

## **Chapter One**

### **Prologue**

*“To transform the world, we must begin with ourselves; and what is important in beginning with ourselves is the intention. The intention must be to understand ourselves and not to leave it to others to transform themselves or to bring about a modified change through revolution, either of the left or of the right. It is important to understand that this is our responsibility, yours and mine; because, however small may be the world we live in, if we transform ourselves, bring about a radically different point of view in our daily existence, then perhaps, we shall affect the world at large, the extended relationship with others”.*

(Krishnamurti, 1954, p. 42)

As I sit at my office desk in the university’s Education department preparing for my next lecture, sounds of laughter come from the playground of a nearby primary school. On opening my office window, the excited sound of children at play floods the room. Thankful for the break, I watch their interaction: one child passes the ball to another who takes the ball, and balancing it on his left foot for a few seconds, an act that takes his school mates by surprise, he skilfully slides it under his left foot to another child. She continues the ball play.

I wonder what it is about ball play that can hold our attention and interest? Is it the possibilities that a game opens up? Is it the sense of excitement, of uncertainty, of not knowing how it will all end? Is it that each person is called on to actively participate? Is it that, once play starts, each person is dependent on the other and yet needs to act independently as well, when she runs with the ball? Is it that even when you’re not playing the ball you have to continue to actively read the game?

As I watch, the children are totally engaged in the game: each child with his/her part to play, as they pass the ball from one to the other. I reflect that I, as an adult, can in a curious and imaginative way, enter the world of the children, feeling that I am an active participant, promoting in my thoughts and occasionally by word and gesture the flow of the game with them.

I reflect that life, like the game, can be full of uncertainties. Each of us can be a learner who strives to develop his/her knowledge and skills to make sense of the world around us. Our values of caring and sharing need to be developed if we are to construct the world in a positive way. Who knows what will come from these small beginnings? How can I develop social formations that can lead to active, enquiring and creative learning in a variety of contexts?

Tolstoy (1862-1967) viewed ambiguity and uncertainty not as something to remedy but as the soil for deep learning (p. 287). How can we help develop a love of learning from an early age? In our current education system, are we offering a curriculum appropriate to the needs of the learner? In higher education where talk is of knowledge transfer rather than pedagogy, are the learner's needs being overlooked? How can I, as a higher education educator initiate and help to co-create a curriculum with my learners? What if we did something different? Wouldn't it be interesting to step into the shoes of the learner at the other end of our classroom and experience what it is like to be looking in from the other side?

Were we to mentally and habitually exchange places with our pupils or students, we, as teachers, would have to rely more on our imagination. We would have to deal with uncertainty and ambiguity and treat them as part of the learning process. We would not be able to plan everything in advance but would probably allow knowledge to emerge and grow in and through the practice. We would listen to our learners more carefully, indeed we would have their voices in our heads, and respond to their individual needs.

Perhaps we need to learn from musicians, artists, designers, children who play games, even those who hold the ball in both hands and run! As Schön points out:

*“It is rare that the designer has the design all in her head in advance, and then merely translates it. Most of the time, she is in a kind of progressive relationship: As she goes along, she is making judgements. Sometimes, the designer’s judgements have the intimacy of a conversational relationship. Where she is getting some response back from the medium, she is seeing what is happening – what it is that she has created – and she is making judgements about it at that level”.*

(Schön, cited in Winograd, 1996, p. 176)

In my own learning and educational development, I am cautious of preconceptions but rely on my previous knowledge, experience, attitudes and skills, and of course the greatest faculty of all, the imagination as I live and learn in relation to others.

Learning is essentially a human, creative and dynamic exploration. Is it not important for me as a higher education educator to strive to articulate and live my educational values and to give form and shape to them in my practice?

Is it not important that in professional development programmes, we, as co-practitioners should become actively engaged in learning to share our understandings, articulate our values, design and construct artefacts that reflect them and learn from one another? With such a stance, would we not, as ‘professional learners’ learn to be take ownership and responsibility for our own learning, as we go on our educational journey?

