Learning Partnerships
-the art of handling ambiguity

Volume I (1 - 384)

Submitted by Patrick Meaney to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Education, October 2008

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I certify that all material in this thesis which is not my own work has been identified and that no material has previously been submitted and approved for the award of a degree by this or any other university.

Signed:
Acknowledgements

I would like to express my sincere gratitude to Dr David Cater and Dr Keith Postlethwaite for their invaluable guidance, support and friendship. I should like to acknowledge the commitment of the numerous participants, friends and colleagues who, in so many different ways, supported and contributed to the overall development of my research inquiry.

Above all, my love goes to my family for their love and support throughout.
Abstract

This intrinsic case study is about people who worked in partnerships. Each of the partnerships emerged from relationships formed between the business, education, government and community sectors. A principle aim of the cross-sector partnerships was to enhance learning opportunities, integral to which was the incorporation of ICT. The study explores through interweaving narratives, some of the key interrelationships that emerged from the evolving partnerships as they strived to accomplish their aims.

The partnerships represented a rich and complex context for dynamic and strategic change occurring, not only in the evolving partnerships, but also in the systems they intended to consolidate and optimise. Furthermore, such complexity pervaded ideological notions of instability and discontinuity arising from difference that may be implicit or explicit in open, distributed complex systems.

The metaphor of hypertext serves to both retain textural qualities of organisation and address key problematics associated with visualisation and representation and also as a means to reflect upon the study by encouraging improvisatory processes akin to those experienced by the participants. In this respect, hypertext is not used to simply challenge artificial boundaries, lineairties and determinisms but rather, prompt the construction of meanings further to those partially represented. It also serves to maintain a clearer relationship between those contexts within which research has been, or becomes situated.

The thesis largely rests on its representational form in terms of its self-sufficiency to portray, convey, express, evoke, engage and inform. Ambiguity forms a fundamental facet of the thesis. In addition to those that rest within the texts, graphic illustrations are used to provide narratives in different forms whereby, readers are not bound by the same inadequacies or constraints in drawing meaning about the subject from text alone. By taking the view of the artist, the illustrations provide a flexibility that overcomes some of the dimensional limitations of the thesis and further emphasises its connectionist, constructivist and aesthetic undertones. The links between components and nuanced meanings emphasises the interdependencies in terms that transcend the representational form of discursive language. The case is thus, synthesised in the following illustration:
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List of Accompanying Material

MEDIA

The thesis is available in two forms - the printed (.pdf) version offers one arrangement or construct, the .doc version on the enclosed computer disk provide further permutations through the use of active hyperlinks and other navigational devices. The printed (.pdf) version of the study is presented in two volumes to overcome some of the limitations of printed text and to help the reader maintain momentum when exploring the narratives. For example,

• **Volume I** represents the main body of the thesis and serves to provide a way of conceptualising and finding some form for contextualised experience in action.

• **Volume II** provides fundamental and important details that have been embedded in the narratives in Volume I by using ‘comment fields’[^PM1], and which in printed format, constitute ‘end-notes’. Specifically, ‘comments’ should be read alongside Volume I to facilitate cross-referencing and embellishing and thickening the overall description of the case study. Some comments emphasise the hyper-textual and holistic nature of the entire case and/or provide a second reading to, or a retrospective account for the narrative within which they occur. Comments were a device that on one hand provided a means of encapsulating particular details without impacting the pace and flow of the main narrative. Comments allowed the incorporation of data, sometimes in its raw state, as additional or retrospective insights and as another layer of analysis. Not only does the use of comments in this way emphasise the problem of what should be brought to the fore, for what purpose and on whose behalf, it also raises doubt about temporal and ideological dimensions. (refer reading the small print and One in the Eye). In electronic (.doc) form, the entire Volume II becomes superfluous because the comments ‘pop up’ when the cursor is rolled over the highlighted text or comment reference.

Details for navigating these are provided in the ‘Read Me’ file in Appendix 1.
**CD-ROM Media**

**Animation Files**

Some of the figures illustrated in the thesis are animations or interactive models. These include:

- Linked Rings.swf (Sequence - Flash animation format)
- CATM animation.mov (QuickTime animation)
- Node detail.3dmf (Quickdraw 3D file format)
- Multiball Worlds.3dmf (Quickdraw 3D file format)
- 3 Bees (Projector file format)

The ‘Read Me’ file supplied on the CD-ROM provides an outline on how to access these file types and how to play and/or interact with those illustrations.
## Definitions

### Glossary

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<td>AAL</td>
<td>Anywhere Anytime Learning</td>
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<tr>
<td>ADSL</td>
<td>Asymmetric Digital Subscriber Line</td>
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<tr>
<td>BCS</td>
<td>British Computer Society</td>
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<td>Becta</td>
<td>British Education Communication technology Agency</td>
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<td>BESA</td>
<td>British Education Suppliers Association</td>
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<td>CAD</td>
<td>Computer Aided Design</td>
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<td>CCI</td>
<td>Chamber of Commerce &amp; Industry</td>
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<td>CD</td>
<td>Compact Disk</td>
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<td>CEO</td>
<td>Chief Executive Officer</td>
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<td>CfBT</td>
<td>Careers for British Teachers (an EBLO)</td>
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<td>CIP</td>
<td>Community ICT Project</td>
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<td>Community of Practice</td>
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<td>CRS</td>
<td>Computer Recycling Scheme</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>CSV</td>
<td>Community Service Volunteers</td>
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<td>CTC</td>
<td>City Technology College</td>
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<td>DEFRA</td>
<td>Department for Farming and Rural Affairs</td>
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<td>DES</td>
<td>Department of Education and Science</td>
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<td>DETR</td>
<td>Department of the Environment Transport and the Regions</td>
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<td>DfEE</td>
<td>Department for Education and Employment</td>
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<td>DfES</td>
<td>Department for Education and Skills</td>
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<td>DOS</td>
<td>Disk Operating System</td>
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<td>DTI</td>
<td>Department for Trade and Industry</td>
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<td>DVD</td>
<td>Digital Versatile Disk or Digital Video Disk</td>
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<td>EAL</td>
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<td>EBLO</td>
<td>Education Business Links Organisation</td>
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<td>EDP</td>
<td>Education Development Plan</td>
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<td>EDSI</td>
<td>Education Superhighways Initiative</td>
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<td>Education Support Assistant</td>
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fdisk  Command line utility to provide partitioning functions
FE       Further Education
Gb       gigabyte
GDP      Gross Domestic Product
gHz      giga-Hertz
GOSE     Government Office South East
HDD      Hard Disk Drive
HE       Higher Education
HEI      Higher Education Institutes
HT       Headteacher
HTML     Hyper Text Mark-up Language
ICT      Information Communication Technology
IIP      Investors in People
ILS      Integrated Learning System
ILT      Interactive Learning Technologies
ISDN     Integrated Services Digital Network
ISP      Internet Service Provider
IT       Information Technology
IT4All   Information Technology for All
KS       Key Stage
LA       Local Authority
LAG      Local Action Group
LAN      Local Area Network
LCD      Liquid Crystal Display
LDA      Learning Development Agency
LDA      Local Development Agency
LEA      Local Education Authority
LLL      Life Long Learning
LLP      Lifelong Learning Partnership (an EBLO)
LLSC     Local Learning & Skills Council
LSA      Learner Support Assistant
LSC      Learning & Skills Council
Menap    UK Charity for people with a learning disability and their families
mHz      mega-Hertz
MIDI     Musical Instrument Digital Interface
MIS      Management Information System
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<td>NCET</td>
<td>National Council for Educational Technology</td>
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<td>NGfL</td>
<td>National Grid for Learning</td>
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<td>NIACE</td>
<td>National Institute of Adult Continuing Education</td>
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<td>NLCB</td>
<td>National Lottery Charities Board</td>
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<td>NOF</td>
<td>New Opportunities Fund</td>
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<td>NT</td>
<td>Brand of Operating System by Microsoft</td>
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<td>NVQ</td>
<td>National Vocational Qualification</td>
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<td>Ofsted</td>
<td>Office for Standards in Education</td>
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<td>RAID</td>
<td>Redundant Array of Inexpensive Disks</td>
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<td>RAM</td>
<td>Random Access Memory</td>
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<td>Random Access Server</td>
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<td>TUPE</td>
<td>Transfer of Undertakings (Protection of Employment) Regulations</td>
</tr>
<tr>
<td>TVEI</td>
<td>Technology Vocational Educational Initiative</td>
</tr>
<tr>
<td>UfI</td>
<td>University for Industry</td>
</tr>
<tr>
<td>VCN</td>
<td>Virtual College Network</td>
</tr>
<tr>
<td>Acronym</td>
<td>Definition</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>VCR</td>
<td>Video Cassette Recorder</td>
</tr>
<tr>
<td>VSO</td>
<td>Voluntary Sector Organisation</td>
</tr>
<tr>
<td>WAN</td>
<td>Wide Area Network</td>
</tr>
<tr>
<td>WBL</td>
<td>Work Based Learning</td>
</tr>
<tr>
<td>WIMP</td>
<td>Windows Icons Menu Pointer</td>
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<tr>
<td>WPL</td>
<td>Work Place Learning</td>
</tr>
<tr>
<td>WRL</td>
<td>Work Related Learning</td>
</tr>
<tr>
<td>WTS</td>
<td>Windows Terminal Server (Microsoft)</td>
</tr>
<tr>
<td>WWW</td>
<td>Worldwide Web</td>
</tr>
<tr>
<td>Y&amp;C</td>
<td>Youth &amp; Community</td>
</tr>
<tr>
<td>Y2K</td>
<td>Year 2000</td>
</tr>
</tbody>
</table>
Definitions

Referencing for citations

Quotes from literature conform to Harvard system (Author, date; page reference)

The nature of the research study (cross-sector / multi-organisational partnerships) meant that contributors to observed action may have been from organisations from the Business (B), Government (G), Education (E) sectors. Therefore, statements by participants that are quoted in the text are indexed according to the following classification:

- **B**: Business organisation (private sector)
- **G**: Government organisation (public sector)
- **E**: Education organisation (public sector)
- **C**: Charity (private or third sector)
- **EBLO**: Education Business Link Organisation
- **School**: School

Some organisations may have been associated with more than one sector according to their constitution and clients, e.g. BE = Independent (private) business predominantly working in/with education.

Anonymity for each contributing organisation is upheld by numerical coding (e.g. B7 or G2). Exceptions include: the college, the LSC, the LEA or LA, an EBLO.

