Chapter 3 – Taking stock prior to taking political action: What could I do about it?

In the previous chapter I have outlined how I experience myself as a living contradiction when my practice is in conflict with my values. Prior to undertaking this research my school work relied heavily on a banking concept of education (Freire 1972: 45-60). In contrast my values and experience led me to respect an emancipatory concept of education. While I have undertaken my work in an authoritarian institution, I believe that authoritarianism works against the individual achieving their potentials. A clear challenge for me was to attempt to bring my school-based practice into line with my values. In the current chapter I show how my background as part of an activist group of young people helped me to see an alternative to the didactic and authoritarian approach that I was using in my classroom. I continue by describing some of my early faltering attempts to take action to overcome the dissonance I was experiencing and bring my practice into line with my values. I do this by describing ways in which I have come to prefer to work.

The chapter continues by telling the story of how I came to the conclusion that my work within NCVA required a similar change of approach. This led me to the understanding that the differing contexts of my work could inform each other and led me to new ways of working. In addition to taking stock to prepare to modify my practice I outline my purposes for the research. While my concerns in relation to my practice were wide ranging my purposes were wide ranging too. At the same time I outline the theoretical basis for my approach.

I will start by outlining some features of my history that suggest a different approach to working with young people.

Can my history and culture provide me with a model to develop a new history and culture?

I have already referred to what Dewey calls a 'traditional model' of education (Dewey 1938: 17-23) and Freire calls a 'banking model' (Freire 1972: 45-50). These are the dominant 'theories-in-use' (Argyris and Schön 1974) in schools and are models which I have frequently used myself. However there are other models which do not depend entirely upon a 'transmission' metaphor (Sfard 1998). Another conceptualisation of education

involves ideas that the cultivation of individuality is important, that the opportunity to learn from experience matters, that skills and techniques are acquired as a means of attaining ends which appeal to the learner and that a learning model involves developing the capacity to embrace change. Within such models there are several characteristics of learning which appeal to me: the value of learning from experience or learning from doing; the recognition of all participants as knowers; valuing the autonomy of all learners/doers/knowers, and working in collaborative ways. Collaborative approaches which recognise the autonomy of the learner are important, and recognising that all participants in the learning process are knowers in their own right are features that appeal to me.

When I compare my practice in school with my practice as a member of the Young Christian Workers (YCW) group I find my practice within the YCW honours my values more than my practice as a teacher or administrator. Let me give an example to help explain the difference between the activities of the YCW group and much of what occurs in my classroom.

Many years ago, a friend, let me call her Mary, of one of the members of the group, whom I will call Paul, was dismissed from her job in the local grocers shop for being absent from work due to illness. Mary told her story to Paul who recounted it to the group. This was not recounted as a simple tale of woe but in the context of the 'Fact of the Week', where members of the group told of their experiences during their working week. experiences were discussed by the group in the context of their values base and the group decided if action could be taken. In this instance Paul undertook to pursue action on behalf of his friend. Over a number of months Paul acquainted himself with various elements of labour law and discovered there could be a basis for an unfair dismissals case. He took this case, without legal or trades union representation, to an unfair dismissals tribunal and won the case. Mary was compensated for her unfair dismissal. Following this success, the YCW group undertook the establishment of a 'school-to-work' programme. The aim of the programme was to enable young people in schools to become aware of their rights and responsibilities as they moved from full-time schooling into the world of work. Such school-to-work links have since become a feature of many school programmes like Leaving Certificate Applied (LCA), Leaving Certificate Vocational Programme (LCVP) and Transition Year Programme (TYP).

I interpret the events of Paul and Mary's story as a 'practice of freedom' (Freire 2003), arising out of critical reflection whereby young people 'reflect and act upon the world in order to transform it' (Freire 1972: 28). In this situation, Paul identified a mismatch between his values and his experience of life. Whitehead (1993) might say that 'he experienced himself as a living contradiction'. While Paul respected the dignity of other people, clearly Mary's former employer did not. By entering into dialogue with the other members of the group Paul devised a plan to support Mary. However, his plan achieved more than that. By taking action to support Mary, he practised his freedom to act and became the author of his own life. Through reflecting and acting collaboratively upon his world, he transformed it. Paul and Mary, through communicative action, expressed their natality. Paul and Mary's activities involved both speech and action. The dialogical interaction provided by their membership of the group provided the basis for communicative action (Habermas 1975). But the group did not just provide a 'talking shop'. The dialogue within the group provided the basis for Paul and Mary to take action. Freire claims that closed societies are characterised by submission, adaptation and adjustment in favour of those with power: 'The adapted man, neither dialoguing nor participating, accommodates to conditions imposed upon him and thereby acquires an authoritarian and acritical frame of mind' (Freire 2003: 23-24). By contrast, in an open society, people can develop participation in common life, and therefore engagement in dialogue implies social and political responsibility (ibid: 24). The group that Mary and Paul belonged to formed an 'open society'. It supported them, through dialogue, in refusing to adapt to the abuse of power within their broader society. The nature of the activities that Paul and Mary undertook fits closely with Habermas's (1975) ideas of the exercise of 'communicative action' and Arendt's (1958) concept of 'political action'. In his action Paul's activities were more educational for him and his friends than many of mine are for me or my students in my classroom.

