abstract linguistic values. But these abstract linguistic terms can transfer into living standards of judgement for assessing the quality of my research and of my text. In this way I am offering new living standards of judgement. My claim to knowledge is that I have achieved these values in my practice. My values have transformed into my own living standards of judgement by which I assess the validity of my claim to knowledge. These are standards which are different to traditional standards of generalisability and replicability. I don’t believe that the conclusions that I draw can be generalised or the work I have done can be replicated. I believe that others can gain insights from my work and develop new ways of working from the ideas contained within this thesis just as I have gained insights from other people’s research. I have applied these insights to the circumstances of my research. I will show the validity of my claim to know by showing the living standards of judgement used in realising that claim. I ground my claim to know in personal validity, my sense that what I am doing seems right. My personal validity will be supported by processes of social validation. I assess the validity of my claim to knowledge through the realisation of my values in my practice. In this chapter I will show what I believe is the achievement of my values of justice, natality and plurality in my practice and I will make this claim open to public critique.

You may wonder how I can transform justice or natality or plurality into a standard of judgement. I do this by judging my practice in relation to natality or one of the other abstract criteria. I judge my practice in relation to how I have supported people to achieve their natality. The evidence of supporting people to achieve their natality is evidence to support my claim to knowledge which in turn informs my living theory of practice. My living theory of practice is about how I have encouraged myself and others to work in solidarity to exercise our agency through communicative action. I am showing how communicative action can happen through web based relationships and offer a type of virtual communicative action. I am showing the potential of ICT for forming webs of connection for real time and virtual communicative action.

However, while my standards of judgement are grounded in my values this does not exclude the potential to show measurable changes in my practice. Above, I have referred to equitable and effective access to information and communications technologies (ICT). As noted earlier, Jones *et al.* (1995) have established criteria for equitable and effective access to ICT. In their study they describe four indicators – connectivity, ubiquity, interconnectivity (other writers refer to this as collaborative work), and equity – that denote equitable and effective access to technology. These linguistic criteria could be transformed into living standards of judgement in the form of the following questions:

Is there access to a school wide network as a result of the project?

Is there access to the Internet from all schoolrooms as a result of the project?

Has the number of computers, printers, digital cameras, data projectors increased as a result of the project?

Can this level of access to technology be considered ubiquitous?

Does the evidence of the Setanta Project and of the LCA IT class indicate that there has been movement away from forms of teacher centred learning to forms of collaborative learning?

Does the evidence of the NCVA action learning project show the development of collaborative learning in work based groups?

Does this amount to interconnectivity? (in Jones *et al.*'s (1995) terms)

Is there evidence of a wider range of students and teachers having access to technology?

To the extent that the above have been achieved does this amount to equitable and effective access to technology?

In relation to the Setanta project I can show, in measurable terms, that substantial progress has been made toward meeting these criteria. In the previous chapter I have given some indication of this. Connectivity was provided by the provision of a school wide network with access points in all classrooms and access to the Internet from all rooms throughout the school. Progress toward ubiquity has been provided by the large increase in the number of computers, printers, data projectors, and digital cameras made available to students and teachers throughout the school. Equity can be shown through the increase in the numbers of teachers and students who had access to the technology. Interconnectivity, in the sense of collaborative work, is a less measurable criterion but nonetheless I believe that the evidence of the Setanta project and NCVA Action Learning Project indicate that collaborative work was taking place.

I see measurable evidence as a subset of a more extensive evidence base which is not directly measurable but is valid nonetheless. In terms of standards of judgement for the assessment of this work which are not necessarily measurable I ask the examiners to give attention to the following questions as they examine the thesis:

Is there evidence of my commitment to values of justice, natality and plurality in my practice?

Is there evidence of life-affirming action in my practice?

Do students' reports of their website projects show evidence of them thinking for themselves?

Have I shown a commitment to dialogical processes in my practice?

Have I demonstrated an approach that supports the reconceptualisation of ICT as a form of political action?

Have I shown a continuous commitment to improvement in my practice?

Is the account comprehensible, truthful, sincere and appropriate?