The organisation code is suffixed by the role of the person being quoted (e.g. School 7/Headteacher; B3/Senior Manager; BE2/CEO)

Further coding may apply in those instances where there might be more than one contributor within an organisation (e.g. Tutor/1, Tutor/2; Teacher/1, Teacher/2). This number does not signify status.

Examples of full coding might include: B3/Senior Manager/2; B2/CEO; School 5/Teacher/3; EBLO/Tutor/4
Navigation

To assist the reader with the processes of visualising and making some sense of the patterns within this thesis I offer some signposts that may assist with navigating and understanding its potential. This case study is presented as a single, holistic entity (refer The ghost in the machine). It comprises numerous interweaving narratives. Each descriptive narrative follows a line of thought. Each narrative overlaps. Each holds components that could be re-situated in other narratives. Re-situating the components would create new lines of thought, and emerging from which, would be new relationships and meanings. A major issue for the study is that the dynamic structure and naturalistic research approach were emergent rather than being predetermined. Thus, the thesis works towards, rather than from, that potential.

Influences on structure

‘Like every great word, ‘representation/s’ is a stew. A scrambled menu, it serves several meanings at once. For a representation can be an image - visual, verbal or aural ... A representation can also be a narrative, a sequence of images and ideas ... Or, a representation can be the product of ideology, that vast scheme for showing forth the world and justifying its dealings. (Stimpson, 1988; 223) (in Denzin & Lincoln, 2005; 211)

The structure for the thesis represented one of the key dilemmas for me. It was not simply a matter of: what could be included; or finding and providing an appropriate level of ‘detail’ for what might be construed as ‘central’ or ‘peripheral’; how and where I, as insider/outsider, was to be identified, or ‘fit’; and/or that it was supportive of a narrative form that was essentially, an abstraction, partial and compatible with notions of emergence, connectionism, hyper-textural forms; that in a balanced way, dealt with the technical, political, ethical and aesthetic undertones; or that narratives individually and collectively provided a means to portray, convey, express, evoke, engage and inform. The nature and forms of these influences, dynamics, shifting emphases, context and action were ‘complex’. The issue then was whether this complexity should influence, shape and help with the configuration of the thesis or instead, be noted yet neglected, or somehow, simplified. Moreover, it brought into question, other key concerns pertaining to commensurability, and authorisation of contextualised, though abstracted action within and across different communities of
practice, and the foundational principles of knowledge and/or meaning-making. That engagement and abstract representation of meaning-making further stressed the notions of temporal spatial and notional linearities of an emergent, though retrospective account [PM2].

There are numerous structural alternatives to the thesis. Each solution can shift the emphasis, weight and priorities associated within and/or across the thesis’ components and strands. I believe my structure encapsulates the ethical/aesthetic dimensions, reinforces the intrinsic nature of the case and its emphasis on the interdependencies between situated action and research action. In printed form, the structure implicitly and explicitly denotes a linear form of the overall narrative, irrespective of the otherwise, metaphorical claims of hypertext, collage or textures and strands. In its electronic form, the reader is not so bound by such constraints - some structural questions become secondary if not redundant.

**Possible openings unfold?**

The thesis stresses that, emergence, improvisation, difference and uncertainty were foundational properties of the entire study (a common feature in the structure of a complex hypertext). Rather than dismissing these in favour of other attributes that might otherwise suggest a contradiction, the narrative structure instead, provides the means to embrace these qualities. I hold to the view that, the ‘start’, ‘middle’ and ‘end’ can be also determined by the reader, if they are quite clear that this is an option and that this involvement will then influence their own construct. (Stronach & McClure 1997; 1) That such strategies enhance the overall purpose and value of the thesis as an evocative and engaging proposition is also an essential contributory factor to the general perception of its relative worth and ongoing contribution to knowledge, or rather, ‘knowing’.

This case study is presented as a hyper-textural narrative with interweaving strands. This amalgam of hypertext and texture emphasises the conventional reading of hypertext as narrative within a (potentially) non, or multi-linear structure that offers relative freedoms to a reader. According to the scale and distributedness of the
hypertext, (as in the case of the worldwide web), the pathways taken by the reader help to build a (new) construct as relationships are built and find some form. Texture suggests ‘a distinctive character of something complex’, such as the ‘effect’ of the different components of a piece of music (for example, that which emerges from the interdependencies between melody, rhythm, harmony and timbre). Texture has some correspondence to ‘collage’ and may be cited as a quality of metaphor. (This can explored further by referencing for example, the arts (Arnheim, 1974; Eisner, 1998 and 1972), organisational theory (Strati (2000) new sciences (Capra, 2003 and 1996; and postmodernism (Mabry, 1997; Cilliers 1998).

Through different lenses, the thesis holistically represents the interplay between two broad communities of practice (Furlong & Oancea, 2005): one being defined as and framed by participant action within a unique ‘real-world’ setting – the ‘research study group’. The other community of practice, defined as the ‘research community’, was a key influence on how participant action might be perceived, visualized, theorized, abstracted, and re-presented in order to consolidate and/or inform knowledge and understanding of real-world action. (This notional distinction about and between communities of practice is explored in more detail in ‘Prelude’ and various other narratives in the Research Section.) Thus these two key influences represent major strands or lines of thought, sets of belief, forms of conduct, ways of visualizing and realising, and both have influenced the overall structure of the thesis, as conveyed in the Activity Section and the Research Section. They overlap due my (dual) role, my accountability to both communities of practice, and the ways that I have been persuaded and/or personalized my interpretations through the various narratives on behalf of both communities of practice.

Channels and Paths

There are a number of possible paths that a reader might like to consider and each approach may find some commensurability with different modes of thought or paradigms. Amongst the many ways of approaching this case study, the following serve to indicate a few options for the reader:
Option 1: For those that wish to explore the evolving action contexts that inspired me to engage in research, and to better understand co-participant action, then the current printed structure begins by emphasizing that situated activity (Activity Section) and how it set the conditions for, shaped, influenced and evolved alongside my research practice (Research Section). These broader narrative strands are bridged in numerous ways due to my roles as participant and researcher.

Option 2: For those that wish to gain a deeper insight into the emergent, uncertain, ‘real-world’ action, where the boundaries between context and action become indistinct and reiterative, where knowledge is only partial, and where the theoretical distinctions, determinisms and influences about and between research and real-world action remains, to some extent, uncertain, then you might begin with any of the Scenarios. The Scenarios are snap-shots into different, distinct forms of action, representing various voices and issues. As a collective, they are not sequential – each had temporal, spatial and ideological overlaps that may (or not) have informed each other. Each provides a different kind of insight into situated activities such that each enriches and thickens the overall description of the conditions, events, issues, personalities, rationales, and other bases for action.

The question should remain as to whether the Scenarios were the essential drivers for, and/or a representation of context and policy. The narrative ’If Then Why Not Later?’ provides a synthesis of contextualized action in its various forms (such as the historical, socio-political, strategic, organisational policy making dimensions). ’Weigh-in’ provides a different lens for these key developments and how these were (subsequently) manifest as (local) initiatives, developments, projects and general day-to-day practice, as enacted within and across the Scenarios.

Option 3: For those readers that choose to believe that research is predominantly about research strategies, methodologies, accountabilities to that particular community of practice, and so on, then this stance might be partially satisfied by starting with the Research Section wherein: ’Prelude’ and ’Fat Patches’ illustrate how the research opportunity eventually framed the study as an ’intrinsic case study’ – each narrative represents a ’first and second ’reading’; ’Terms &
Conditions’ and ‘reading the small print’ emphasize the importance and dualities of the contexts ascribed and described by both communities of practice, through me, to the subsequent delineation of the research approach. These also refer to matters such as my (multiple) roles as insider/outsider, issues of ethics and validity, as framed by both of the two communities of practice.

A further feature that is essential to the notions of structure, whilst remaining consistent to the connectionist and constructivist undertones, draws on the use of diagrams, networks and multimedia forms. This feature brings to the fore essential issues of local, distributed and alternative forms of representation, particularly with regards to where raw data, its transcription, translation, transformation, associated theorising and analyses, and formulation of relative values that reside somewhere within theoretical and/or real-world contexts. It also encapsulates further structural issues by bringing to the fore matters pertaining to aesthetics, form and representation in art and different ways of visualising, representing and realising meaning. This is explored in greater detail in ‘One in the Eye’.

While each narrative provides a summative analysis of context, action, theorizing and meaning-making within its own setting, these strands also provide a way to look across the various narratives. For example: a conventional notion of ‘context’ as a means to frame or set some notional, temporal, or spatial boundary for participant action is conveyed in a more general sense within ‘If Then, Why not later?’. It also finds some correspondence to ‘contextualized local action’, as summarized in ‘Weigh-in’ (the Projects and developments peculiar to the Research Study Group). This is further detailed within each of the Scenarios as re-interpretations of context within specific action settings that (then) informs the wider, more general context. The implications of this cycle of determinism, proposition, uncertainty and subsequent action, (‘if/then’), as it is informed by and subsequently informs the precedents for further action, was not only encapsulated within the Scenarios, but those interdependencies also explored differently in ‘reading the small print’ and ‘In Search of the Lost Chord’.
As an aside, I am wary of the term ‘meta-analysis’ insomuch that, in keeping with complexity theory (Cilliers, 1998) that suggest meanings, arise from networks of complex interactions within and between components of the system and one’s distance from it (4); from Hatch’s view that organisations and environments are linguistic representations of indistinct realities (Hatch, 1997; 119); where micro/macro are intertwined (Strati 2000; 77), to Lyotard’s views on narrative (1984; 18), to Witkin’s ‘crystalisation of the totality’ (1976; 177) and to further notions of autopoiesis (Mariotti, http://www.oikos.org/mariotti.htm), the interweaving, interdependencies within and between the narratives serve to unify, represent a holistic, intrinsic case. In one sense, the Activity and Research sections each represent a ‘meta-narrative’ from the (theoretical) perspective of insider/outsider to a given community of practice (even though my voice as co-participant and researcher pervades both). Further ‘meta-analyses’, for example, pertain to what I have represented as the ‘linked rings’ (Fig 89), a model that illustrates the essential interdependencies between context and action, with theorizing and meaning-making. This is integral to the thesis and pervades each narrative and the case study as a whole. (This matter is explored again in ‘micro/macro/meta …’ and in ‘Different ways of seeing’.)