A key question for me is whether there are aspects of Paul's action that could provide me with a model for working as a teacher and administrator that would allow me to move away from the 'traditional model', 'the banking model', the 'transmission metaphor' and the 'closed society' that I work within. Are there opportunities within my 'closed society' to form a democratic enclave, where dialogue could occur and a space created for 'critical

enquiry' (*ibid*: 45)? How would such a model work within the classroom and could it work among colleagues?

My experience as a member of the YCW provided me with a practical understanding of how learning could be different. This was not a banking concept of education (Freire 1972) but a practical experiential model of education. But involvement in the YCW was not confined to providing a model of practice. It provided a methodology. As I came to understand this better I was faced with the difficulty of what this methodology might offer for use in the classroom. In the next section I will indicate how my thinking in relation to methodology and indeed pedagogy and curriculum were affected by undertaking the teaching of a new school subject. The newness of the subject offered possibilities because practices around the teaching of the subject were not yet 'congealed' (Crane 2001), and offered the possibility of a new approach to answering the key question within this chapter: 'What can I do about it?

Could a change of subjects provide a change of approach?

For the first few years of my teaching career I taught Science, Biology and Physics. After a time an opportunity arose to become involved with a new school subject called 'Technology'. Technology is referred to as Craft, Design, Technology elsewhere. Technology attracted me because it focussed on students undertaking project work and provided considerable opportunities for students to take control of their learning. In my first year teaching Technology I was assigned to a class group to teach both Technology and Science. I have previously written on my experiences teaching the group both subjects, and I draw on that work to clarify my reflections in relation to devising new ways of working. When I examined my work with this class group I found some interesting contrasts:

...I believe there is a distinct difference between the two classes. The difference is not about content, it is about approach. My science classes tend to be focused on the teacher. I am instructing, demanding, directing, correcting. The students are listening, carrying out instructions, not listening, misbehaving. The environment is rather authoritarian. In my technology class it is not about me, it is about them. They are working, they are making, and they are co-operating. There is no need for me to impose order, they are controlling themselves. Technology is more educational; they are discovering for themselves, my role is more facilitator, helper, and advisor.

(O'Neill 1996: 1)

Teaching Technology was providing me with a new approach that was participatory for the students and collaborative for both teacher and students. However, after teaching the Technology course for a couple of years I was experiencing some concerns here also. By December 1994 I had undertaken an action research study into 'Motivating Junior Certificate Technology Students' (O'Neill 1994a). The initial attraction of Technology was waning. My values were in conflict with my practice and this could be seen in my reflections at the time:

I am excited about technology... it is fundamentally interesting...it opens up a world of understanding, how things work, how things are made, why they work or are made...it allows me to understand and take part more fully in the things which affect my daily life...it allows me to use 'things' like pulleys and gears, resistors and transistors, LEDs and buzzers, computers and lathes.

But

...kids in my class are bored...they break the pulleys and gears...they steal the LEDs and buzzers...they run around the room...they hang leads from other kids' jumpers.

(O'Neill 1994b: 2)

It was clear to me at this point that the students must hold the answer to my classroom difficulties; however my tendency to turn a concrete problem into an abstraction was getting in the way of my learning:

... if I ask my pupils "Why, then, do you think you are poorly motivated?" I'm sure I will get an interesting answer, but probably not one I'll want. If there was a simple answer to how to motivate pupils, then we would have no problem. If I asked my pupils "Why do you burn holes in the desks or break the pulleys?" I might get more useful answers.

So, eventually, I asked them. And they told me: "You talk too much."

"We have too much writing to do."

"We want to make more things."

Well, it is not too difficult to find actions there!

(O'Neill 1994b: 2)

This account shows the development of my own understanding and my learning by engaging with my students in dialogue. As a result of engaging my students in dialogue the power relationships within my classroom were changing. We were moving from the traditional didactic relationship to one of collaboration on common tasks. In this way practice within my classroom was changing and indeed a new pedagogy was developing. There was the possibility of reconceptualising curriculum as an articulation of conversations of communities of practice. The idea of the teacher as facilitator is a hallmark of adult education (Apps 1991; Brookfield 1995; Knowles 1992). These steps showed the potential to move in this direction with young people.

But change often occurs slowly and these were important periods of learning for me. From this particular episode I learned that it was important to focus on concrete concerns rather than rushing to abstraction and then, deciding on action becomes easier. From this work it was becoming clear that in order to improve the quality of the work taking place within our classroom I needed the participation of students in deciding what was worthwhile work. The students were more than capable of telling me what worked for them. If I wished to support them in 'being the best that they could be' I needed to listen to them and support them in choosing the best ways for them to learn. "You talk too much", "We have too much writing to do", "We want to make more things", are clear statements. However my first inclination was to go into expert mode: 'But I know what is on the curriculum.' 'I know what the examiner expects.' 'I know... I know... I know...' But do I know how each of these individual students learns best? My tendency was to follow traditional education styles with linked pedagogies which are didactic and controlling.