For today’s teachers, new technologies allow for new ways of doing things. ICT holds out much promise in this area. With developments in bandwidth, learners can communicate different forms of representation, in the form of multimedia. There is also the opportunity to move beyond the walls of the classroom and opportunities for collaboration with others. ICT is constantly shifting and developing and we can feel we are moving and exploring unknown terrains. Early computers laboured over tasks that are now done in nanoseconds. Speed makes the computer a friend that can whisk us along rather than leaving us in frustration. But we need to be attentive to the journey rather than become too fascinated by the technology. In the learning game, each of us has to use his/ her gifts to create opportunities, open a path that can lead to new understandings, new and wonderful sights, sounds and opportunities!

## **Introduction**

On entering the doctoral research field, I reflected on my personal teaching practice, I realised that cooperative work had been key to my involving my student/learners in developing their own knowledge.

I recall how in my early days at Dublin City University (DCU), I became involved in collaborative project work with other universities and schools, as well as in developing my own ICT skills. These experiences led me toward an approach to Doctoral research that could involve study of the teaching and learning process, and where better to begin than with my own practice as a higher education educator. In the self-study that is a central feature of this research enquiry, my educational values emerge as guiding principles in my practice. Through this reflection, I intend also to clarify the sources of my own characteristic approach to these concerns of teaching and learning, as well as the methodologies I have developed for dealing with them.

### **Masters degree in Educational Technology (University of Bath, 1990)**

I began carrying out a self-study of my own educational development in 1990 during my Masters Degree research at the University of Bath, United Kingdom (UK). I was inspired to do so by Dr. Jack Whitehead, lecturer at Bath University who set out his 'living educational theory' approach to research during the opening session of the Masters degree in Educational Technology programme in 1990. The notion of an action research 'living educational theory' approach that involved practitioners in systematically reflecting on their practice to bring about improvement, and creating their own theory from the ground of their educational practice was very different to the theories of teaching and learning that I had encountered previously when I studied for my Teaching Certificate. I used a 'living educational theory' approach in my Masters degree dissertation. I did so because it allowed me to ask, research and answer the important question, 'how can I improve my own teaching practice?'

Through addressing this question, I saw the opportunity to explore in a more theoretical way, an issue that I would have approached in a more pragmatic manner in relation to the teaching of computing. In the late 1980's I was teaching in various contexts: Further Education, Sixth Form Centre and Adult Education. A lot of software packages were targeted toward learners working in isolation with the computer. I was interested in designing and developing my own teaching and learning programs.

In an IT assignment for the Masters degree, I used HyperCard (Apple Corporation) to develop a multimedia program. Although I had experience of programming, the advantage of Hypercard was that it allowed one to create multimedia products without having programming skills.

My interest in using this type of program related to my own educational values which included being creative and developing my own software for use in class. This experience of designing and developing my own learning activities using authoring software gave me an insight into how I could take more ownership of my practice and not rely on ready-made software.

During the Educational Technology module I had the opportunity to explore the use of different media in teaching and learning. The unique educational features of interactive video appealed to me and I decided to explore the use of an interactive video programme for my Masters dissertation. I explored the role that I played as

facilitator, in co-operative group use of Interactive video with pupils in a post-primary school in Bath, UK. I chose a program called 'North Polar Expedition,' which is a multi-role educational adventure program. The program involved five people working together as a team in trying to reach the North Pole. During my research, I videotaped the group as they worked through the Interactive Video program. I was impressed by the potential of the video to record real life situations, i.e. the group's interactions and discussions, my role as facilitator and how I was influencing the learning process. This study was later published in the British Journal of Educational Technology (Cloke, Farren and Barrington, 1996). The idea of knowledge as a process was certainly one that I valued and wanted to promote in my own teaching and learning.

My supervisor, Jack Whitehead, had asked me why I was so committed to the idea of group-work and group discussion. I recall saying that in my own experience as a learner, I had found an excessive emphasis on teacher-centered approaches that discouraged students from exploring their own learning. I believed that learners needed to become more involved in shaping their own learning patterns. In my Masters degree enquiry, 'My Facilitation of Co-operative Group-work with Interactive Video as a Catalyst'.