‘Off the Beaten Track’ provides a further analysis or rather, a synthesis of the contextualized action encapsulated within and across the Scenarios. It draws together various diagrams that I designed as theoretical models to analyse and represent some of the emergent issues. These models were then refined having been discussed with and validated by other participants. While I was seen to be a colleague the information was presented from my perspective as both co-participant and researcher. I have presented this narrative as a ‘Scenario’ as it provides a further strand or insight into participant action rather than research action. However, it also serves as a bridge between the two otherwise distinct communities of practice (the ‘Research Study Group’ and the ‘Research Community’) as a means of bringing together research practice, policy, and practice.
'Fat Patches' looks across and synthesizes the narratives within and across the Research Section to reflect on how research action was informed by and interdependent to participant action such that the study eventually became defined as a holistic, intrinsic, complex case study. In combination with 'Prelude' they provide a first and second reading, a before and after, an extended embellishment of a distributed narrative that is circumfluous to that by which the case became defined.

'In Search of the Lost Chord' illustrates something of the complex, uncertain improvisatory nature of the proposition and serves as a generalisation and proposition for the entire case by reflecting on and synthesizing the multiple, interweaving and interdependent narratives encompassed in the thesis – for some readers this might be a place to start as it encapsulates the principles of the thesis and how one might engage with it as a representation of potential and as a means of knowing.

**Embellishments and constraints**

In this presentation of the thesis I opted to begin by focusing on the activities occurring within a unique, dynamic setting, and from which there emerged an area of personal, though parallel interest that represented and configured the opportunity for further investigation, contributed to the refinement of a broad research question and arising from which, a commensurable research approach evolved. (Refer Fig 52, Generic Research Practice; Fig 32, Research Action.) A key feature of this contextual setting was its inherent dynamic and interdependence with emergent action that shaped, and was being shaped by this evolving context-in-action. Importantly, the evolving dynamic and uncertainties of action-in-context meant that my research evolved in line with the evolving issues and potential as emphasised by participants and participant action. (Ref Figs 49-50, Research Action in Action and Disturbance in action) This is in stark contrast to an alternative approach that could have perhaps, begun by defining a question or problem, perhaps by drawing on literature or other cases; finding a setting to test that question and its associated methodological assumptions in the hope of establishing some form of resolution. (Williams, 1988; 239). Thus I was keen to develop a representational form commensurate with the fundamentals of the study and its portrayal. In keeping with
influences from literature, research paradigms, and art, the structure and narrative style references connectionism (including network theories, complexity theory) and constructivism, insofar that the pathways and meaning-making is as much evoked by, as derived from the relationships between my abstract, partial representation, and the experiences and expectations of the reader.

Further considerations that I made about the overall structure of the thesis also pertained to: how this broader framework correlated to the 'inner structures' - the use of ‘narratives’ and reference to ‘strands’, and where the emphases lay in the research itself, in the action, in the Scenarios, or in the subsequent identification and/or resolution of issues, by someone, and/or in its generalisations. Thus, each narrative holds to the notion of interweaving strands and encapsulates key concerns from different lenses or perspectives, through different voices. An essential quality that enables a reader to start with any of the narratives is that each contextualises action (in its own form/s) such that this underpins facets of the overall processes of theorising and meaning-making, not only within the context of that narrative, but also within a broader theoretical framework.

Structure is of course, not solely determined by (linear) patterns but can occur through layers, nuances, ambiguities, and alternative schema and forms of representation. Hence my suggestion of texture may be found through as more general sense of the aesthetic, overall form, or style. This may be apparent in the polyphonies of overlapping voices, including mine as narrator, participant, researcher, by reflecting on past, present, potential, and from the story as a whole. A further example is the use of different text styles, or the use of comment fields to offer additional or alternative insights (as evident in several narratives), or a ‘second reading’.

For example, in the Scenarios, these might provide additional (raw) data/information, descriptions/explanations, references, and so on. In One in the Eye, it provides a means to run two parallel, interdependent strands. In ‘The Question?’ it makes more distinction between the object(ive) and the subject(ive), the seemingly implicit and the explicit, probability and possibility.
A potential weakness of such an approach is that, while I may claim it is commensurate with the overall study, it is nevertheless unconventional and in that sense, does not readily provide accessibility into the thesis. Yet, to counter this, what could be ‘simpler’ than accepting the key to understanding and handling emergence or complexity is to accept the beauty and dynamics of difference, uncertainty as conveyed and evoked by real-world action and ongoing meaning-making in progress. (Guba & Lincoln, 2005; 221).

My concerns about structure included finding a means by which it could be conveyed or ‘contained’ even within the printed form, without contradicting the notion of, or metaphor for) ‘hypertext’ or ‘texture’ (Strati, 2000; 70). The normal symbols that traditionally emphasize linear structures are further reduced by not referring to numbered chapters and headings – instead illustrative titles are used to frame the narratives yet provide a potential for divergence. A structural schema for the thesis is illustrated in the diagram ‘Fat Patches Applied’ (Fig 1)

The idea behind FAT patches (Fig 1) relates, in ‘scientific terms’ to a facet of fuzzy logic. Particular reference to this representation is more fully discussed in the narrative, ‘Fat Patches’.
Why do we find it so congenial to speak of organizations as structures but not as clouds, systems but not songs, weak or strong but not tender or passionate? Is it because organizations physically resemble one but not the other, that we somehow discern through the clamorous hurly burly something that is structural, but not cloudlike, systemic rather than rhapsodic, strong but not tender? What kind of ‘structure’ could we have in mind that the continuous movements of eyeballs, arms, legs, words, papers and so on should bear a physical resemblance? And are those who think they observe structure simply blind to systemic ‘process’, and those who spy ‘strength’ insensitive to obvious signals of ‘tenderness’? No, there is little sense to be made of the assumption that organization theories are read off the world as it is, inductively derived from our experiential immersion in a world of continuous flux. (Gergen 1994: 207)

The Activity Section comprises narratives that represent participant actions of the Research Study Group. ‘If Then Why Not Later’ locates the Study within local, regional, national and global contexts, and how change within those contexts energised the actions of a unique participant group defined as the Research Study Group. This account links to and blends with two other key texts: ‘Weigh in’, which is a summative account of the Projects and developments associated with the participant group. Scenarios provide details into the different forms of actions by participant groups. The Activity Section, as a collective, complex narrative is distilled within and through the interweaving micro-narratives by Scenario 5, which also serves as a bridge between the Activity Section and the Research Section.

Fig. 2 Participant Action [PMS]
If Then Why Not Later?

The ghost in the machine

This study is about people, as individuals and in the aggregate as communities. It is about how they interacted with each other on a personal and professional basis. It is about how they operated within various inter-organisational contexts that, potentially at least, were of mutual interest and concern. The study illuminates a variety of attributional and ideological inter-relationships that arose through partnership activity and how the participants made some sense of the opportunities. Particularly, it explores some of the dynamics that order transactions in and across different organisations.

The framework for this collective social and intellectual activity was constructed through reflecting on various partnerships encompassing organisations and agencies principally from the education business and government sectors out of which three key goals derived from the aggregated corporate decision making of partnership activity:

- to engage in collective partnership activity (i.e. cross-organisation/cross-sector) (process)
- to promote and develop learning opportunities (for the wider community) (process)
- to incorporate information and communications technologies (ICT) as the catalyst/means to effect learning (product)

The research opportunity arose from my being a participant, not only in the formation and development of specific projects that sought to 'promote learning through partnership activity', but also in a newly constituted Lifelong Learning Partnership. Within each, a common aspiration was the incorporation of ICT as a means of 'liberating learning opportunities'. Another motive of the partnerships was that of 'consolidation'. Thus, the various partnerships considered strategic and operational issues by reflecting on the needs, interests and conditions of each sector and the potential advantages that might arise from a more collaborative approach. It
soon became evident that the terms of reference and conditions used by the different sectors, and on which this shared practice could develop, introduced many uncertainties and essentially ‘de-stabilised’ prevailing norms and traditions. Assumptions, motives, concepts, language, practice were channelled and challenged through engagement at all levels, however they may have been constituted or ‘formalised’, and consequently, led to interesting new situations and relationships such as those reported in the Scenarios. This collective represents a community of practice that, for the purpose of this research, I defined notionally as ‘the Research Study Group’. To elucidate, the following text explores this practitioner base by first providing an outline of the key qualities of the organisation/s for which I was working in one capacity or another during the study period[PM12] of my research; my roles and position within those dynamic setting, and the key issues as highlighted by my overlapping role as researcher. The Scenarios extend this description of this community of practice defined as the research study group. By way of contrast, the Research Section indicates a different community of practice (defined as the Research Community) and various narratives[PM13] therein explore the emic and etic, insider/outsider relationships between these two key communities of practice.

Understanding an EBLO …

An Education Business Link Organisation (EBLO) is an organisation that is conceived and principally seeks to build links between business and education (EBL), though working in partnership with likeminded others. It achieves this by working collaboratively with each of the sectors (education, business, government and community) and the balance or commitment, or emphases between those sectors can vary according to the nature of the link or activity that is commonly agreed. An emphasis that pervades many EBLO activities concerns the process of (re)contextualising and emphasising relationships between learning occurring within schools to the world of work. This may find different forms of emphasis, such as through work related learning (WRL) and other derivatives such as work-place learning (WPL), or work-based learning (WBL). There is a complex network of EBLOs across the United Kingdom each finding different ways and means of building and harnessing education business links and promoting work related learning.
Diversity

The nature and practice of EBLOs can vary considerably according to, for example, geography, demography, remit, funding, how each is constituted and the implicit and explicit demand for their services. Hence, one EBLO might be represented by a single person, working within an LEA or other host organisation, perhaps, with the main responsibility of developing links between organisations, or maybe, mainly involved in placing students on work experience in local businesses on behalf of schools and colleges. Another EBLO might operate independently, have over 35 staff, some of whom act as consultants, provide and support learning opportunities for and on behalf of both education and business entities, develop resources, and so on. Further, some EBLOs may be defined, administered or sanctioned at local level by a national organisation, perhaps with core funding and following government directives. Others operate as ‘independents’, perhaps with no ‘core funding’, and claim that they respond to, rather than are dictated to by a larger organisation or government instrumentality. One other type of EBLO comprises a group or organisations that have come together and merged into a partnership or ‘consortium’ in order to endeavour to consolidate, collaborate, coordinate and optimise opportunities within a cohesive, communal framework to serve their mutual advantage.