Taking a lead from what the students told me I decided to focus on assisting them to 'learn' rather that trying to 'teach'. With this in mind I decided to make classroom activity more interesting by buying an expensive electronics kit. I had used the kit previously; for me it was really fun, exciting stuff! It was expensive but I convinced the principal that this was worth getting. We got the kit and work started. The students worked in pairs. The exercises involved setting up circuits from instructions on a work card, then pasting a diagram in your copybook and writing, usually a single sentence, an explanation of what happened. The circuits were easy to relate to because they were simulations of familiar devices like traffic lights, washing machines, music- synthesisers and so on. One day when I entered the classroom one student asked me, "Are we doing writing again, today?"

Incredulously, I asked, "What do you mean writing? We're working on the kits!" "That's what I mean, Sir, writing!" he said! I began to understand that work with these kits that I found fascinating, exciting and fun, some of my students could only see as 'writing'.

This was another important episode of learning for me. I learned that it is important to be prepared for other people seeing things in a different way to you and to be prepared to give up things you thought were sacred (O'Neill 1994b). This experience was directing me towards Arendt's (1978: 187) ideas of plurality. To be a good judge one needs 'to look upon the world from another's standpoint, to see the world in different and frequently opposing aspects' (Arendt 1968: 51). Within my classroom there were many different standpoints. I needed to support my students in revealing their standpoints and then perhaps we could learn together. At the same time it was becoming clear to me that the role of facilitator of learning was not sufficient. In Schön's metaphor of the swampy lowlands of the classroom, facilitation does not happen on neutral ground but in the real world where people bring their positions in the hierarchy of power relationships with them (Johnson-Bailey and Cervero 1997). Because the social context is duplicated in the classroom, facilitation reproduces the power structures that privilege some, silence some, and deny the existence of other learners (hooks 1994; Maher and Tetreault 1994). If all learners are to thrive, adult educators must go beyond the facilitator's role to negotiate directly the power dynamics in the classroom.

In another of my classes, John caused endless problems. He took up an incredible amount of time; he always seemed to have a problem with something and the rest of the class suffered because of the time I spent dealing with John's difficulties. One day in desperation I sent him off to tidy up some clutter left by a previous class. I did this just to get him out of my way for a while. John loved it! He tided up all the mess and came back looking for more to do. So I appointed him equipment manager for the class. He gave out tools and equipment at the start and saw to it that they were collected at the end. Because of the responsibility he had taken he seemed to be able to get his work done and look after the equipment as well. This improved the smooth running of the class overall. It seemed John needed a purpose, he needed to achieve, and having achieved as equipment manager, he was able to achieve as a student of technology. Again this was a learning experience for me and again the learning operated on a number of levels.

The need to 'belong', to be 'part of' seems to be deep in us (Maslow 1943), and when a sense of belonging is developed, many problems disappear. At the same time I was learning in terms of organising my class. Action does not need to focus on an entire class. The individual is the important one. Often supporting an individual in changing, changes the entire class. There is certainly an element of group dynamics here. But perhaps most importantly in this situation I was pursuing a traditional role. I was being controlling. Like Dewey's 'good teacher' I was using 'devices of art to cover up the imposition so as to relieve it of obviously brutal features' (Dewey 1938: 17-23). So I distracted the student rather than confronted him. While I struggled looking for an action to take, John rose to the occasion. He transformed control into emancipation. He took a situation that, at best, was meant to distract him and provided himself with a life-affirming role within his community.

However this insight has only come to me recently. Reflecting on the episode at the time I suggested some thoughts on what I had learned:

What then have I learned from all of this? Perhaps the most important learning is that I must be prepared to give up my own claim to knowledge. While what I know about technology may well be greater than what my students know at this point, I do not necessarily know the best way for them to learn. I must always be open to the possibility, maybe likelihood, that my approach today, to this particular class that I am teaching now, may not be the right one and I must be prepared to listen to what they have to say. And having listened, be prepared to change.

(O'Neill 1996: 21)

These comments represented my view of what I had learned about my teaching at a particular point in time. The learning that I was undergoing was providing me with the basis to change my approach to working with my students. It appeared from this work that as I changed my way of working the students changed theirs also. I was discovering there was a relationship of influence between my students' learning and my learning and this influence was a two-way thing. In many respects the evidence of my learning is in my students' learning. A key part of my learning was that I was beginning to bring my values around the right of young people to be listened to and be heard into practice. These episodes highlighted the importance of 'relation' within our activities. John's new role changed his relationship with the members of the class, including me. The one small change in relationship resulted in a significant change in several lives. James Gleick (1994:

17) describes Lorentz's pioneering work in predicting weather. He describes the phenomenon of 'The Butterfly Effect' where small changes in input have a large effect in output. I was discovering that classroom situations can exhibit the Butterfly Effect where small changes can have large effects in people's lives.