Within several of the projects accounted for within the thesis I have taken the approach of 'exercising a preferential option for the most disadvantaged' (Finnegan 2000). In a school where streaming was the dominant approach to organising class groups, opting to work with those who were not in mainstream programmes was responding to the natality of individuals. This is a recognition that people do not need to be 'academic' or 'well-

behaved' to be worthy of our care and attention. Normative standards for ways of being are not what matter. People's natality, as a result of their birth, requires me as teacher to be the best that I can be to support them in being the best that they can be (Arendt 1958). I believe the evidence, provided here and in the accompanying multimedia thesis, demonstrates that I have honoured the natality of colleagues and students.

The concept of plurality (Arendt 1958), in common with theories of multiple intelligences (Gardner 1993; Gardner and Hatch 1989), values uniqueness rather than uniformity among people. Pursuing web technologies with their emphasis on multimedia approaches is an aspect of seeking forms of representation that go beyond mathematical-linguistic approaches. Web technologies provide learning opportunities for those with intelligences and inclinations that are not limited to the mathematical and linguistic. This approach does not deny the value of mathematical and linguistic abilities but rather sees these particular aspects of intelligence as subsets of the wide range of intelligences exhibited by people. In my account of the development of web sites I have shown how the website projects were devised to support students in pursuing their interests, thereby valuing their plurality or diversity. At times this placed me in an unsettling position as in the case of the wrestling web site. In the event my unease was not justified and this was a particular learning opportunity for me as well as the students. The approach taken within the work honours the plurality among people.

In the case of the North/South video conference with two prime ministers, students worked collaboratively to devise questions to put to the two prime ministers. These questions reflected the range of interests of the students. Questions ranged from political to sporting questions. The range and diversity of the questions reflect the range and diversity of the students' interests – an aspect of their plurality. But beyond the nature of the questions, the approach to devising the questions draws on the differing capacity of students to spark each other's creative processes. The documentary evidence of the dialogical development of students' questions can be found in the multimedia version of the thesis ([http://www.ictaspoliticalaction.com/pdf/northsouth/AhernBlair\\_questions.pdf](http://www.ictaspoliticalaction.com/pdf/northsouth/AhernBlair_questions.pdf); Appendix C).

The multimedia version of the thesis, as well as this written version, serves to make my story and my students' and colleagues' stories public. By making my story public and by my students making their stories public we are making a contribution to the knowledge base and at the same time offering the work to public critique. This offers the potential for

social validation which is an aspect of establishing the validity of the work. In the multimedia thesis and in this linguistic form I am claiming that there is evidence of the authenticity of our collaborative work. The positive responses of the students to the activities they have undertaken and the willingness of their teachers to offer ongoing commitment to developing collaborative practices around the use of ICT is evidence of the worthwhileness of the work. These support the validity of my claim to know my practice.

### ***Offering my practice to public scrutiny***

Within this work I am developing a living theory of practice. As a teacher-practitioner and consultant-practitioner I am devising and validating my living theory of practice in, by and throughout my practice. I am creating epistemological standards of judgement in and of teaching, education, educational administration and educational research. In this way, I, as a practitioner, have been transformed into and have become a theoretician and the theoretician has also been a real-life practitioner in the real-world (Serper 2004). I am showing practice and research as one and the same. I am therefore linking standards of practice and standards of judgement. Similarly, issues of validity which refer to the validity of my claim to knowledge are grounded in my evidence base. Consequently the validity of my claim to know my practice can be tested by showing that I did what I set out to do. I am supporting my claims to validity by offering the evidence of my practice to public scrutiny. In the following sections I will show how the evidence of my practice can withstand public scrutiny and satisfy living standards of judgment. In the accounts in the following sections the reader may consider if the evidence from practice suggests that I have achieved the living standards of judgement set out above.