Types of EBLO

An Education Business Partnership is but one such EBL organisation, of which there were, at the time of writing, approximately 250 across the UK. It is not possible to define an EBP on the basis of the nature or extent of its work other than that they all generally follow the principle role of: developing education business links, through partnership activity, to enhance learning opportunities, and where appropriate and ideally, to link these to the world of work. A Lifelong Learning Partnership (LLP) can be also classed as an EBLO in that it constitutes a forum to negotiate and implement strategic and subsequently operational opportunities pertaining to learning, particularly where each partner can act as both a stakeholder and beneficiary of the learning process. Other EBLOs include for example that those that focus more particularly on career pathways (such as Connexions) and others that provide teacher placements in industry.
A major problem for ‘outsiders’ is that many of these organisations may not be called and EBP, or a Lifelong Learning Partnership, instead preferring to operate under a different name. Furthermore, some organisations are sufficiently large and complex to encompass several of these different types of EBLO. Moreover, in some cases they may operate from within a larger organisational configuration not normally defined as an EBLO, such as from within a LEA, the ‘Business Links’ organisation or ‘EBLO Consortium’. These individual and/or overarching organisations may be configured as part of the public or private sector, or both. The two EBLOs in this research study were both independent companies limited by guarantee, had independent Boards of Directors or Trustees and were further distinct insomuch that the LLP did not consider itself a ‘delivery organisation’. However, both operated from the same building; though their governing Boards were separate, around 50 percent of the Board membership was common to both EBLOs; for logistical and financial reasons, all staff (in both EBLOs) were employed by the EBP – in the first two years of becoming formalised as a LLP its funding was insufficient to sustain the organisation; no financial support of reimbursement for Board members all of whom operated voluntarily, within the conditions defined by the Memo and Articles of the organisations.

Historically, many EBLOs were the result of Government initiatives, thereby framing the nature of its subsequent transactions. For example, Education Business Partnerships (EBPs) were a DfEE initiative as the early 1990s intended to build and strengthen links between business and education. To help achieve this outcome, a requirement was that an EBP should be led by a management group comprising key representatives from business and education. EBPs were generally incorporated into the LEAs or Training & Enterprise Councils (TECs). However, the DfEE withdrew all further core-funding after one year following their inception. Many EBPs remained within the control of the umbrella organisation with which they began. The specific LEA, germane to this thesis, at that time decided that it would not continue to support its EBPs. The EBP management board however, had already anticipated this retraction of support and had already moved the organisation’s position such that it could easily become an independent company limited by public guarantee and as a registered charity.
In the case of Lifelong Learning Partnerships (LLPs), the new Government’s policy changes partially indicated its intentions in literature such as ‘Education & Training Development Agenda: towards 2000’ (1999). That rhetoric however, did not explain the significant delays and complications of funding that ensued for several years. As conveyed in Scenario 4, that the local LLP had a history of action underpinned by the Local Action Group and Targets Task Force, provided an invaluable asset to ongoing partnership practice within the locality.

**Strategic Function**

To operate effectively, an EBLO has to be sensitive to past, current and potential developments occurring within and between the business, education, community and government sectors, with shifts in priority based on the constituent organisations’ capacities, roles and functions. This implies that the EBLO has to be acutely aware of the needs, interests and practices of each contributing sector, while also carefully balancing its strategic and operational involvement such that subordinate effective partnership relationships continue to evolve in a positive and fruitful manner. Furthermore, there could be, and often were, as evidenced over the period of the research, considerable differences between emerging national, regional and local agendas that might introduce other pressures or opportunities. Part of the ‘game’ was, knowing how to handle this plethora of activity, such that stakeholders and beneficiaries alike gained advantage through engaging in those transactions. In the case of a larger EBLO, such as the local EBP or LLP, partners from different organisations that were conversant with such strategic matters and who could relate these to a collective, more complex framework of activity, were important contributors to the nature of the negotiations, quality of information and subsequent processes of operationalisation or implementation. (Scenarios 2, 3 and 5 provide alternative representations about strategy and how this corresponds to laying the foundations for policy, and for different forms of action, as framed by ‘strategists, practitioners, providers, brokers, and young people.’)
Operational roles – provider, enabler, resource

A further very important condition affecting each EBL organisation is one that has to take account of concerns regarding their functional or operational role - that is to say, what the nature and purpose of the ‘link’ actually is, and whether they act as promoter, enabler, or deliverer or resources. To exemplify one EBL organisation, ‘providing support for activities’ might mean taking a lead role in ‘delivery’, as presenters, teachers, etc. It may, in this case, organise and run the activity. To another EBL organisation, taking a lead role might mean: ensuring people with the ‘right qualities’, from both the education and business sectors, are brought together to assure that an effective learning opportunity can occur. This process is often associated with being a ‘broker’, where for example, the potential economic and logistical benefits of ‘enabling delivery’ results from drawing on experienced practitioners, from the world of work, who can provide a different perspective on a dimension of learning that is of common interest to both, or all parties. With this approach, there is virtually no field or aspect of learning that cannot be addressed by the partnership - one ‘merely’ brings together ‘the right combination’ of human, social and technical resources. Hence, students may engage in activities ranging from particle physics, managing mathematical problems encountered on the stock market or flea market, or exploring chemical processes from the perspective of the fireman or hairdresser, and presented in such a way and level of complexity that the resources and learning materials are suited to the needs and interests of primary school aged children through to students in higher education.

As an evolving strategic partnership organisation, the LLP was an essential facet of the EBLO configuration and therefore encompassed within the narrative Understanding an EBLO. It differed from the other EBLO germane to this study in respect of the general nature of its action – both represented strategic action, but the LLP did not consider itself to be a ‘delivery’ organisation – operationalisation of strategic action was considered to the role of the partner organisations. However, defining ‘strategic action’ according to the self-appointed roles and actions of ‘strategists’ (as formed not only through the observation of this co-participant group, and represented in Scenario 4) was problematic. This was particularly so where ‘strategy’ occurred outside ‘formal discussions’, was not easily observable or
explicitly manifest\cite{PM20}, and/or did not directly influence or reflect ‘operationalisation’ or ‘activities’, as practiced and exemplified by the day-to-day transactions of the others.

’Swt’s it all about then’ reflects on participant action: in relation to the LLP in relation to a key research model (Fig 29, OAR/I); in order to explore ‘strategy’ within a ‘strategic partnership’; and to posit the notion that ‘strategy’ may be located ‘elsewhere’. ‘Weigh-in/steering groups’ not only includes the LLP as one of the major ‘Project’ developments but also references it as one of the key ‘steering groups’ that instigated an ICT audit that underpinned part of my research study, as outlined in Scenario 4 and in the One in the Eye.

**Brokering/Partnership Processes**

A key to the partnership process in operation is the practice of bringing people together, through negotiated activity, to ensure that the purpose and quality of outcomes are understood by all parties, and mutual advantage to be derived from any initiative is optimised\cite{PM21}. It is a process whereby each participant has to come to terms with the nature of their own expertise and de-contextualise this such that others can gain from their insights\cite{PM22}. They have to handle the differences and uncertainties in a speculative, creative way, while taking appropriate steps to ensure it is not just ‘best guess’, and looks beyond the stereotype\cite{PM23}. The outcome is dependent on the transactional capacities of all partners. Underpinning this transaction is the sense that an essential difference in capability, perspective, function and rationale of the partners makes it ‘worthwhile’. If each had the make up of the other, then the partnership is less valid or purposeful\cite{PM24}.

**To be, or not to be an EBLO ...**

While the above account provides an overview of the function and diversity of EBLO processes and products, and that many organisations also engage in similar partnership activity with another organisation from a different sector, that does not mean *de facto*, that they are ‘an EBLO’. For example, several large businesses have demonstrated significant commitments to working with education and do provide an extensive programme of events, funding and other forms of support. This might include for example, a community based business that resides on the margins of mainstream, formal ‘education’, but nevertheless, serve an educational purpose, such as the Science or Natural History Museums, and the Royal Society of
Chemistry, and who are keen to bridge the (potential) gap between providing ‘information’ or ‘learning opportunities’ to the general public, and ‘other sectors’ of the wider community. Other businesses that have made huge investments in education and learning, particularly by supporting activities in schools include, for example, the British Army, Boots the Chemist, RAL, AWE, Syngenta, BA Systems and the like. Within some circles, including elements of the education sector, there is some considerable scepticism as to why such companies would invest, or ‘dabble’ in education - to the point where, for example, legislation restrains telecoms companies from being seen to promote their services or products to children\[PM25\]. Many such companies do not class themselves as an EBLO on the basis of their links with education, any more than a Local Authority may, even though they can and do operate independently to EBLOs and facilitate similar link opportunities.

*The relevance of the EBLO*

Key national, regional and local agendas were highly pertinent to the (re)formation of partnerships, particularly those that sought to foster effective links between education business and government sectors. Though the key focus was principally on ‘Education, education, education’, this was in the event, largely seen as a means to support the rhetoric for social ‘inclusion’, empowerment, and economic regeneration and growth\[PM26\].