NCVA – could changing the model of practice provide a more life-affirming approach to administering certification?

Before exploring the ideas that I was pursuing in attempting to work out what I could do to bring my practice in NCVA into line with my values, let me start by setting the context for the work undertaken in NCVA.

In 1992, the Irish Department of Education introduced a national system of certification for vocational education. Until then, certification was variable and standards were unclear. The Green Paper on Education (1992) indicated that 'course structures would be modular, graded by levels and standards based; in addition a credit system of transfer will be developed' (Rialtas na hÉireann 1992: 116). The aspirations in the Green Paper described programmes that would be flexible in nature.

Department of Education statistics indicated that some 15,000 students might ultimately undertake the examinations. The large numbers of students involved suggested that the system would need to be computerised. However, traditional computer systems do not lend themselves to the flexibility required to enable the various methods of assessment, external moderation and cross moderation, which combine to produce results for certification (O'Neill 1997: 7). Thus, there was a danger that delivering certification would be operated as a generalisable functional event, requiring simple collation and reporting, rather than an educational process, which requires interpretation and acknowledgement of the differentiated nature of the accreditation gained (Lomax 1994a: 16). Currently, delivery of certification is regarded as a straightforward administrative procedure; administration itself is regarded in a technical-rational light (Carr and Kemmis 1986: 132).

In attempting to bring my practice into line with my values I had worked in collaboration with administration staff to develop means of working that recognised the multiple relationships both within the certification procedures involved, and in the form in which assessment procedures are combined and moderated. While some successes were achieved, these were essentially about refining existing policies and procedures and making them

more efficient. In many respects the changes that were being made were largely technical changes. As mentioned earlier, these involved what Argyris (1982: xii, 159) calls 'single loop learning'. Argyris suggests that these work well for routine programmed activities or emergency situations that require prompt unilateral action but are not suitable for 'non-routine, non-programmed, difficult issues'. More complex situations require learning that involves 'examining our underlying individual and organisational values and assumptions' (Argyris 1982: 159-160). He refers to this as 'double-loop' learning. 'Double-loop learning' offers the possibility of questioning the basis of the work we are doing rather than simply making our present activities more efficient.

It became clear to me that the progress we were making and the learning we were undergoing was not enough to keep pace with the pace of change that we were facing in NCVA. There was an urgent need for us to change models. It was not enough for us to examine and correct the way we were doing things; our underlying assumptions needed to be challenged and modified if necessary. Clearly the problems we faced were not the administrators' problems but problems for the entire organisation. It was in this context that I realised that a process to support organisational learning and organisational change was required. It seemed that establishing a process of organisational learning within NCVA required the same sort of philosophy of learning that informed the work in school. It was into this context that the idea of forming an 'action learning group' was formed. Such a group would bring together 'people who are interested in critically examining their own work with a view to improving practice', as I stated in the project proposal (O'Neill 1998b: 1).

Starting the Action Learning Group was recognition that we needed to get out of established roles (Tsoukas 2002: 423) and disrupt rules and routines (Beech *et al.* 2002: 473) if novelty was to be encouraged. By setting up the action learning group I included people from various strands of the organisation who participated in different relationships to those in which they usually worked. The group provided a different approach to work than they were accustomed to. This produced the 'far from equilibrium position' required for change (Tsoukas 2002: 423). I will provide a more detailed account of the work of the Action Learning Group in Chapter 5.

Do the ways I prefer working suggest how I could bring my practice into line with my values?

I have for some time been teaching Science and Technology. A relevant question for me in the light of my experiences is which would I rather be teaching with a class right now? Would I prefer Science in which I have a theoretical background or Technology in which I don't? I would say Technology. If I look at my relationship with a class in Technology and in Science in general it is different. The technology class is more fulfilling for both teacher and students. When I asked my students which they preferred almost all answered the Technology class. The reason is that Technology is not about the content; it is about how things are done. Activity in the Technology class is not centred on the teacher. It is centred on the students. It is about the students working; they set the pace, get things going and make things happen. I, as teacher, am no longer 'in front' of the class. I prefer this class because I am more comfortable supporting the students as they take control of their lives, and this provides me with a more satisfying and rewarding environment to work in. In the Science class the focus is on the teacher. The Science class is more authoritarian and demanding. Technology class is more collaborative and enabling. I do things every day in my Science class that I do not want to do. Activity is too much about controlling the students. In Technology there is no need to control them, because they are controlling themselves. The students are liberated, they are given responsibility and they are finding out for themselves. I am facilitating that. My role in the Science class is that I am running the Science class; I am telling them what to do. The students frequently resist that. Technology is more educational in the sense that young people are enquiring for themselves or running their own lives. They are discovering things for themselves, working things out for themselves. They are making things happen, or not happen as they choose. In Technology I am realising my values, and as a result I feel more comfortable. Evidence of the enabling nature of the classroom culture in my Technology class can be seen at http://www.ictaspoliticalaction.com/pages/peaceful.htm

Technology class provides a good example of how I prefer to work. I am less happy with my Science classes because I find it difficult to operate in the same way. In Science class it is more about content to cover, whereas in Technology it is about an approach to follow. However, in light of my experience of teaching Technology and in collaboration with colleagues I have endeavoured to apply some of my learning to my Science classes. I have

undertaken a more project based approach to my science class. Evidence of this work can be seen at http://www.ictaspoliticalaction.com/pages/peaceful.htm

Are there ways that I can 'thicken' democracy?