By presenting my research publicly I can demonstrate the exercise of my educational influence. At the same time, by presenting the evidence base of this research publicly and offering it to public critique in a variety of fora I am hoping to have gained social validation. This has been accomplished by presentations at the Schools Integration Project (SIP) Symposium (Galvin: 2002; O'Neill 2000c), British Educational Research Association Annual Conference 2006 (O'Neill 2006), the Setanta Project launch (see [www.ictaspoliticalaction.com/pages/setanta/setantalaunch.htm](http://www.ictaspoliticalaction.com/pages/setanta/setantalaunch.htm)) and to several gatherings of educators and educational administrators under the umbrella of Arion Study visits ([www.ictaspoliticalaction.com/pages/chapters/influence/index.html](http://www.ictaspoliticalaction.com/pages/chapters/influence/index.html)). Arion is a European



Community initiative which enables education specialists and decision makers to access up-to-date information about educational developments (see [www.arion-visits.net](http://www.arion-visits.net))

Social validation for the research has, I hope, been gained because in many respects the research has been a public practice – practice carried out in public. Not alone has the evidence of my work, that of my colleagues and my students been offered to public scrutiny but in many cases the practice was undertaken in public. The interaction of students with two Prime Ministers was a public practice. The involvement of the Prime Ministers was a public validation of the work. The research has been presented to several international study groups invited to the school by the Department of Education and Science. According to an official of the Department the visits enabled the members of the study groups to gain ‘an invaluable understanding into Irish post-primary level education in general and ICT in particular’ (McHugh 2002). The recognition by educationalists from fourteen counties of the ‘interesting and informative’ (*ibid.*) nature of the work undertaken by teachers and students of St Aidan’s and their collaborators is a validation of the work.

You may consider: does the evidence above validate my claim to know my practice and to have changed that practice for good? Does the evidence above provide some evidence of the innovative practice which gave rise to a living theory of practice?

A study of St Aidan’s carried out by the Dutch Inspectorate of Education examined the use of ICT in teaching and learning. The study drew attention to the changing practice of both teaching and learning within St Aidan’s.

...slowly but surely the Setanta project is bringing about changes in education, both on the teaching and learning sides. The project has encouraged teachers looking for ways of bringing ICT into their classrooms to review their own teaching practices. Within the statutory curriculum and the traditional manner of teaching, more and more small projects and large projects are emerging in which ICT has been integrated in education. During our visit to the school, for example, we sat in a history lesson in which an exciting story about the Irish famine in the 19th century was brought to life with the help of an excellent PowerPoint presentation.

(Inspectie van het Onderwijs 2001: 27)

The Inspectorate drew attention to the changes for students noting that the new ways of working allowed students ‘to gain experience in organising numerous different types and especially different embodiments of information’. But perhaps more importantly, ‘the tasks

allowed scope for pupils' initiatives that tie in with their personal interests ... [producing] ...the school's richly filled intranet' (*ibid*: 28). My understanding of this is that my recognition of the plurality of students has produced uses of ICT that are life-affirming for students and teachers and result in students taking control of their lives in ways that could be seen as political action (Arendt 1958).

The Inspectorate drew attention to the approach of persuading rather than forcing teachers to use computers in the classroom: 'the basic idea is to remove barriers and provide encouragement' (Inspectie van het Onderwijs 2001: 29). The outcome of this practice was that teachers noticed that students derived greater pleasure from lessons and this motivates teachers and students alike. I take this comment to be recognition of the web of enablement which I have nurtured in the school which has enabled young people and their teachers to work in collaboration to achieve their values.

The Inspectors' study went on to describe changes in engagement with the community and emphasised how the Setanta project's 'extremely effective co-operation takes place with partners in the community'. The positive effects of this approach were emphasised with the report pointing to the 'synergy of effects that have been created through co-operation between teachers at St Aidan's with their specific educational requirements on the one hand and specialised ICT people at Dublin City University on the other' (Inspectie van het Onderwijs 2001: 29). The inspectorate is recognising the importance of the community of practice that underpinned the work that took place.

Does the account of the Dutch inspectorate indicate that innovative practice had taken place in the school? Was the emphasis of that practice toward collaborative work? Did that collaborative work emphasise students' particular interests and therefore support their natality? Does the Inspectorate's comment about removing barriers suggest that a more democratic rather than authoritarian approach was evident in the work of the project? Does this constitute new practices? Do you agree with the Inspectors? Do you agree that the changes achieved indicate that I know my practice? Does the evidence from my evidence base show that my claim to know is valid?