The interpretation of those politically led agendas by the participants with the EBLOs forming the study group was diverse. They played an extensive role in the activities outlined in the Scenarios, though these snapshots of such activity constituted a relatively small part of the EBLOs’ wider role and commitment. Both organisations served to provide a forum, provided a rich source of ‘participants’, or ‘people who in someway had some involvement’. The participants also picked up on the emphasis on ICT in the national and regional policy documentation and set up specific focus groups to consider the implications for consolidating local learning and ICT infrastructures. (Scenario 4 provides a example of this particular interest through the actions of the LLP)
Specifics about the EBLOs within the Study

The following text outlines those aspects that help to situate the EBP’s stance towards education business links and the importance it gave to partnership developments. Many of the details were publicly accessible through its website, its audited accounts, its Business Plans, strategic and operational target areas, through its Annual General Meeting, marketing materials, and reports to and within national, regional and local configurations. Particularly they were essential to and evidenced in various ways through its actions and general reputation. Salient points concerning its constitutional position can be listed as follows:

a) The EBLO was a small, independent company, limited by guarantee[PM27] and registered charity[PM28], a credential that placed it within the private rather than public sector.

b) Its governance was through a Board of Trustees comprising twelve executive-level representatives from business, education and Government, and community based organisations, many of who were also members of other strategic partnerships[PM29]. Board membership changes did not challenge unduly the balance of representation[PM30] over time. The operational transactions of the company were further informed by a stakeholder group with an equally divers representation. As a small company it had a mostly flat, transparent management structure. Irrespective of titles, all employees were recognised for their experience and insights arising from day-to-day practice such that new ideas and developments could emanate from any part of the organisation.

c) The purpose[PM31] or remit of the organisation was formally declared through its mission statement: ‘to take action at all levels[PM32] to assist young people[PM33] to become better equipped for the demands of working life in a rapidly changing society by promoting effective education and business collaboration at a local level’[PM34]. The EBLO were also active members of other partnerships and working parties/steering groups/Boards[PM35] and other strategic alliances, and consulted widely with business, agencies and organisations locally, regionally, nationally, etc[PM36].

d) Its partnerships with other practitioners from several thousand organisations from all sectors essentially emphasised its approach to EBL, namely, bringing to the fore, personal knowledge and learning in, about and through experience of work.
related learning. This resulted in numerous projects, developments and initiatives in all phases of education and across the wider community, as partially represented in the Scenarios.

e) Since gaining independence in the early 1990s the EBLO’s workforce increased eight-fold and gradually incorporated other organisations such as the SATRO, SETPOINT and the office for the Lifelong Learning Partnership ( LLP ). It employed additional staff for projects run on behalf of other organisations such as the Local Education Authority ( LEA ), and the Learning and Skills Council ( LSC ).

f) The EBLO had a history that extended beyond my associations with it and/or the notional borders define by this research study. This was shaped by its multiplicity of strategic, political, financial, technical, business, educational and ethical transactions. This history represented contextualised action that found means to become re-enacted through day-to-day practice as ongoing action.

g) Its success could be measured in terms of its day-to-day work and how this informed and was informed by its efforts to strive for innovation and change. These include the integration of web technologies into its work experience programmes to enhance communication and participation at all levels, its enterprise programmes that gained national recognition, and those illustrated within the Scenarios.

h) Accountability within the organisation was complex as it occurred in many ways on many levels. The EBLO paid due regard for example, to political, technical, strategic, financial, educational, logistical and ethical concerns, particularly in maintaining a sensitivity to and balancing of the stakeholders’ and beneficiaries’ divers needs and interests. That its partners were from business, government and education meant that it had to understand, report to and operate according to the concerns and needs of all those organisations. The nature, quality and extent of its transactions were regularly audited internally and externally according to a divers range of criteria, the findings generally becoming part of published accounts, reports and informing policy and practice. The EBLO was also aware that the scrutiny of its achievements was no guarantee of future funding and/or approval by its partners and/or competitors. Independent audits ( and awards ) also included those by Investors in People ( IIP ) and a number of independent organisations that ‘kite-marked’ its quality standards.
i) The EBLO was not guaranteed, nor necessarily received regular or recurrent funding from central Government or its other partners. As a registered charity it was a 'not for profit' organisation that was largely driven by 'co-operative values' – surplus never exceeded 5% of its overall income. The acquisition of funding represented ‘an ongoing challenge’ that emphasised problems of sustainability and growth. Conversely, the EBLO’s status and growth was testimony to its success. The derived funding emanated from a wide variety of private and public sources, mostly target driven, ‘restricted’ or ‘ring-fenced’ and therefore, representing yet another form of accountability; funding was competitive and uncertain, and therefore demanded a speculative, adaptable approach to the management of its operations in addition to maintaining quality standards in its provision of services. It also affirmed independence of thought and action.

j) The position of authority and autonomy of the EBLO was established in several ways. First, according to the above conditions, status and position, the EBLO had the right to formulate, and stand by its own authority as an independent organisation. That it generally conducted its business in a relatively open and transparent way according to clearly defined criteria, codes of practice, policies and practice that depended on both external and self-validation meant that it could answer to challenges about its decisions and practices. Those authorisations would be through its internal management structure, through its numerous internal and external lines of accountability, and in the ways that these subsequently influenced and enabled it to conduct its business. Second, in addition to the normal traits associated with business transactions and accountability, the people within the organisation believed that they represented a ethos and ethical practice legitimated and validated through its governance, stakeholders and beneficiaries, and also through their day-to-day business transactions. For example, the scenarios provide an example of autonomy in its sequence of decisions to apply for funding from the private sector to initiate the Communities ICT Project, through to the point at which it ceased applying for that funding. The ‘right’ to no longer provide additional ICT resources that could be used by schools was not simply a matter of the EBLO ‘withholding’ funding. It was not construed as a matter of ethics by any members of the EBLO. Rather, it was upheld as a rational decision, subjected to scrutiny by its Board, to no longer ‘apply’ for funding for activities that it no longer needed or wished
to support. Nevertheless, I understand the EBLO would have been prepared to discuss this in more detail with the schools had they been prepared to accept the role of stakeholder in the venture, taken a more objective view of achievement, and adopted a more proactive role. These transactions are explored in more detail in the Scenarios.

More ‘ins and outs’

There is another important strand to ‘understanding an EBLO’. In seeking some form of validation for my summative analysis and definition of an EBLO, I provided and discussed the texts with various people ‘in the know’, people who were representatives of that form of participant action. Two of these were EBLO managers from organisations that engaged in EBL/WRL activity. The nature, range and scope of their activity were very different (as outlined in ‘diversity’ and ‘types’) to that of the EBLO involved in the research study. Both managers commented that this ‘capacity’ was largely determined by socio-demographic contexts, available funding, and the size and expertise of their respective organisations. Otherwise, they agreed with the summary.

My summative analysis of an EBLO was also read and agreed (validated) by the CEO and Chairman of the national umbrella organisation for one type of EBLO. Their main comment was that while they, as ‘insiders’, understood and agreed with the narrative, they were also aware of the difficulties for ‘outsiders’ to understand the complexities, dynamics, fragmented, and disparate nature of the EBLO community and that this was ‘problematic’. For example, an ongoing source of confusion and frustration for Government who wanted something ‘simpler’, easier to define, something more ‘cohesive’ that clearly represented greater ‘unity’[PM38]. Conversely, the EBLOs have upheld the belief that diversity was key to ‘its’ strength and potential – such a belief has allowed EBLOs to customise EBL and WRL to local conditions and needs, retain autonomy. This stance emphasised the preference to hold to the notion of being a ‘boundaryless’, ‘network organisation’ that remains, largely, membership driven (Ref: Hatch, 1997; 64). This raised two fundamental issues that the national umbrella organisation has tried to reconcile.
First, by acknowledging the views of Government, the potential for central funding for its member organisations could represent a boon. However, the benefits as they become manifest over time would depend on the ‘costs’ tied to the conditions and requirements attached to that funding. Historically, of course, the Government have already demonstrated one possibility when the EBLOs were first configured during the 1990s.

Many EBLOs seemed attentive to the lack of understanding about their practice, as typified by Government, was not uncommon. For example, each time a new partnership/EBL opportunity arose with education and/or the business sector organisations, the process of describing the remit of the participating organisations was an essential part of the introductory meetings. Partly due to the EBLO’s relatively small size, diversity of practice and lack of marketing materials associated with EBL activity, such discussions represented an essential part of stating credentials and associated authority, gaining mutual understanding of partnership action, emphasising the benefits of ‘brokering’ and laying conditions for subsequent, effective practice. This kind of discussion therefore, also occurred with the newly formed LEA and with new members to the LLP. A problem was that each time members from the EBLO met with such partner organisations, they might be meeting with other representatives from the same organisation for the first time, and thus, required to repeat this information. (This was certainly the case when I conducted the interviews on behalf of the LLP/ICT Sub-Group, as conveyed in Scenario 4.)

Furthermore, depending on the purposefulness of that exchange (e.g. perhaps it served as little more than courtesy, or perhaps represented something more significant that underpinned subsequent action), the only means of verifying the understanding of these multiple acquaintances, was either in subsequent meetings and events, or by triangulating the views of different participants from within one organisation to establish the consistency of understanding. However, as portrayed in Scenario 4, it was not easy to establish if or how other motives and factors came into play.
Strategic / operational roles and functions

The EBLO delivered a very wide range of activities\textsuperscript{[PM39]} to local schools and College of FE, for local businesses of all sizes, and in collaboration with a host of other agencies/ societies and Higher Education entities. An essential aspect of such activities was to promote education business links (EBL) between organisations and work related learning (WRL\textsuperscript{[PM40]}) opportunities for the students, thereby retaining a niche within the education market. It also engaged in curriculum development and pedagogical enhancement activities. Most activities reported were collaboratively arranged with organisations from each of the relevant sectors national, regional and local scales, as appropriate, including the DfEE/DTI, Royal Societies, businesses, Environment Agency, and other local sponsors. The EBLO, in acting as the intermediary or ‘broker’, as a peripheral body that negotiated ‘insider’ knowledge for the benefit of ‘outsiders’, considered that the process of negotiation required an awareness of and sensitivity towards the needs and interests of each of the different parties and stakeholder groups such that any subsequent opportunity for partnership engagement was mutually beneficial to all the constituents concerned in a particular initiative.

In a nutshell …

The EBLO was the lead provider of EBL and WRL opportunities for local schools and businesses, the lead organisation for the Rural Communities ICT Project (RCP) and computer recycling scheme (CRS) that provided a focus in the Scenarios delineated in the Activity Section, and was actively involved as a partner in a large number of activities and groups that were significant but extraneous to those circumscribed in this research study. The foundations for these important initiatives are outlined in 'Weigh-in' and Scenario 4.
Me, Them and It

Who’s who and what’s what?

Embedded in the texts throughout this thesis are references to ‘participation’ - that is to say, processes of ‘taking part in activity’ [PM41]. Of course, there were many kinds of ‘participation’, represented through many different forms, and which were indicative of attitude, belief, behaviour, conduct, standards, stance, ignorance [PM42], circumstance, and so on. These ‘observed actions’ were dynamic in the sense that they were ephemeral, transient qualities that were of the moment and not generally exclusive to any particular participant. All forms of participation had different kinds of significance or emphases according to how, when and by whom these were conveyed and/or interpreted. The Scenarios form different purposive sets of activities and relationships that encapsulate participation while necessarily misrepresenting, or not fully representing the temporal and spatial dimensions within which these occurred.