In my work context I find myself working within authoritarian systems. Within such systems many of the aims and purposes pursued by teachers are not so much the result of conscious choice as the constraints contained in a social structure over which they have little if any control (Carr and Kemmis 1986: 130). Despite my gloomy assessment I still ask myself, are there ways that I could work in a more participatory manner? I find myself attempting to move from a position where participation is 'thin' to the point of nonexistence towards 'thicker' democracy (Apple 2003: 12). It has been suggested that the solution lies in the 'Total School' (Fullan and Hargreaves 1992). 'The premise is that teachers and heads should ultimately make it happen' (ibid: 2). However, Fullan and Hargreaves (1992: 117-8) cite a variety of sources (Nias et al. 1989; Leithwood and Jantzi 1990; Fullan 1991) to support a claim that the development of a collaborative school is dependent on the actions of the school head. Within the school structure it would be easy to claim that the context of education is unsatisfactory but external factors make it impossible to do anything about it. Such external factors include timetabling, space, lack of support, centrally determined curriculum, and terminal examinations. If we focus on the internal constraints rather than the external constraints it may be possible to make progress. Hanafin (2000: 163) takes such a view in her examination of the constraints on establishing multiple intelligences classrooms. The internal constraints relate mainly to what I believe I can do. If I believe that the external constraints are overwhelming then I am immobilised. Immobilisation can stem from linear thinking. Apple suggests an approach that allows what appear to be external constraints to be overcome. He suggests that the fact that something is imposed does not necessarily mean that it must be treated as impositional (Apple 2003: 14). Hanafin and Apple are saying that the taken for granted need not be taken for granted. There are opportunities for challenging the status quo.

I believe that oppressive power relations have no place in education and that a democratic approach is central. But what are the steps that can be taken to 'thicken' democracy? Developing more participatory forms of learning require a fundamental shift in how we view learning. Learners need to be allowed to place themselves at the centre of their own

learning. Cook-Sather has commented that every reform in education has been premised on adults' notions of how education should be conceptualised and practised. She says, '...there is something fundamentally amiss about building and rebuilding an entire system without consulting at any point those it is ostensibly designed to serve' (Cook-Sather 2002: 3). Encouragement, support and empowerment are key elements in centring learning with the learner. The examples that I have given from the Technology class show some movement towards a more participatory classroom. I need to develop these ideas and my thinking around this further. Informing myself of ideas in the literature that support participatory modes of working is part of this process.

The changing nature of scientific processes

During the twentieth century a clear theme appeared throughout the literature of the philosophy of science regarding the changing nature of scientific processes (see for example Coveney and Highfield 1995; Woodhouse 1996). A new body of literature, popularly termed 'the new science', has transformed not only how science is understood but also how scientific knowledge is created and disseminated. Old paradigms which value concepts such as certainty, objectivity and the deterministic nature of cause and effect processes have been transformed by scientists working in a variety of disciplines, who suggest that scientific enquiry needs to embrace the ideas of uncertainty and unpredictability in natural processes. These evolutionary trends have been well described by, among others, Bohm (1992; 1995), Capra (1983; 1992), Gleick (1994) and Peat (1996).

The metaphors of the new science transfer to how the practices of social scientific and educational enquiry are conceptualised. New paradigm research in education embraces newer forms of enquiry such as action research. These newer forms also emphasise uncertainty and the need to embrace contradiction. Whitehead (1993), for example, speaks of experiencing oneself as a living contradiction, and undertaking an action enquiry in an attempt to resolve the dissonance. This is an experience with which I identify when I study my work situation in which my educational values are often denied in my practice as a teacher and as an administrator. To understand my situation more thoroughly I have engaged with the work of other researchers (for example Lomax 1994a; 1994b; 1996; McNiff 1988; 1993; McNiff and Collins 1994; Whitehead and McNiff 2005; 2006) all of

whom embrace ideas to do with the need for individuals to see themselves as informing the education of social formations, a key aspect of my enquiry.

The ideas of the new science also travel to how organisation is conceptualised. While undertaking my research for my master's degree in education (O'Neill 1997) I engaged with the literature of learning organisations as described by Argyris (1982), Schein (1996), Schön (1991; 1987) and Senge (1990; 1997). I now understand that organisations need to be conceptualised as transformative processes. Reconceptualisation is not an abstract exercise but an active process of recognising the agency of transformative individuals.