### **Islington Sixth Form College, North London**

While teaching in a Sixth Form college in London, in the late 1980's, I made extensive use of co-operative group-work and group discussion and found it to be an effective way of teaching and learning. Staff were fully supported in the use of team teaching approaches to the study of IT.

IT workshops were organized that provided opportunities for teachers to explore and learn about software tools appropriate to their classroom needs. Much of the research into the use of computers at the time tended to focus on the ability of learners to work on their own in front of a computer and engage in individual self-instruction. There was a relative dearth of packages that focused on cooperative learning. The developers of educational packages seemed to have lost sight of the desire that arises among most learners in computing classrooms to share their learning experiences with others. At least, this feature of actual computing learning activity found no echoes in the learning materials I engaged with.

### **British School of Brussels**

Having completed the Masters degree, I taught in the British School in Brussels. I taught Computer Studies and ICT to GCSE (General Certificate in Secondary Education) level (Year 10 and 11), Computer Studies to A (Advanced) level (Year 12 and 13), Communications and Marketing on BTEC (British Technical Education Council) courses. The A Level Computer course involved programming, systems analysis, and technical operations of the computer. The GCSE Computer Studies course was also geared towards programming and the internal operations of a computer. In 1994, the GCSE Computer Studies syllabus was replaced with a new GCSE Information Technology syllabus. The school decided to follow the University of London GCSE syllabus in Information Technology. The educational context of the changeover from Computer Studies to Information Technology was the establishment of a National Curriculum in the UK. Key Stage 4 of National Curriculum represented GCSE (Year 10 and 11), which catered for students between 14 and 16 years.



I believe that the principal strength of the new syllabus in Information Technology was its open-ended nature. In other words, it wasn't prescriptive. The syllabus valued the process of enquiry as well as the product. It provided learners with the opportunity to explore and experiment with ICT and to carry out project work in areas of interest and relevance to them. It provided me with some scope for applying my interactive approach to IT teaching in the classroom.

### **Centre for Teaching Computing, DCU**

The next stage of my teaching and learning journey took me to Dublin. In 1997, I was appointed Research Officer at the Centre for Teaching Computing, in the School of Computer Applications at Dublin City University (DCU). The Centre for Teaching Computing provided me with the opportunity to continue my interest in ICT in teaching and learning. This appointment brought me to the heart of the problems of teaching and learning of and through IT that had become one of my chief preoccupations. I was privileged to be involved in activities that were central also to the Irish Government's aim to accelerate the teaching of ICT subjects in anticipation of industrial expansion in that area and benefited from Government's willingness to experiment with novel approaches to this endeavour.

Several interesting developments in ICT took place while I was there. Two academics in the Computer Applications department, Michael Ryan and Micheal O' hÉigartaigh spearheaded a number of initiatives to promote the use of ICT in primary and post-primary schools. They established the Irish Tech. Corp. and the Centre for Teaching Computing.

The Irish Tech. Corp. was an initiative that involved co-operation between industry and the third level education sector to provide schools with technical advice and support and to supply schools in the Greater Dublin area with computer equipment. Ryan and O' hÉigearthaigh established the Centre for Teaching Computing (CTC), in collaboration with the University of Ulster, to support computing academics throughout Ireland, in the shared development, evaluation and dissemination of teaching materials and methodologies. The Centre organised workshops and conferences for higher education staff and organized annual conferences on subjects concerned with ICT in the curriculum. This was the first Center that was established in Ireland to support the use of technology in the context of teaching and learning in higher education. They also set up a Masters degree in Computer Applications for Education in 1996.

In 1998, Michael Ryan and Michael O' hÉigearthaigh, who had been responsible for the latter initiatives, took up positions outside DCU. In 1998, the Centre for Teaching Computing was closed and the work of the Irish Tech. Corps was incorporated into the National Centre for Technology in Education (NCTE) at DCU campus. The latter body was given the task of managing the implementation of Department of Education and Science's Policy on IT dissemination, contained in Schools IT 2000.