While examining 'What counts as evidence in self-studies of teacher education practice', Whitehead (2004), reflecting on the limitations of a chapter of a book in terms of providing evidence for educational influence, suggests that such constraints can be overcome by using

web technologies. ‘Using an address of a web site you can directly access the evidence and judge its validity for yourself’ (Whitehead 2004). Evidence from the Arion meetings in the form of video and photographs is available within the multimedia version of the thesis. The video evidence shows teachers and students presenting their work. However some of the photographic evidence is more compelling. Fletcher and Whitehead (2000) refer to ‘the look of the teacher’ in arguing for the use of digital video to improve the practice of teachers. ‘...it is rather like Galileo (Sobel 2000 cited in Fletcher and Whitehead 2000); with the telescope he looked at the world in a totally different way – by turning the video-camera on oneself it is transforming a world view about what is possible to communicate’. In the photographs below we can see the look of collaborative learners – teachers and students – transforming world views. In some cases we see world-leaders and students together as collaborative learners. After one such meeting Proinsias de Rossa, M.E.P mentioned, “I have never taken part in a video-conference before!”

I am making a claim that I know my practice. The claim to know my practice is grounded in my evidence base. The multimedia artefacts, here and in the multimedia thesis, provide evidence of my educative influence in people’s lives. Do the photographs below show the look of the teacher on young people’s faces?

In assessing the validity of my claim to know my practice I ask you:

In these photographs who is the teacher and who is the learner?

Do you see new ways of teaching and learning?

Does this evidence appear authentic to you?

Does the content of these photographs suggest that students’ natality and plurality is being valued?

Do these photographs indicate life-affirming practice?

Do you agree that in order to bring about the changes in practice that enabled these activities to take place that I must know my practice?



Students explain their ICT project to a member of the Arion study group



Barry Mellett with Michéal Martin, Minister for Education and Science.



Stephen explains his ICT project to a member of the Arion study group.



An Taoiseach, Bertie Ahern and St Aidan's and Loreto Grammar school, Omagh students.



Members of the Arion Study Group.



Presentation by a Transition Year student to the Arion Study group.



Students engage two Prime Ministers in dialogue.



Prime Minister Tony Blair in conference with students from St Aidan's, Loreto Grammar School, Limavady Grammar School and Carrigaline Community School.

Fig 6.1 – A series of photographs showing young learners engaging community leaders and accounting for their practice

It was our practice following engagement in activities like those shown above for students and teachers to record their thoughts about the activities on the school website (for example see <http://www.ictaspoliticalaction.com/webs/staidansweb/nov26/index.htm>). Following the North/South schools link one student wrote:

It was really weird to be sitting there and to hear that the Prime Minister and Taoiseach were to arrive in five minutes. It was then I realised how important this actually was - it was history in the making - and I was involved!!! The media attention was unbelievable. Greg and I were surrounded by the press and radio, it was an unbelievable experience.

When the leaders arrived the atmosphere in the hall was electric. Both of them acted informally which helped to put the students at ease. They answered every question clearly and fully, something politicians are not always good at.

When the time came for Greg and me to ask our questions we moved off the stage and we began. As I asked the question Mr Blair kept eye contact with me and seemed genuinely interested in what I was saying. Mr Blair answered the question completely and really got his point across. When they both left and I had a chance to think about what I had been involved in, it really sank in - I had been involved in a part of history! What a day!!!

(Sherlock 1999)

To begin with I wasn't nervous at all, and because of this I began to worry. But it wasn't until the Taoiseach and the Prime Minister walked into the hall that the event's importance hit me. It was then that I realised the amount of media coverage that was present. I almost panicked but after the huge applause the two guests of honour received I calmed down. After all, the only important job I had to do was stand up in front of everybody!