Reconceptualisation of organisation suggests a form of practice that relies more on a participation metaphor, where learning takes place by becoming a member of a community or culture and where participants take the perspectives of others into account (Lomax 1998). Freire tells us that the praxis that defines human existence is marked by a dialectical interplay between the way that history and culture make people even while people are making that very history and culture (Glass 2001: 16). What I am doing at present is influenced by my past history and culture, but that work is concerned with providing me with a new and changing history and culture. The history and culture in question is developed within communities of practice (Brown and Duguid 1991; 1996; 2002; Lave and Wenger 1991; Wenger 1998) and communities of learning which I practise within and learn within. A central aspect of this work is how the various facets of my life-world interact and illuminate each other. My learning does not take place only in a single location or at a particular time or with particular people. My learning also takes place when particular experiences in a particular location with particular people are viewed in the light of different experiences in different locations with different people. My communities of practice form a web of ideas, people, experiences, plans, disappointments, relationships and actions, which are linked. Drawing on perspectives from the new science regarding unpredictability and uncertainty I find that what I know about my practice is that I do not know. When a child comes to me with a problem I do not know the answer to his problem. The nature of knowing is dialectical – I work out with him how to deal with him. So I do not know in advance – what I know about my practice is that I need to work it out every time. So I am not working toward closure. My knowledge is open-ended and provisional.

Can I develop my own living theory of learning?

In this chapter I have outlined my personal background and how it has formed and informed my current practice and understandings of my practice. I have described how my first years in education were informed by my participation in the Young Christian Workers (YCW) movement and how this led me to examine my practice in an attempt to bring my practice into line with my values. During these early attempts at improving my practice I began to theorise my learning in terms of developing a personal living theory of learning. Among the ideas I was formulating at that time was that education was not so much about teaching as about learning. So I began to doubt the central role of the teacher as the possessor of knowledge which was to be imparted to passive, empty minds and began to see a process of collaborative learning where students and teacher were learning together. My learning was concerned with how to support my students in their learning. Their learning was substantially concerned with how to take control of their learning. reconceptualisation of learning necessitated a democratic approach to school work where learners became central. Underpinning this reconceptualisation were Arendt's ideas of natality and plurality (Arendt 1958). My students with their wide diversity of skills, talents, abilities and interests are not better than each other – just different. Each and every one has the capability to start something new - what Arendt calls natality. It is my belief that ICT has the transformative generative potential capacity to support that natality.

Purposes of the research

In the previous chapter I have drawn attention to my concerns in relation to my practice. These concerns provide the impetus for me to research my practice but they also provide the purposes of my research which I set out now.

Personal purposes – Improving my learning

For me, the key purpose in carrying out research is to improve my learning, and by improving my learning to improve my practice. The improvement of my learning is based on my identification of a gap between my values and my practice (Whitehead 1989; 1993). I need to learn how to close that gap and bring my practice into line with my values. I address the issue of improving my learning on two fronts. I make a study of practice and theorise that practice in the light of insights drawn from others. Drawing on the work of

Arendt (1958; 1973; 1978; 1994) and Habermas (1975) I frame the initial question: 'How can I reconceptualise ICT as political action?' I go on to place my practice within the framework described by Whitehead (1989; 1993). I locate my understanding of my learning within frameworks established by Apple (1999; 2000; 2003), Argyris (1982), Dewey (1916; 1938), Lave and Wenger (1991), and Wenger (1998), and express the desire to locate this work within the wider literature particularly in relation to the 'New Scholarship' (Boyer 1990). I am supporting the development of a new epistemology for the new scholarship (Schön 1995) and this epistemology draws on the ideas of an epistemology of educational enquiry (Whitehead 1999).

Knowledge purposes – Contributing to the knowledge base of education.

In her presidential address to the American Educational Research Association in 2001, Catherine Snow, while supporting the wealth of knowledge possessed by teachers, called for that knowledge to be 'systematized so that personal knowledge can become publicly accessible and subject to analysis' (Snow 2001: 3). One of my purposes in carrying out this research is to respond to Snow's call.

I anticipate that this work will contribute to the wider body of literature in terms of the New Scholarship. I have drawn on Gardner's ideas of multiple intelligences (1989; 1993) in devising materials that appeal to those intelligences. Eisner's ideas (1997) on alternative forms of representation have informed the choice of materials used. The programme of work draws together insights from a range of contexts in an attempt to see the patterns that underlie successful change within organisations. But far from being linear processes these patterns are enfolded (Bohm 1992) within patterns that represent the relationship between learning and practice and indeed the patterns that represent relationships between people. This thesis unfolds some of these patterns to enable me to examine '...the unbroken wholeness of the totality of existence as an undivided flowing movement without borders...' (Bohm 1995: 172).