While working with the Centre for Teaching Computing in 1998 and 1999, I took part in several online learning professional development courses with Sheffield University, University of Greenwich, UK and Southern Cross University, Australia.

I decided to participate in the online learning courses to explore how an online learning environment could support professional development. Once again, the theme of collaborative learning came into focus. Online education may be defined as an approach to teaching and learning that makes use of Internet technologies to communicate and collaborate in an educational context. Examples of such technologies include systems such as WebCT, Blackboard, LotusNotes and Moodle. I was somewhat taken aback to find that, while there was an extensive literature on student use of the internet, little reference was made to teachers' communicating with each other via the internet and the way collaborative work could lead to improvement of teaching practice. I believed that these should have been areas of research priority. Indeed, the preoccupations of the Centre in which I worked led me to become interested in the shortcomings in the available literature. I became interested in exploring how teachers could use online technologies to develop their practice.

### **School of Computer Applications, DCU**

In February 1999, I joined the lecturing staff in the School of Computer Applications and I began teaching on the M.Sc. in Computer Applications for Education programme. I had had experience of teaching ICT in the UK context and believed that it would be important for me to become more aware of the particularities of working in the Irish context. I invited a practicing teacher in a post-primary school to collaborate with me on one of the programme modules. This led to other collaborative projects between the School of Computer Applications and the post-primary school i.e. the Setanta project [WWW1].

I was able, in my own teaching practice, to begin to fill some of the gaps in the available material on IT teaching methodologies (in particular, collaborative teaching and learning) that I had identified while a research officer. I derived substantial benefit from my shift from a research mode (albeit with a strong emphasis on applications) to teaching, and to appreciate what could be achieved by the pursuit of each endeavour. That my teaching concerned the formation of teachers and, in some cases, the teachers of teachers, gave me the opportunity to observe at first hand, and in a collaborative fashion, the very real problems involved in the teaching and learning process. I taught in the School of Computer Applications from February 1999 to August 2002. On moving into a university context, I was still as eager as before to continue my interest in teaching and learning.

### **School of Education Studies, DCU**

Since September 2002, I have been working in Education Studies at Dublin City University (DCU). I co-ordinate the M.Sc. in Education and Training Management which consists of two streams, Leadership and ICT. I teach on the M.Sc. in Education and Training Management (ICT), which is a two-year part time programme. I teach on the following modules: *Web Based Interactive Design*, *Emerging Pedagogies*, *Educational Multimedia Development* and *Collaborative Online Learning Environments*. Participants on the programmes come from various practice contexts and it is vital that they explore how ICT can be used meaningfully in their unique contexts. The diverse range of participants (present and past) on the programmes provides a rich source of perspectives and I believe that each participant can learn from each other's experiences. I value a collaborative approach.

### **Rationale of my research enquiry**

In my practice-based research, I demonstrate how I am contributing to a knowledge base of practice by creating my ‘living educational theory’. This involves me in systematically researching my practice in order to bring about improvement.

Whitehead (1989, 2003) claims that values are embodied in our educational practice and their meanings can be communicated in the course of their emergence in practice. He encourages us to account for our own educational development through the creation of our ‘living educational theory’ and using our values as living standards of judgement we can judge the validity of our claims to educational knowledge. I intend to analyse my educational influence in terms of the transformation of my embodied knowledge into public knowledge, by showing my educational influence in my own learning, the learning of others and on the education of social formations. This relates to the idea of social formations as defined by Bourdieu (1990) and points to the way people organize their interactions according to a set of regulatory values that can take the form of rules.

### **Framing my research**

My research is timely as there is now a growing interest in applied and practice-based research. In a UK discussion document entitled ‘Assessing Quality in Applied and Practice-based Educational Research’, Furlong and Oancea distinguish different models of educational research. They claim that action research as a model “*challenges any simplistic distinction between ‘pure’, ‘applied’ and ‘strategic’ research*” (Furlong and Oancea, 2005, p. 8). They suggest that “*action research and reflective practice are models that offer arguments against the idea that applied*

*research is only focused on use and that it does not and cannot contribute to more theoretical knowledge production while at the same time achieving changed practice” (ibid).* The future of educational research in the UK is likely to be guided by the results of the Research Assessment Exercise (RAE) 2008. The UK Government’s RAE 2008 states that researchers should be able to submit applied and practice-based research that they consider to have achieved ‘due standards of excellence’: “*Where researchers in higher education have undertaken applied and practice-based research that they consider to have achieved due standards of excellence, they should be able to submit it to the RAE in the expectation that it will be assessed fairly, against appropriate criteria*” (RAE 2008, par. 47).