(Farrell 1999)

My name is Greg Fitzpatrick. I am in 2A class. On 26th November 1998 Tony Blair and Bertie Ahern came to our school to launch the "North/South Schools Link". I was one of the people to put questions to the Prime Minister and Taoiseach. They were really sound and "down-to-earth". I will remember that day for a long time to come.

(Fitzpatrick 1999)

Our students regularly communicate with schools in Slovakia and Spain. Communications technology is bringing students closer together.

(Cashel 1999)

Students and teachers taking part in the Comenius project commented:

The worst thing of this project was the time because for example the school in Dublin ends in May. The best thing was that we have found new friends and have tried out new ways of communication.

I have never thought it would be so exciting. The project let us know many interesting things and made us think about the differences between the countries.

The first year of our European Education Project has been a tremendous success. Teachers and students alike, in each of the four participating schools have been enriched by this cultural interchange.

This project gave me a lot of new knowledge about Ireland and Spain. I know a lot about their habits, a style of living and of course I've improved my English. I have a lot of new friends and it will be good, if it continues.

We have worked in groups with our classmates and have increased our friendship and mutual understanding.

Comenius has helped me to bond with my classmates. I love feeling part of a group and that I'm helping to achieve something.

The tasks and activities have also helped me to take a greater look at myself, my culture and my country.

One of the most important features of this project is the fact that except the "official" or planned part, that is, the work on the individual project topics, there also existed the informal, non-planned part. I mean the correspondence among the students involved in the project concerning out- of-project themes and communication. A similar feature occurred in the work of the co-ordinators.

(St Aidans 1999)

These comments from the participants in these projects are evidence of changing practices and, as a result of those changing practices, changes can be understood to be taking place in the in understanding of others and in their self perceptions. One student came to see himself as being a part of history; another had increased his capacity for friendship and understanding. I suggest to you that all of these aspects show that the improvements in my own understandings and practice have had an educational influence in the learning of others. The changes in my practice have enabled my students and colleagues to work in collaboration to achieve their purposes. This is evidence of the validity of my claim to know my practice. The changes in my practice have led to collaborative practices which are dialogic in nature, function on the basis of intersubjectivity, and support the development of individual human agency. In this sense they are life affirming. I claim that in the evidence above and in the overarching multimedia version of this thesis I am showing within my

practice significant progress in bringing my practice into line with my values. The values are values of justice and freedom underpinned by ideas of natality and plurality. These are values that necessitate moving beyond a life of labour and work into one of political action. The evidence shows that ICT can be reconceptualised in a way that promotes human agency in undertaking political action to achieve one's aims in life.

I am showing the generative transformational potential of each and every person to influence the wider social order. The young people who are exercising their natality through ICT are, through ICT, entering interconnecting branching networks. They have the potential to influence thinking at a global level.

### *Evidence of my educational influence in my learning*

I have shown above how practice has changed within school and within NCVA. But this thesis is not just about changing practice; it is also about producing new knowledge. The new knowledge that I have gained is, in the first place, knowledge of my learning. A key aspect of this thesis is that I am learning how to support others in their learning. In this section I will outline my learning within the work of this thesis.

In my early work on the thesis I was using a propositional form of theory to talk about organisational change. I was drawing on Schön (1987; 1991; 1995) and Senge (1990; 1997), and other theorists (Argyris 1982; Schein 1996). I was drawing on them propositionally and attempting to apply their ideas to my work. For the most part this was not successful for me. Through a process of envisioning approaches to my practice, applying them and reflecting on the outcomes I began to find new ways of working. What I learned was to start with my practice, draw insights from the experiences and theories of others and devise ways of working to overcome the dissonance that I experience between my values and my practice.