Social purposes – contributing to a good social order

A key value within my work is recognition of the uniqueness and diversity of individuals. I theorise this in terms of Arendt's (1958) concepts of natality and plurality. Recognising individuals' natality provides an impetus to contribute to the development of a good social order which will support individuals and groups in realising their natality. Key

characteristics of that social order will include a community of autonomous individuals working within systems characterised by a form of democracy which is participative rather than representative. The mode of communication within this community will be dialogical. The form of the social order will be negotiated self respect.

Can I reconceptualise ICT to support my students and colleagues in improving their learning by exercising their autonomy?

I experience my school environment as an authoritarian environment and my role within that environment is frequently authoritarian. Within a system that is as 'congealed' as this it is difficult to change. I use the word 'congealed' here in the way that Crane (2001) uses it when he claims, 'Congealed thinking is the forerunner of failure... make sure you are always receptive to new ideas.' I find my school environment has suffered from congealed thinking – with a lack of receptiveness to new ideas. Within such an environment ICT has a transformational quality that can assist change. It would be difficult to suggest to another teacher in my school that changing teaching methods might change the classroom environment providing a more constructive, collaborative and human environment for students and teachers. There may be much less difficulty in suggesting that ICT could be used in an Irish class or a religion class. In this way the teaching methods and indeed the power relations can change.

When it comes to working with ICT the power relations between teacher and student can be radically different. I say 'can' because they do not have to be. I have endured many computer programming classes which took place in a didactic classroom without a computer in sight. There was little collaboration in these classrooms. The projects that I will detail below, where students develop their web sites, develop PowerPoint presentations, get involved in video conferencing with other students, these projects represent at least some of the steps toward an 'ideal speech situation' (Habermas 1984). This is a situation where each participant has an equal chance to take part in dialogue; where dialogue is unconstrained and not distorted. What the idea of an ideal speech situation does is to provide us with some ways of identifying and exploring the distortions that exist in our practice and in our lives. The projects I describe can be seen to form a democratic enclave within an authoritarian system. The projects encourage the equal distribution of educational and social goods by developing within the classroom a different

form of relational space and as a result give rise to relational epistemologies (Schön 1995). These epistemologies indicate that what we know is in our relationships and how we come to know is through our relationships. Rather than being a pre-packaged chunk of knowledge to be delivered, curriculum can be reconceptualised as a creative conversation between teachers on the one hand and between teachers and their students on the other (Elliott 1998). In the process all parties, teachers and students, can learn to make choices about their life plans.

In search of a methodology

While examining my practice over a period of time I have used a range of techniques to analyse how I work in a classroom. For example as a novice teacher I used 'Flanders Interactional Analysis Categories' to study the interactions within my classroom (Flanders 1970). This involved taping a lesson, then writing down a number every three seconds that represents the type of interaction that was taking place at that time. I then formed a grid from the numbered categories that emerged. While Flanders offered a way of analysing interactions in the classroom it offered no help with improving those interactions. It seems to me that Flanders was developed using the logics that underlie propositional thinking that seek to describe the world without considering changing it. I therefore seek a method based on dialectical logics and living logics. Dialectical logics are the logics of open spaces. They see every statement as a response to a question. Living logics are the logics of relation and imagination (Whitehead and McNiff 2006: 35-40). My journey involved seeking a methodology that offered me new possibilities, a methodology that was open and creative.

In deciding on an appropriate mode of enquiry, it is important to consider the nature of the situation that we wish to look at, and from that, an obvious direction may reveal itself. I approached this programme of work in a not entirely disinterested way. I have personal values relating to the students' right to a quality educational experience, and to respecting teachers' and students' dignity by providing them with an experience of school which is not dehumanising and which is educational for them (Lomax 1996: 6). In relation to me, it was and is my deep-rooted desire to improve my professional practice (Whitehead 1993: 69), which will lead to my personal development as a teacher and as a person. I believe that this, in turn, can lead to improvements in the institutions in which I work. As the essential aims

of my work focus on the desire to respect the dignity of individuals on the one hand and a commitment to change a situation for the better on the other hand, it seemed to me that the method of educational action research was and is an appropriate method of enquiry.

McNiff, Lomax and Whitehead (1996) refer to the appropriateness of action research as a research method in such a situation when they say

Action researchers tend to be working intentionally towards the implementation of ideas that come from deep-seated values that motivate them to intervene.

(McNiff, Lomax and Whitehead 1996: 9-10)

Kemmis and McTaggart express similar thoughts:

The linking of the terms action and research highlights the essential feature of the method: trying out ideas in practice as a means of improvement and as a means of increasing knowledge...

(Kemmis and McTaggart 1988:9)

Rearick emphasised the importance of a dialectical approach and the emphasis on supporting change:

Action research is conceptualized within their community as the dialectical process that leads to change.

(Rearick 1999: 1)

As one of my objectives was self-development and the development of my understanding of my work I believe that I was generating what Whitehead calls 'a living form of educational theory' (Whitehead 1993: 67). Bassey (1995) identifies three different types of research: theoretical research, evaluative research and action research. He says, theoretical researchers and evaluative researchers describe, interpret and explain events, whereas

Action researchers are intent on describing, interpreting and explaining events while they seek to change them for the better.