Boyer, the past President of the Carnegie Foundation of Teaching and Learning, based at Stanford University, urged academics to move beyond the teaching versus research debate. He identified forms of scholarship that moved beyond the scholarship of discovery (research). These included the scholarship of integration, scholarship of application and scholarship of teaching. Boyer pointed toward a more rounded view of what it means to be a scholar: “*a recognition that knowledge is acquired through research, through synthesis, through practice, and through teaching*” (Boyer, 1990, p. 24). In 1995, Schön pointed out that if teaching is to be seen as a form of scholarship, then the practice of teaching must be seen as giving rise to new forms of knowledge (Schön, 1995, p. 31).

Lee Shulman, current President of the Carnegie Foundation of Teaching points out that the key to improvement in teaching lies in a conception of teaching as a scholarly endeavour. He outlines the following characteristics of a ‘scholarship of teaching’:

*A scholarship of teaching will entail a public account of some or all of the full act of teaching – vision, design, enactment, outcomes, and analysis – in a manner susceptible to critical review by the teacher’s professional peers and amenable to productive employment in future work by members of the same community.*

(Hutchings & Shulman, 2004, pp. 149-150)

Shulman has been instrumental in creating an advanced study centre called the Carnegie Academy for teachers who engage in the scholarship of teaching in ways that make their work public and available for critical evaluation, in a form that others can use, build upon, and move beyond. This involves university academics engaging in sustained inquiry into their teaching practice and their students' learning. The Carnegie Foundation has created the Knowledge Media Laboratory (KML), a web based resource of teaching and learning artefacts [WWW2]. Shulman points out that if pedagogy is going to be an important part of scholarship there must be evidence of it, *“it must become visible through artefacts that capture its richness and complexity”* (Shulman, 2004, p. 142).

Issues around knowledge and how teachers can contribute to a knowledge base of practice are evident in articles in the journal ‘Educational Researcher’. The following excerpts are relevant to this debate.

In 2001, Snow wrote the following in her article, ‘Knowing what we know: children, teachers, researchers’.

*The Knowledge resources of excellent teachers constitute a rich resource, but one that is largely untapped because we have no procedures for systematizing it. Systematization would require procedures for accumulating such knowledge and making it public, for connecting it to bodies of knowledge established through other methods, and for vetting it for correctness and consistency. If we had agreed-upon procedures for transforming knowledge based on personal experiences of practice into public knowledge, analogous to the way a researcher’s private knowledge is made public through peer-review and publication, the advantages would be great.*

(Snow, 2001, p. 9).

In June/July (2002) Hiebart *et al.* wrote in their article ‘A knowledge base for the teaching profession: what would it look like and how can we get one?’

*To improve classroom teaching in a steady, lasting way, the teaching profession needs a knowledge base that grows and improves. In spite of the continuing efforts of researchers, archived research knowledge has had little effect on the improvement of practice in the average classroom. We explore the possibility of building a useful knowledge base for teaching by beginning with practitioners’ knowledge. We outline the key features of this knowledge and identify the requirements for this knowledge to be transformed into a professional knowledge base for teaching.*

(Hiebart *et al.*, 2002, p 3)

### **Contribution of Information and Communications Technology (ICT)**

It is worthwhile, at this stage, outlining the contribution ICT has made to the development of my educational knowledge, and in particular, my developing new



standards of educational judgement. ICT has been used to complement and support my pedagogy as it unfolds. Some examples in the context of my research include:

- digital video to record teaching and supervision and reveal tensions and living contradictions when values could be lived more fully;
- online learning environments that have sustained ongoing dialogue among practitioner-researchers with evidence of reciprocal educational influences in learning;
- desktop videoconferencing that has opened up the classroom environment and provided opportunities to share our knowledge with others with reciprocal influences in learning;
- multimedia and web-based artefacts with supporting text provide evidence of how practitioners are developing living standards of judgement through asking, researching and answering the question, ‘How do I improve my practice’?