Part of the equation, and discussed below concerns ‘how I knew’ - how I ‘found out’, and ‘from whom’ or ‘what’, how this was ‘informed’ and ‘representative’, and ‘of what’. I have already asserted that: ‘This study is about people. It is about how they acted and interacted with each other on a personal and professional basis, as part of the ‘daily round’. To this it should also be clear that the ‘opportunity’ that lay at the heart of the research study resided in the fact that circumstantially, I was already then in situ as a participant member of the ‘Study Group’, immersed in that community of practice, where our terms of practice were being continually defined and redefined by a host of dynamic conditions, and about which I anticipated that I would be able to gain further insights into the workings of the dynamics of partnership and its modus operandi - especially in the social dimension [PM43]. Many emerged through the activities and through various associated processes of theorising that are embedded in the Scenarios, the circumstances to which they related, and the following texts.
Me

This strand provides an outline description of my roles and position within the partnership groups during the research with an analysis that further locates my position as participant, co-participant, partner, researcher, narrator, from the perspective of ‘insider/outsider’, as framed by someone or something. In that sense it provides a critique of identity within a unique setting and in relation to the notional boundaries of two broad communities of practice. It also refers to the (auto)biographical nature of the story, with the underlying issues and relationships between narrative as methodology (Stake, 2005; 450), and narrative as structure (Chase, 2005; 657 and Cilliers, 1998; 116). In that sense it overlaps with other narratives that consider ethics (‘Someone has to be right’), aesthetic and creative processes (In Search of the Lost Chord) and other technical issues as explored throughout the Research Section. It indicates the interdependencies within and between my place within the EBLO, other partnerships, the transactions that occurred, and how those provided the focus for my research. It supports the narratives within the Activity Section in the sense that my ‘roles’ were partly dependent on the various forms of contextualised action. It is included in the Research Section as the issues seemed more apparent to and largely arose from the concerns generally expressed by the research community. This balance between locating contextualised action and/or emergent issues is also a structural matter discussed in ‘Navigation’.

Between 1997 and 2005 I was employed by the EBLO germane to this study. Over that period, which also included the study period (1998-2004), my roles and responsibilities evolved to include generally representing the company and its divers strategic and operational roles nationally, regionally and locally. Though that representation may from time to time focus on specific developments, issues and organisational practice (for example, relating to ICT, science and technology, education, strategy, and so on) these were all essentially underpinned by the focus of the company on EBL and WRL. Within this local organisational setting, my day-to-day roles were the general wellbeing of the company, its overall development and sustainability within evolving and complex settings. These broader roles would find
form through actions that focused on for example, funding, staffing, relocating the company to new premises, building partnerships, project management, teaching, developing resources, and other contractual requirements encompassed by the term 'ad hoc'.

Central to that role of partnership working was collaborating with organisations on their projects and developments. Thus I was a participant member of the local Lifelong Learning Partnership (LLP) and other strategic or steering groups (e.g. LLP/ICT sub-group, that of the Rural Communities Project, Computer Recycling Scheme, the local National Grid for Learning Development Group, Virtual College Network, and other community ICT projects. Further afield I was a member of the British Computer Society’s Schools Committee, worked with SETNET, the Regional New Opportunities Fund Steering Group, Teacher Training Agency, the local Learning & Skills Council’s ICT Board, and was governor for a local primary school.) Additionally, I retained links with colleagues in previous areas of work as I had previously spent 16 years working in all phases of education, mostly as a teacher, trainer, manager, and researching for and developing teaching and learning resources. The people I was working with included; CEOs, senior managers and other practitioners from the business, education, government and community sectors locally, regionally and nationally; with project managers, ICT technicians, people working in sales, marketing and staff management, teachers, students, with people in the local community, local businesses, schools, parents, social workers, clergy, and so on. The various aspects of that encompassed identifying opportunities for development, sharing and channelling ideas through the appropriate partnerships and technical systems, planning, writing proposals/reports/ agendas/minutes, financial and technological planning and management, auditing and evaluating short and long term processes and outcomes in addition to, and as part of day-to-day transactions and accountabilities.

Thus, my credential within that broad though immediate community of practice was a ‘jack of all trades’, bricoleur (Denzin & Lincoln 1994; 2), broker (Wenger, 1999; 109), practitioner, professional, connoisseur (Eisner, 1998; 63), participant, co-participant and partner, involving and experienced in anything from discussing ‘strategy’ to
wielding a phone, keys, pen, portfolio, mouse, tissues, screwdriver, guitar, or mop – each with its inherent dangers. A certain ambivalence in my role as broker arises not only through the associated notion of peripheral action (Wenger, 1999; 109) but that this role was central to my work. That is to say, the process of filtering and synthesising facets of knowledge, experience, expertise, and skills that were integral to a specific practice, matching it with those of another practice, and imaginatively formulating a proposition with which both practices were comfortable and served to enrich the new context in which that enterprise was applied – otherwise, the art of handling the proposition of ‘de’ or rather ‘re’ contextualisation whilst understanding the potential ‘differences’ such that these may enrich rather than negate the purpose of the transaction.[PM44].

Several other people from the different sector organisations with whom I was working closely shared multiple roles and responsibilities. Board and/or Project group membership overlapped to the point where one might at times, question which meeting one was attending, and whether that agenda item had been discussed in another meeting, somewhere … Within a small rural community with an overall population of only c.120,000 with 80 schools, only two large businesses[PM45] and driven (within the context of my research study) by relatively few people with a concern for the agenda for partnership activity, this overlap was perhaps, inevitable. As stated in Scenario 5 (‘Hats & umbrellas’ and in ‘Cloaks & daggers’), the diversity and changing permutations of the participant roles and settings defied the proposition of relating the above attributes to each participant within the research study group. For example, the college principal was a member of six Boards, numerous Steering and Project groups, attended as Principal, Board member, Chairperson, colleague, partner, supporter, and so on. Neither s/he, nor the colleagues in similar positions had any problem with this multiplicity or that s/he, like others, also could talk professionally, personally, impartially, on and off the record, formally and informally. S/he, like some, but not all, could make the switch within and between meetings – irrespective of the hat, the expression or the teeth, of which, these were presumed to be his/hers.
This plethora of interaction was further enriched both implicitly and explicitly by perspectives shaped by the diversities and complexities of peoples’ character, beliefs, interests, concerns and motives of their professional and personal lives (Refer: Wenger, 1999; 47; Nonaka & Takeuchi, 1995; 58; van Geert, 1994; 12). Some of this was shared – for example, it was not uncommon for some colleagues, especially from the business sector, to talk to me about his/her own personal studies and learning whether this was scuba diving or some accredited award, problems with the family, the dog, the car, holiday plans, their enthusiasms, drinking habits, shoes, the economy, Blair, their scepticisms ... Those insights, whilst being outside the scope of my study were all parts of the fabric of the community of practice.

This homogenous group, albeit from different sectors, different organisational types, with different interests, provided a notional bond in, for and across the general nature of their actions. This bond was represented in broad terms, by the needs, interests, opportunities, and/or potential in partnership action, particularly where this might consolidate and enhance teaching and learning within and across the wider community. This community of practice gained further focus through a general idea that ICT could also somehow contribute to that potential. (Refer: If Then …”) This community of practice was integral to my research study such that, as my ‘research study group’ they were quite distinct from an otherwise obscure community of practice that were ‘outside’ or external to that group – the ‘research community’ and within which I was seeking membership.

A further significant ambivalence arose from my new role as researcher – not so much in terms of the acceptance within my research study group for my additional role. As partners, they largely expressed an interest, drew upon my interests and findings at various times (refer Scenario 4) such that this allowed me to triangulate my findings, and/or served as (new) data. Rather, the ambivalence arose from the notion of insider/outsider – terms of reference that were not uncommon within the research community. Clearly, irrespective of social bond through partnership action, each participant was an ‘insider/outsider’ to various forms of action, perhaps on account of status, gender, expertise, experience, dress, personal enthusiasm, commitment and the perceptions of others.
In comparison to the 'research study group' in which I functioned daily, as insider, co-participant and so on, in one sense I was an ‘outsider’ to the research community of practice. The study group seemed to comprise predominantly of people engaged within a context-in-action. Conversely, my ‘actions’ within the ‘other’ community of practice, the research community, predominately emanated from my reviewing of the research literature, policies, documentation, papers, articles, and with these did not represent in quite the same way, much about personality, social action, partnership. While it clearly represented the paraphernalia, the technical trappings and systems that served to consolidate, bring cohesion, unify, authorise, qualify … and in a broad sense, represent a community of practice, it did not convey quite so much about the passion, hair, families, financial issues, teeth, gender that were an essential part or indicative of people who talked about and engaged in collaborative action[P46], with innumerable day-to-day roles responsibilities that made them stressed, late, angry, hungry, fun, and who were creative, dangerous … For me, as a newcomer, an outsider finding ways in, the clinical detachment of scientific and/or academic rigor was reminiscent of the first time I walked into a large business to talk about an education initiative for which I was seeking support; akin to sitting in the waiting room at the dentist; similar it seems for business colleagues who were venturing ‘back’ into a school to talk to teachers as peers, or worse, to their students; an environment where expertise, experience, potential did not necessarily have the same interpretations … I suppose it might not be too dissimilar for an insider a researcher, from that research community of practice, encroaching on the space experiences and actions of others in ‘real-world’, situated, contextualised action settings - trepidatious perhaps about their accountability, rigor, ethics, personality and (im)partiality to, and in the name of, knowledge. A predicament was, for me then, from what, or whose perspective was I, as an ‘insider’ and/or ‘outsider’, to explore real-world contextualised action, within which I had some experience, in order to gain greater insight, as an insider? The comments of Nagel (1974) in his discussion ‘What is it Like to Be a Bat?’ had some resonance with my dilemma:

What is the analogue in this case to pursuing a more objective understanding of the same phenomena by abandoning the initial subjective viewpoint toward them in favour of another that is more objective but concerns the same thing? Certainly it appears unlikely that we will get closer to the real nature of human experience by leaving behind the particularity of our human point of view and striving for a description in terms accessible to beings that could not imagine what it was like to be
us. If the subjective character of experience is fully comprehensible only from one point of view, then any shift to greater objectivity—that is, less attachment to a specific viewpoint—does not take us nearer to the real nature of the phenomenon: it takes us farther away from it. (428)