(Bassey 1995: 13)

With these points in mind, it seems appropriate that action research should have been the research method favoured by me for this project.

Because this research project was an examination of particular aspects of what I might call my 'normal work', then it was necessarily 'insider research'. However, insider research has been the subject of some criticism. Robson warns of some of the dangers.

The disadvantages are, however, pretty substantial. Your addition of the role of researcher to that of colleague is difficult for yourself and your colleagues.

(Robson 1996: 298)

He goes on to talk of the difficulties of interviewing colleagues, ethical and relationship issues surrounding the acquisition of confidential information and other difficulties. He also mentions the advantages of insider research:

...Generally you will have an intimate knowledge of the content of the study, not only as it is at present, but in a historical or developmental perspective. You know the politics of the institution, not only as a formal hierarchy but also how it 'really works'.... You will know best how to approach people.... You will have 'street credibility'.

(Robson 1996: 297)

I had a clear intention to research my situation hoping to improve the situation, to enhance my professional development (Lomax 1996: 7) and to contribute to the enhancement of that of my colleagues, and to ensure that information and communications technology provided a better and more humane service to those who availed of it. To this end, it seemed to me that the advantages of insider research far outweigh its disadvantages for my work. However, Robson's warnings are not to be taken lightly and suggest that aspects of the research project would have to be treated sensitively, and ethical issues would be of great importance. I have addressed these issues by securing the permission of participants to carry out the research. As this is a collaborative work and the organisations that I work in are clearly identifiable, even if anonymised, I secured permission of participants to acknowledge their participation. I reassured my participants that they could withdraw at any stage from the research. I co-signed an ethics statement that gave these assurances with participants (Appendix A).

My approach to action research follows that set out by Whitehead (1989; 1993) and I follow the key steps that he uses. In my case the steps may appear more complex than usual. This is in keeping with the dynamic web-like nature of my life experience, and as a result my concerns and my approach to them are not linear and closed but dynamic and open-ended, and the apparently unconnected are connected. I have experienced a range of 'living contradictions' in my work, the example I give here is from my work in school:

I experience a concern where some of my educational values are being denied in practice:

I believe that every person has a unique place in the world and has the potential to make new beginnings. I work within a highly authoritarian environment. My students, my colleagues and I suffer within that environment. Our lives are affected by the logics of domination that are the dominant practice.

I believe that knowledge of ICT is important for all students. Many of our students leave school without any ICT experience because of difficulties in fitting it into an already crowded curriculum.

Many of our teachers are 'missing out' on the advantages that ICT can offer to teaching and learning because they do not have the skills to use them or sufficient access to them

I imagine a solution to that concern:

If we could devise a way for teachers and students to work collaboratively a democratic enclave could be formed within an authoritarian system.

If we could devise a system for enabling teachers to use ICT in teaching their subjects then the educational experience of teachers and students could be improved.

I act in the direction of the proposed solution:

I collaborate with colleagues to devise ways of working with each other and with students that emphasise the logics of relation rather than the logics of control.

An infrastructure is put in place to enable a school-based intranet to be developed.

I put a proposal to fellow teachers regarding developing content for an intranet.

I support teachers and students to develop content for the intranet.

I evaluate the outcome of the solution:

Teachers and students were interviewed about their experience of the development.

I studied students' and teachers' reports of their actions.

I examine my reflective journal.

I modify my practice, plans and ideas in the light of the evaluation:

I develop the infrastructure to extend the Intranet throughout the school.

Additional subject material is added to the intranet.

I encourage additional teachers and students to participate.

I devise projects that support collaborative learning.

I believe the brief outline given here indicates the methodological framework I have followed in carrying out this study. I hope that this framework is obvious throughout this paper.

It is not possible to assess in absolute terms all the types of improvement in practice that I am looking for. An indication of improvement can be gauged if the participation rates by teachers and students increase and if the volume of content on the intranet increases. However, I believe a better picture of the current situation and of any improvement in the situation can be gauged by conversations with those involved.

I therefore gathered data by the use of interviews with the main participants: teachers and students, administration staff, development staff and others, as recommended by researchers of educational research design and methodology (Bell 1995; Robson 1993). I produce my data in later chapters. I negotiated access to students' artefacts and their reports of their work and I use these as evidence of students' learning and of my learning. I conducted interviews at a number of stages during the study. By comparing reflections on the interviews, I am able to show if an improvement had taken place (Elliott 1991). The evidence that I generated from the data can be directly related to my values and to the standards of judgement that I have proposed for judging the quality of my research.

Summary

Here is a summary of my thesis so far. In the first chapter I have addressed what my concerns are in relation to my practice as a teacher and a consultant on information technology. My concern centres on the dissonance that I experience as my values are being denied in my practice. Consequently I experience myself as a living contradiction.

In Chapter 2 I have indicated why I am concerned. I have related some experiences to show why I am concerned. These experiences reflect the autocratic practices, strict orthodoxies and the logics of control that permeate my workplaces.