This research is publicly available on my website and has been accredited at Masters degree level at Dublin City University [WWW3].

### **Educational values**

I believe that values give form and meaning to our personal and professional lives. An awareness of one’s ontological position is a vital step in clarifying the meanings of one’s values as they emerge in practice. Smith (2001, p. 271) asks, ‘*Why should it be important to consider the question of what sustains us?*’

This question suggests that we should reflect on the significance of our values and that in answering the question we would articulate the values that provide meaning to our personal and professional lives. We are never finished products. We are always emergent beings with further potentiality. We are always in process of becoming. My educational values have revealed themselves in the course of my practice. As my pedagogy unfolded, I found myself asking questions and moving towards new possibilities. Through the ‘living educational theory’ approach, I was able to move through my concerns towards imagining a way forward as I asked, researched and answered the question, ‘how can I improve my practice?’ In my thesis, I also sought to create my ‘pedagogy of the unique’ by showing how the values that emerged in my practice became living standards of judgement. My research involved supporting participants (students on the postgraduate programmes) and encouraging them to critically evaluate their practice. These participants were collaborators in my educational journey and not subjects to be studied. The values that have emerged in the course of my practice include a commitment to a ‘pedagogy of the unique’ and weaving a ‘web of betweenness’ (O’ Donohue, 2003).

### **Pedagogy of the unique**

In my thesis, I intend to show how the educational values that inform my ‘pedagogy of the unique’ for higher education have emerged through my practice. I will show how I provide an open and collaborative space for participants to articulate the process of their own learning as they provide evidence of how they are improving the learning capacities of the students for whom they in turn are responsible. This shared space involves classroom and online learning environments.

‘Pedagogy of the unique’ expresses my belief that each participant has a particular and distinctive constellation of values that motivates his/her enquiry and that sets a distinctive context within which that enquiry proceeds. This is based on my belief that participants bring to their learning their own previous life knowledge and experience. I demonstrate how I help to develop each participant as a person in relation to one another rather than being preoccupied with the advancement of their content knowledge.

In the context of my ‘pedagogy of the unique’, the dialogic processes reflect my growing openness to learning and relearning with others, and reveals my belief that education should be a democratic process that gives adequate “*space to each participant to contribute to the development of new knowledge, to develop their own voice, to make their own offerings, insights, to engage in their own action, as well as to create their own products*” (Barnett, 2000, p. 161). I believe that I have intimately related teaching with learning processes by gradually providing opportunities for participants to accept responsibility for their own learning and to develop their capacity as learners. I provide space within the learning environment so that each participant can create a narrative of his/her own learning. These narratives have been accredited within the academy at Master’s degree level.

It is interesting to note that Barnett and Hallam (1999, p. 145) are concerned that much of the research on pedagogy in higher education is limited since its focus is on how the student acquires a body of knowledge rather than exploring their adjustment to the conditions of ‘supercomplexity’.

Supercomplexity refers to conditions in which, persons are presented with conflicting frameworks for the understanding of particular situations. Van Manen (1991, p. 31), believes that *“the word pedagogy brings something into being. Pedagogy is found not in observational categories, but like love or friendship in the experience of its presence – that is, in concrete, real-life situations”*.

### **Web of Betweenness**

The notion of love or friendship suggests a dialogic approach to learning and that we learn in relation to others. Freire (Freire & Macedo, 1999, p. 48) argues that *“I engage in dialogue because I recognize the social and not merely the individualistic character of the process of knowing. In this sense, dialogue presents itself as an indispensable component of the process of both learning and knowing”*.