As a ‘researcher’, a clear benefit of my study was the prospect of it somehow contributing to knowledge about something for someone. Over time, my repeated reminders to co-participants about my ‘other’ role led to an acceptance that I would revisit statements, ideas and issues to clarify and qualify my interpretations or analyses. That process of what might be called self or peer review, was generally greeted positively such that it led to me being invited on a number of occasions to present and discuss my research in various ways. That this provided me with means of triangulating, verifying, and generating further data was technically very useful to me for my overall approach and findings. Particularly, it was a clear statement from them about what was otherwise construed by ‘outsiders’ as ‘an issue’. ‘We’ (both they and I) did not perceive this as (outsider) ‘interference’ but rather a means of developing further ways of knowing. While the research community has in over the years gradually adapted its stance towards research ‘in’ or ‘about’ real-world, situated action, perhaps there this could reflect still further on the views of those (out there), about whom it may concern rather than dealing with it ‘internally as a historical, technical, academic or ethical matter. Scenario 5 (Off the Beaten Track) represents a summative narrative that brought together facets of my research from a researchers (my) perspective to the co-participants on, or with whom the findings were based, and thus being shared. My ongoing analyses of participant action informed my action as a researcher, my action as participant, and through my review meetings with and presentations to colleagues, as co-participant and partner. Scenario 4 provides a different example of such transactions through the development, publication, presentations and reviews of issues that the LLP wished to understand better with the view to informing both policy and practice. Both Scenario 4 and 5 therefore provide example of emergent issues that I shared with co-participants in terms that could inform policy and practice. Other scenarios provide further evidence of how my research informed and influenced ongoing action. I will stress that my research was not the sole determinant of subsequent decision-making about for example, the future of RCP – other players not only informed but also took that decision.
Partnership activity contexts

Partnership activity was situated within, and influenced by a wider context of activity. This encompassed, for example, socio-demographics, the new emphases on the new social agendas (inclusion/connected society), which in turn endorsed Lifelong Learning, Learning Partnerships, etc. most of which of course encompassed a plethora of contrasting (political) motivations. This was reflected in strategic activity nationally, regionally and locally to ‘unify’ and thereby strengthen ‘learning frameworks’ and ‘opportunities for all’. Mutuality, cohesion and unity, synergy and optimisation were all part of the rhetoric for this development.

Central to all of this activity was the notion of change, not only within the immediate, local context, but also, that which was occurring regionally, nationally, and globally. There were interdependencies between these forms of change, and these also reflected different ways of thinking, different perspectives and different approaches.

Rain in a bucket

Environmental change (technology)

Change is contributing to the blurring of boundaries between home and work, business and pleasure, day and night, alive and dead. New technologies are pervasive and invasive - it is not just company executives who check emails and voicemails just before going to bed, all placing a moral burden to reply. Rarely is it now possible to sit through a music concert or have a meal in a restaurant without a mobile phone ringing - borders between ‘face-to-face’ and ‘in-your-face’ technologies are indistinct. Many people in the UK have a fully technologically and expensively equipped kitchen only to buy convenience, ‘fast food’ that can take longer to cook than ‘real food’; people own cars with state-of-the-art technologies previously found on satellites and warheads and with aerodynamics and efficiencies that burn holes in the ground and tarmac at incredible speed, on roads so congested that we now travel slower than 25 years ago. The technological significance is emphasised by considering the computing power and ‘memory’ of a wristwatch is now very many times that of the 1969 Apollo Moonlander from which Armstrong took a leap for mankind …
Rapid recent growth in two areas, new technologies, and growth in the world’s population, which has more than doubled in the past forty years, has, in combination, stressed both the nature of employment and the conditions within which employment occurs. The nature of work is being transformed by new technologies, which is shifting the emphasis on how, where, when and if people work. New cybercultures and virtual worlds exist where people not only create their own identities and realities but have significantly challenged the very basis of knowledge:

Technology had put afterburners on the egalitarian notion that anyone-can-do-anything, by enabling pretty much anyone to try anything - especially in fields in which ‘expertise’ had always been a dubious proposition. Lewis, 2001; 91)

... just as they have also affected the way we wash the dishes or travel to work. The immediacy of information results in patients visiting the surgery pre-armed with details from the Internet; numerous other situations now exist (not only on the Internet) where a combination of shifting knowledge, attitude and new forms of communication or accountability are challenging and redirecting the locus of power such that, for example, young teenage boys have

... used the new masks offered up by the Internet to reinvent themselves in a manner that was, from the point of view of central authority, disturbing. They were able to do this only because central authority itself had been thrown into doubt and was ripe to be challenged.’ (ibid; 141)

Another brick in the wall?

If the foundations of knowledge are shifting in terms of ‘who knows’, ‘how they know’, and according to the language or means by which this might be communicated, strong messages are also being transmitted to, and by society about both the ‘value’ and the ‘cost’ of knowing’. One key example is that education and training are currently amongst the world’s biggest businesses, accounting for more than six percent of the world’s Gross Domestic Product (GDP). The GDP of the Learning & Skills Council (LSC) is equivalent to Belgium’s. National surveys show that in 2000, UK employers spent £23.5 billion nationally on training employees. Almost half of employers reported that some of the training led to a formal qualification, though much of this was not accredited. The ‘locomotive of the UK economy’, the South East Region, (the area in which the research study occurred) endorses the rhetoric and statistics by emphasising:
More and more jobs will require a broad and ever-changing learning mix of knowledge and understanding, creativity and adaptable thinking, specialist skills and technological competence (SEEDA, 1999; 5)

... and encouraging the strategy whereby schools should be working with parents and the business community: ‘to ensure that pupils are aware of the challenges ahead and are well prepared for the world of work. The divide in perceived value between academic and vocational qualifications eliminated’. (ibid)

Robinson (2001) succinctly draws some of these facets together:

The dynamic interaction of technological and economic change has two immediate long-term implications for labour markets. First, it puts a premium on the capacity of companies, countries and of individuals for creativity and innovation.... The second key quality is the need for flexibility and adaptability. International companies, especially those using ICT, will position the operations wherever the best qualified and most cost-effective labour force happens to be. European call centres for example are as likely to be in Delhi as in Paris. The competition for jobs is no longer local or even regional, but global. (56)

Of course, we have already reached the stage where the location of qualified knowledge and the location of the cost-effective workforce need not be geographically common, just as the principles of supply and demand are no longer what they were five years ago.

Industries and companies that were world leaders in the 1950s have been replaced by new ones, bringing with them new doubts, new demands on knowledge, skills, attitudes, and adaptability, on a different ideology that takes stock of the real human resources we have. If we are in a deepening revolution in the work people do, who works and for how long, it will also affect how we relate to each other and how we conceive our own intelligence and abilities. It will take on different perspectives according to the social contexts and ideological stances and constitutes a ‘paradigm shift’ - that is, the approach within which theories are framed and through which discoveries are verified. It gives meaning to Eisner’s (1998) remark

Meanings are construed, and the shape they take is due, in part, to the tools people know how to use. Different disciplines employ different tools. Thus, which meanings become salient is a function not only of the qualities ‘out there’, but, of which tools people bring to them. (36)
In a pragmatic sense, perspectives are also framed by the socio-cultural precedents that essentially underpin customs and practices. Our present (Western) worldview has been hugely shaped by the rapid scientific, technological and cultural revolutions built on the explanatory powers of logic and scientific evidence. It has not only influenced the rationale that underpins ways of, for example, engaging in commerce, business practice, and education, but also emphasised the emergent divide between education and employment. Huge emphasis is placed on the need for education, learning, qualifications, skills, knowledge, academic achievement, pressurising young and old alike to re-evaluate and engage. Employers complain that academic programmes from schools to universities ‘don’t teach what people need to know, and be able to do’, while at the same time demanding higher and higher qualifications for employment, or more critically, evading the training of their workforce. The other side to the coin is the increasing demand for creativity, innovation, entrepreneurship, such that the underlying models for education, economic and intellectual, are now outmoded or inadequate.

Look left, look right and left again

Nationally, recent Government aspirations have reflected on the concerns expressed by business about such change and how this ‘fits’ new ways of conceptualising globalisation, particularly as the challenges and threats are becoming more complex. Towards the end of the 1990s, new opportunities for significant ideological change that could take stock of the situation prevalent at that time and lead towards socio-cultural adaptations arose from a number of conditions. After eighteen consecutive years of Conservative rule, New Labour gained a sizeable majority of seats and became the leader of Her Majesty’s Government in 1997. Changes were both inevitable and partly anticipated at regional and local levels. In the region where the research study was located, the county authority was coincidentally broken up into six Unitary Authorities bringing about further change - at the local level, this meant the transformation, development and administration of public services. New over-arching changes to the economy, education, social agendas, protocol, delivery and service agencies, strategy and policy all underwent radical review. New organisations, partnerships and alliances were set up to manage and lead the reforms that were set out in new Acts, White and Green Papers, numerous Reports,

This change was not simple and did not occur overnight, nor did it mean that all ‘other’ activity ceased - not all ‘like-minded’ activity was in fact motivated or supported by those ‘new’ ideologies, even if they were ‘informed’ by them. Vision, strategic process, policy, implementation and accountabilities it would seem, are not linear, or solely dependent on aspiration, ideology, and rhetoric, but rather, involves various forms of social construction that may or not be commensurate with the prevailing orthodoxy. Assumptions, expectations, traditions, norms, practices, standards, accountabilities, terms of reference, conduct and beliefs were all being challenged by the new regime and re-situating established and potential practices within (new) conceptual frameworks that sought to optimise learning, through partnership. As various people came together to form partnerships and engage in partnership practices in order to address some of the above aspirations for change alluded to above, a plethora of questions, issues, problems and solutions emerged.

Under the umbrella of ‘activity’, these encompass what and how people and organisations engaged in order to meet these challenges. That activity included indicators that both implicitly and explicitly expressed the thinking that underpinned those actions.

The key drivers for an inclusive, democratic society were of course, characterised by notions of freedom, empowerment, equality, opportunity and engagement. It was also delineated by the notions of what is morally ‘right’, which in a pluralist society can be difficult, even intractable. The terms for the new social agenda were at that time therefore, built on the notions of ‘social inclusion’, ‘social and economic regeneration’ within a global economy, where ‘building for the future’ provided a
rationale for consolidating organisational change and a focus for ‘education, education, education’. ICT was seen as a great liberator for those who could access and harness its functionality and potential such that it became an essential focus within the strategic policies and practices advocated by these agendas. Handling and coming to terms with those differences may be tempered according to ‘ethics’, ‘convention’ and notions of ‘normality’, thereby setting a conflict with its ideological, even technological principle. ICT has been shown to be a great liberator for those with access to its functional and potential capacities. As already indicated, what ICT can liberate, and at what or whose expense, is perhaps more contentious.