By using this approach I have learned how to improve my practice for myself and for others. But the work that I am involved in goes beyond mere problem solving. I have learned that by providing descriptions and explanations of my changing practice that I can contribute to educational theory. Let me give some examples of this in practice:

As noted, many educational theorists, Fullan and Hargreaves (1992), for example, argue strongly that change within schools is down to the Head. '...teachers and heads must make it happen' (p. 2). At one level I agree with Fullan and Hargreaves: if you have the support

of the Head then it is easier to make things happen. But at another level I disagree. I disagree on the basis that you can have a dominant culture within a school driven by the Head which is an oppressive culture. Individuals within the same institution can develop an alternative culture and work through that alternative culture that would not be the dominant culture, but that culture can have a major impact. We could think about terms to refer to that culture: an alternative culture, a subversive culture, an emancipatory culture; perhaps all of these. A culture has operated in my school, which was never the dominant culture, but continued to operate effectively without being the dominant culture. Let me use a metaphor to help explain the process.

A colleague has drawn my attention to the phenomenon in geology referred to as ‘Braided Rivers’ (Best and Ahworth 1997). Braided Rivers do not follow a single channel. They have a channel that consists of a network of small channels separated by small and often temporary islands called braid bars.



Fig 6.2 Resurrection River, Southern Alaska. Photo by Marli Millar. © www.earthscienceworld.org

The analogy of braided rivers for school culture is useful. Schools may have a single dominant culture – a single channel river. A school could have a dominant culture and at the same time have other cultures that meet and connect at times but diverge and run their own course at others.



Over a period of time the culture of my school has been like a braided river. There has been a dominant culture but there have been other cultures and they have run a common course at times but have diverged widely at others. With braided rivers a general reduction in energy, that is a reduction in the river flow, results in many of the smaller channels disappearing. This also appears to be the case in braided cultures. The dominant culture seems to have a capacity to perpetuate itself (Bourdieu and Passeron 1990) while the non-dominant culture needs constant input or constant work or constant effort in order to keep it going. There is a real risk that if you lose key influential people the alternative culture can disappear very quickly and the dominant culture is able to take over again. The dominant form is usually legitimised by those who have institutional power. Within my work I see programmes that operated in a particular way over a period of time. When the transformational individual moves on the programme may continue looking the same on paper but it is different. The dominant model takes over. However, the positive side of this is that many of the effects of these programmes cannot be seen because the effects are elsewhere. The effects are in the people who worked through the programme and whose lives have been influenced by them. For an individual teacher with a vision the braided river analogy provides an insight into how it may be possible to devise ways of realising the vision from within the problematic situation.

*Justifying practice in the light of the morality of exercising influence.*

My research programmes over the years have drawn my attention to autonomy at the micro level. By that I do not mean some master discourse of autonomy but how autonomy operates on a day to day basis. I have previously referred to my difficulty with allowing students take control of their own activities:

It is not easy to stand back and let the student find his way. It is not easy to maintain the patience to talk the student through, to walk the student through. Often, it would be easier to do it for him. Even after implementing this practice for some time it is still difficult, at times. When the bell is about to ring and the student needs to save a file it would be easier to do it for him or even show him how than it is to say 'Click on *File*, click *Save*...., in place of *DOC1* type *John's Letter* and Click the *Save* button. And it is not enough to just list the instructions, it is necessary to walk him through them. At the same time chairs are being scattered around the room, pieces of paper are on the floor, a new class group is waiting at the door. But if I can get him to do it once, he now knows how, he gains confidence, then the process is educational and it is

liberating. He does not need me the next time, he can rely on himself and he has the confidence to rely on himself.

(O'Neill 1996: 3)

Taking the time to stand behind a student and support him through saving a file is recognition of the autonomy of the learner. I do not interfere in his work. My right to interfere in a student's work, even for example, if he opts out, is limited. In terms of my work with other colleagues I intervene in other people's lives on the basis of a request for an intervention. In the absence of a request for intervention I have to be careful that my offer is an offer and not pressure. In this way I respect the right of other people to run their lives. I believe this is what the Dutch Inspectorate were referring to when they said '...the strategy...is to persuade rather than force teachers...the basic idea is to remove barriers and provide encouragement' (Inspectie van het Onderwijs 2001: 29). My experience is that students who are allowed to take control of their computer and their work also take control of their lives.