The Celtic spiritual tradition is among the most ancient in Europe and has its origin nearly 3000 years ago. A great legacy that early Celtic Christians passed on to the universal Christian church was the gift of the soul friend: *“Being a soul friend is making room in our lives and hearts for the sharing of others’ stories”* (Sellner, 2004, p. 230). The Gaelic term for soul friend is *anam cara*. ‘Anam’ is the Gaelic word for soul and ‘cara’ for friend. The Irish Theologian and Philosopher, John O’Donohue, understands spirituality as being intimately linked with inter-personal relationships and the community. He does not see community as something that is produced but believes that it has to be allowed to emerge: *“True community is not produced. It is invoked and awakened. True community is an ideal where the full identities of awakened and realized individuals challenge and complement each other. In this*

*sense individuality and originality enrich self and others”* (O’ Donohue, 2003, p.133).

Each individual’s uniqueness can enrich the community. O’ Donohue suggests that in the folk culture of the Celtic Imagination, experience was understood as being much more than the private product and property of an individual. *“In the intuitive world-view of the Celtic Imagination, the web of belonging still continued to hold a person, especially when times were bleak”* (O’ Donohue, 2003, p. 132).

O’ Donohue reminds us that:

*“In Catholic theology, there is a teaching which is reminiscent of this. It has to do with the validity and wholesomeness of the sacraments. In a case where the minister of the sacrament is unworthy, the sacrament still continues to be real and effective because the community of believers supplies the deficit. It is called the ex-opere-operato principle. From the adjacent abundance of grace, the Church fills out what is absent in the unworthiness of the celebrant. Within the embrace of folk culture, the web of belonging supplied similar secret psychic and spiritual shelter to the individual. This is one of the deepest poverties in our times. That whole ‘web of betweenness’ seems to be unravelling. It is rarely acknowledged anymore, but that does not mean that it has ceased to exist. The ‘web of betweenness’ is still there but in order to become a presence again, it needs to be invoked. As in the rainforest, a dazzling diversity of life-forms complement and sustain each other. There is secret oxygen with which we unknowingly sustain one another”.*

(O’ Donohue, 2003, pp. 132-133)

O’ Donohue’s conviction that a ‘web of betweenness’ generated a collective bonus is reminiscent of the economists’ notion of ‘total factor productivity’ – the unexplained residual productivity created by a combination of favourable factors. His idea of community however extends beyond the social community to the idea of a community of spirit and relates more strongly to the educational values I discuss than the economists’ residuals: *“The human self is not a finished thing, it is constantly unfolding”* (O’ Donohue, 2003, p. 142). I have used the notion of a ‘web of

betweenness' in my thesis as a way of expressing my understanding of 'power with', rather than 'power over' others.

In my thesis, I show how participants develop their own sense of being as they learn in relation with others. I seek to suggest that the communications rich characteristics of ICT can re-create in new forms the powerfully interactive traditional world whose passing O Donohue laments and justify applying O Donohue's term. ICT and emerging media technologies can support a dialogic-collaborative approach to learning and bring us closer to the meanings of our educational values as they emerge in the course of our practice.

### **Summary**

So far in this chapter, I have explored key themes relating to my own educational development as they have emerged in my practice. I have defined the standards of judgment I will use to judge my practice-based research. I have highlighted the particular educational values that underpin my work and the role ICT plays in teaching and research. A guiding theme emerging from this brief account of my teaching and learning experiences is my abiding commitment to improving my practice through reflection upon and research into my own teaching and through using technology to enhance its efficacy. This is inspired by my belief that this process is above all driven by personal creativity of teacher and student in the educational encounter. Another value which relates to my perception that teaching and learning can be interlinked through broader collaborative research endeavors that can energise learning activity across wider dimensions, enlarge and explore appropriate bodies of

knowledge with a view to opening new paths to the benefit of participants' own understanding and that of others with similar interests.

### **Overview of Thesis**

My enquiry takes place in the context of the M.Sc. in Computer Applications for Education and M.Sc. Education and Training Management (ICT) at Dublin City University (DCU). My enquiry has involved me in researching my practice over a six-year period and is intended to show how I have contribute to my own learning, the learning of participants and in the education of social formations.