In the early stages of my work I drew on the work of the Frankfurt School and the idea that in order to emancipate ourselves we must understand what is going on at a deep level of analysis. I have moved from critical theory to theories of action and as a consequence I must move from the deep levels of analysis to taking action to subvert attempts at control. I take action in support of teachers using different methods of working with their students and I support students to use new ways of working with each other. When people have been exposed to ICT the main barrier to a change in their practice is lack of access to equipment. Obtaining the necessary equipment is a means of using ICT with emancipatory intent. This is allowing the teacher to express her or his natality and in turn the teacher supports the students to express their natality. Providing access to ICT is enabling what happens in that class to be different.

I have come to a new understanding of theory. Social transformation does not occur through propositional theory. Social transformation occurs through emancipatory forms of theory. In order to act as a change agent it is necessary to understand what is going on – it is necessary to understand my practice – I have to offer my living theory of practice. So I have moved away from talking about organisational learning in a propositional way; I am now engaging in it and showing the process through my thesis. Individuals, recognising that they have the capacity for learning and for change, are a prerequisite for effective

organisational change. It seems to me that recognising one's own capacity to achieve is often a consequence of achieving. It seems people learn by doing; and by doing a greater depth of understanding is achieved and a greater capacity to transform is gained. This thesis argues that the propositional form has a place in producing living theories of practice but transformation is achieved through involvement in action.

While examining 'patterns that connect' (Bateson 2000) I find my work resonating with others in the literature – I agree strongly with Senge (1990: 23) when he suggests, 'We learn best from experience'. In learning better from experience we are better placed to make better changes. During the NCVA project an outside consultancy company provided advice on the collection of data for the organisation. This advice was taken and subsequently, the process was found to be less accurate, more expensive and more time consuming. However, the changes which were based on the experiences of those working the system were much more effective than those proposed by outside 'professionals'. This is an important point. By bringing in the 'professionals' we were assuming they had objective 'knowledge' which would enable them to provide solutions for us. The reality was that the administrative workers who would not normally be seen as professionals and not seen as 'knowers' provided effective solutions. We are all knowers, learners, doers. It seems that transformation can result from active participation in devising a better world rather than through objective knowledge.

Within my research programme the real learning for me has been that worthwhile learning is not only embodied in a systematic programme of work but also in a complex web of personal relationships which are underpinned by values respecting the dignity of all involved. It can however be complicated by power relations, by teaching methods, by social factors, by funding, by parent pressure, by the examinations system, by the curriculum... All of these factors and many more form the web of patterns that connect. It can also be complicated by issues such as the divide between classroom research and academic research (Zeichner 1995: 154; Korthagen and Kessels 1996; 1999; Richardson 1994). My work is academic research which examines my practice as a teacher, as an educational administrator and as a person. My work is also workplace-based research, but I am bringing my claims to knowledge into the Academy.

In examining my practice my intention is to understand better how I learn and in doing so could help others to learn. By studying my learning I believe I am a better teacher,

administrator and person. I see knowledge, of my learning or otherwise, as a process that is based in relationship rather than as an object to be acquired. So I am, already, a better teacher, learner, doer by engaging in the process of examining my work in collaboration with others. My research is the work of an actor rather than that of a spectator (Coulter and Wiens 2002: 15-25). I am not an expert looking at my classroom or administrator's office as a spectator and transmitting knowledge to those I find there. I am an actor, experiencing the achievements and failures in my classroom or office in participation with others and finding ways of improving our learning and our lives through our relationships.

My learning from this project and others indicated to me that ICT embodies the capacity for forms of expression that enable people to come to know in ways that are commensurate with their ways of knowing, and to communicate their knowledge in non-linear, experiential ways.

In this chapter I have presented new practices that have developed as a result of the projects that underlie this work. I have produced evidence of the educational potentials of these new practices and have shown how they relate to my ontological values. I have explained how my thinking has shifted and that I am now aware of how I have come to develop my living theory of practice. I have produced evidence of the development of my living theory of practice and I related this development to my ontological values. I have accounted for my educational influence, in relation to my learning, my colleagues' learning, and the education of social formations. As the living theory that I am developing is a theory of practice the evidence from my practice forms the basis of the evidence for my claim to know my practice.