In chapter two, I discuss national and international reports and literature that suggests that there is a need to review the relationship between teaching scholarship and research in higher education. There is a growing recognition that applied or practice-based research stands "*at the intersection of many interest groups and thus of many interpretations of quality; any assessment of quality, therefore, needs to be multi-layered and multi-dimensional in the approach*" (Furlong and Oancea, 2005, pp. 9-10). Action research and reflective practice have attracted a growing interest in recent years and are seen as models that can contribute to more theoretical knowledge while at the same time achieving changes in practice. As my work is in the context of higher education, I relate to the growing awareness that universities must do more than 'stretch the mould' in their use of ICT in teaching and learning. I have argued that universities need to relate to new teaching and learning realities that include learners who come from more diverse backgrounds, learners who are learners in the context of lifelong learning, as well as the growing internationalisation of education e.g. distance education that makes use of ICT.

In chapter three, I explore how teaching and research have been separated in the context of higher education, and that there have been omissions in the literature on pedagogy in higher education relating to the nature of knowledge, as well as the teacher's role in the production of knowledge. I explore why teaching needs to be understood as a valid form of scholarship, and why teachers need to be involved in taking a more critical stance with regard to their practice. I argue that they can achieve this by inhabiting knowledge based communities of practice as they learn to question the content and purpose of their teaching. Like Shulman, I believe that scholarship must be more than local; *"To call something 'scholarship' is to claim it is public not private, that it is susceptible to peer review and criticism, and that it is something that can be built upon by others"* (Shulman, 2004, p. 209).

In chapter four, I explore ICT theories and I point to a need for higher education authorities to develop and implement a strategic policy for ICT. I argue that higher education needs to recognise that the changing needs and demands of new types of learners bring new challenges to the way teaching and learning are understood. I argue that ICT can support new forms of teaching and learning. There are implications for me, in my practice-based research. I believe that I should develop a critical stance to my own pedagogy as I endeavour to make appropriate use of ICT.

In chapter five, I explore different forms of research. I outline the various forms of action research including a 'living educational theory' form of action research. This allows one not only to improve practice, but allows one to develop theory from the ground of practice.



I explain why I have chosen to use a 'living educational theory' approach. In the context of my doctoral research, my educational values become living standards of judgement that allow me to judge my practice-based research.

In chapter six, I explore my work in the context of the M.Sc. in Computer Applications for Education, and how I have recognised myself as a 'living contradiction', in the sense of holding values and negating these values in practice. I endeavour to involve and support participants in creating their knowledge from the ground of their own practice. I show how I have faced up to various challenges of introducing a 'living educational theory' approach to action research into the Academy. What can be seen emerging from my practice is that I have collaborated with participants as I negotiated with them in co-creating the curriculum, and how I learned to move away from viewing the curriculum as a product that I produce. In other words, values that emerge for me in my role as a higher education educator are that participants should be critical and active participants who are engaged in co-creating knowledge; that this process involves dialogue and that I should help participants to relate to the content and process of their work by supporting them as they engage in researching into their own practice in ICT.

In chapter seven, I explore my influence in the learning of participants on the M.Sc. programmes as they carry out research for Masters dissertations. I show the processes that are involved in my supervision, as the value of a 'web of betweenness' emerges in practice as I support teachers to develop and improve their practice.

This involves validation group meetings that are intended to help participants to develop their learning in the context of peers, and I engage them in developing their understandings through dialoguing with other researchers and academics. I believe that by engaging participants in dialogue that I can support them to widen and deepen their perspective about teaching and meet the challenges they face in the contexts of their practice. In addition, I show how I have helped participants to communicate their knowledge base of practice to a wider community through conference presentations, peer reviewed articles and a Comenius European project [WWW5].

In chapter eight, I show how I have successfully achieved my goal of developing the capacity of participants to be proactive in developing their knowledge in collaboration with each other. Participants are seen shaping their own learning environment, e.g. setting up their own on-line learning environments; posting their own concerns and responding to one another in a way that shows that they are accepting responsibility to collaborate and dialogue by using ICT in order to develop new understandings. They are seen engaging in reflective interactions that relate to concerns that they have identified in the context of their practice