Look in but look out

In promoting learning opportunities each sector inevitably reflected upon a range of systems, perspectives and organisational processes. Indeed the proposition of organisations from the different sectors working in partnership also raised new opportunities for these organisations themselves to learn from each other and explore benefits from collaborative enterprise[PM65]. Of course, partnership activity extended well beyond the formalised coalitions as suggested above[PM66]. As asserted by Richie (1998) ‘Partnerships often begin from a relationship between two or more individuals; the trick then is to establish something which is bigger than the leading players.’

It might be argued that any social interaction constitutes a ‘partnership’ irrespective of its purpose or boundaries (e.g. formality/systematic, temporal, spatial, social) and occurs both in and out of the larger organised entities. That the boundaries of such social interactions were indistinct, highly complex and dynamic became key to the thesis. For example, it raised questions about issues concerning the boundaries of the group such as, with whom was what actually being negotiated in mutual terms; in what ways did differences of interpretation become apparent between actors and stakeholder groups; was there ‘really’, ‘truly’ consensus in those aims made explicit and agreed within a formal partnership, and in any case, how ‘stable’ was the notion of boundary?
Thus, the research reflected on the activities leading to or arising from those generative strategic developments, and the organisational processes, particularly where ICT and partnership served as catalysts for these developments. It reflected on activity of a unique, diverse range of participants within a unique set of conditions. It considered the nature of interaction as (preferred) ‘solutions’ were developed and implemented. It explored the processes of negotiation and differentiation and how the needs and interests of users, organisations, providers, etc. were recognised and incorporated into that solution. This raised further questions about the significance or nature of context, how conditions and circumstance formed interrelationships with the activity[^PM67], and how those taking strategic responsibility for the provision of learning opportunities optimised learning opportunities. As the research study was conducted over a period of six years it also reflected on the relationships between emergent, incidental and planned change. There were several interlinked issues that arose from these developments:

**political**

First, there were inevitably a plethora of motives, interpretations, and behaviours that determined the processes by which the opportunities arising from partnership activity were expressed, shared and developed. In promoting learning opportunities, each sector inevitably reflected a range of systems, perspectives and organisational processes[^PM68]. In practice, the decisions and indecision of a group often reflected both the nature and rate of socio-political and technological change, and the transformations occurring nationally, regionally and locally, across all sectors, in addition to the personal agendas and behaviours enacted by the participants. The participants also indicated a position about ICT, whether personal or institutional, whether informed or naïve. Many of the participants in this study felt they were juggling numerous balls of different qualities in the air while treading on quicksand. Aims agreed within the formal partnership may well have been shared but may not have coincided with the interpretation of such within the ‘extended’ (external) partnerships.
There were also the questions of: who was setting ‘the agenda’, who was taking ‘decisions’ on whose behalf, and who was employing what (other) ‘gaming techniques’? Integral to this perceived uncertainty and change was the incorporation of ICT and the further dynamics that ensued in partnership activity as a consequence of this. New opportunities arose where the review of ICT infrastructures might prompt change in strategic and operational systems also influenced partnership relationships. How well informed and tolerant were the evolving partnerships about ICT such that inevitable change might be most ‘effective’?

**technical**

Second, the process of developing a shared understanding highlighted a number of terminological issues. On one hand, terms such as ‘partnership’, ‘organisation’, ICT and ‘learning’ are laden with alternative constructs that may challenge assumptions, confuse or mislead. For example, organisation may refer to an entity or process; ‘partnership’ may be a formal or informal arrangement between two or more individuals or organisations and might imply that subsequent associated practice is common, mutual or shared. Once over the superficiality of what ICT ‘stands for’, what it actually represents is decidedly more complex. How a concept is framed is partly determined by (previous and) current knowledge, experience and usage. The variety of experiences, rationales, or mind-sets drawn together from the different sectors within a given partnership such that the activities inevitably highlighted a diversity of interpretations, which for some, was problematic. For example, early on in the formation of a Lifelong Learning Partnership (LLP), it became evident to members in the early stages that the educationalists tended to see learning as a sub-set of the field of education, while some business representatives took an obverse view and saw education as a sub-set of learning. In similar vein, the LLP’s interpretation of LLL was established as ‘from cradle to grave’, which appeared, not to be in keeping with the Government’s view, that being (predominantly) those forms of formal learning occurring after the age of 16, and based essentially on human capital economy theory. This problem was still evident at a celebration event two years later during which new terminology was being used to distinguish non-conformity with what LLL had come to mean in the public domain. (Is ‘lifelong learning’ lifelong?) Further disparities in understanding about ICT
were highlighted across the various partnerships. What underpinned such problems? If there was to be general agreement about the role and value of learning *per se*, was it the place, or the processes by which learning ‘became’ valued, and by whom, that was at stake?

**impact?**

Third, both ‘partnership’ and ‘ICT’ constituted possible ‘catalysts’ to the organisations in the study group. The notion of partnership activity seeking to foster a climate of negotiation, collaboration, unity and consolidation has much to commend it. So too, does the incorporation of ICT to provide a flexible, adaptable means to enhance, enable and/or promote empowerment and liberation, and putting ‘learning in the hands of learners’. However, it seems that the functionality and adequacies of ICT might well be determined or delimited by the (situated) context within which it is applied rather than its inherent properties? (Ref: Heidegger (2000). That some participants held the view that “ICT is a catalyst”, “merely a tool”, thereby disregards mutability, potential, or synergetic qualities. Could such tokenism be applied equally to ICT and partnership alike? Were the ways that partnerships framed the nature of ‘learning opportunities’ with, through or about ICT perhaps indicative of the problems as and if they saw them? As advocates of learning, one might assume that the participating organisations would take an active interest in adapting and incorporating the developing strategies into their own organisations, rather than simply perpetrating strategies to encourage increased participation from a wider customer base? For whom did the provider provide? Did ‘partnership’ predominantly offer new strategies that could be ‘worked’ to the advantage of ones own agenda? Looked at differently, normalization might be construed as antithetic of ‘difference’ wherein the instabilities and uncertainties may seem to some individuals and groups, as being highly problematic. However, there did not appear to be an overall consensus, as for others, difference was a ‘true’ reflection of circumstance, (especially) in, for example, cross-sector partnerships, or the adaptable, insufficient worlds of information communication technologies / technologists. Perhaps this was why there was a perceived need, by some participants, for stability through conformity and control? However, within a partnership the question must be raised - is, or was difference a strength or weakness?
Looking forwards (with hindsight)

The three sections to this narrative have considered the wider contexts (national, global) and the implications of change (social, technological, demographic) outside the immediacy of the research study (Rain in a bucket). Look left, look right pointed to national political changes that were influential in bringing about new changes, demands, documentation, opportunities, partnerships and so on. Look in but look out indicates how these began to provide a focus or opportunity to research how the new partnerships handled the changes and new opportunities by pointing to associated questions and possible issues. This thus brings to the fore the nature and significance of: 'context' in terms of what may be construed as central and/or peripheral; participation and partnership action; and how this shaped or signifies meaning or knowledge, both as a process and product of action in context.

Altogether, these learning partnerships represented a rich and complex context for dynamic (and strategic) change, occurring, not only in the evolving partnerships, but also in the systems they intended to consolidate and optimise. Furthermore, such complexity pervades ideological notions of instability and discontinuity arising from difference that may be implicit or explicit in open, distributed complex social systems. The research approach reflected and sought to encapsulate some of this richness and complexity.

By reflecting on complex or seemingly chaotic conditions, where stability was, for some members of the partnership, aspirational, though transitory, and processes of looking in, out, round and about refuted both traditions of reduction on the one hand, and notions of holism on the other. Thus, finding a representational form was both difficult and problematic. The terms of reference for dealing with complexity, ambiguity and uncertainty, if they exist, transited conceptually and ontologically through reviewing various practices more traditionally associated with the sciences, arts and postmodernism in order to find a means. Gleick's (1998) comments reflect the inevitable dilemma, burden and fallibility of detail, focus, terms and references:

The choice is always the same. You can make your model more complex and more faithful to reality, or you can make it simpler and easier to handle. Only the most naive scientist believes that the perfect model is the one that perfectly represents reality. Such a model would have the same drawbacks as a map as large and
detailed as the city it represents, a map depicting every park, every street, every building, every tree, every pothole, every inhabitant, and every map. Were such a map possible, its specificity would defeat its purpose: to generalise and abstract. (278)

**Back to the future**

I had some idea of the meaning that formed a part of the activity that underpinned the research study. I was there, participating in a relatively large portion of that activity. At the time, I, like others, didn’t consider we were necessarily engaged in meaningless activity. Nevertheless, visualising and representing a set of abstracts that were principally bound by the moment has led to the suggestion that meanings were dynamic and emergent from evolving sets of relationships rather than inherent qualities or properties of the events and actions; meanings were reformed through a re-synthesis of those meaningless properties.

**Potential Issues?**

If, as stated above, boundaries and continuities were dynamic and artificial, how does one talk about ‘context’ when it represents a wealth of ‘activity’? Similarly, much of the activity over time itself became contextual. That an activity can become the framework or context of another is axiomatic - neither context nor action is self-contained and each builds on innumerable factors that may, or not, be evident from the immediate or specific – so how one informs or interacts with the other is perhaps more a question of perception or logistics.[PM78].

The research process arising from the conditions highlighted (initially by this narrative and followed throughout other narratives) sought to illuminate, inform and make meaningful. I would suggest that this process was itself central to the collective activity of the research study group as all participants adapted to and shaped meaning holistically and dynamically. The processes of theorising and ‘making meaningful’ were theirs, and mine, ongoing, dynamic and pluralistic. To make a separation from the circumstances within which that meaning making occurred shifts that meaning. The processes by which participants constructed their meanings was complex and intensified by the unique conditions and many forms of uncertainty - people came and went, bringing and taking their own meanings with them throughout
the life-cycle of engagement with the research. Joining in with an activity part way through made prior activity contextual, for the participants. Similarly, ‘non-participants’ who formulated their own ideas and values about the activity in which they may not have played a direct part has very different implications when these outsider observations perhaps, indirectly or unintentionally interact and influence that activity.

As evident from the Scenarios, there was no (single) formula for participation, engagement, making sense or understanding other than that which applied at any given time and the sense of purpose instilled by circumstance. The matter of engagement or participation highlighted three particularly important and interrelated issues:

1) that the bases of ‘experience’ were highly complex - in/direct associations or relationships occurred within seemingly disparate contexts; that they became relevant or incidental depended on a number of factors (time, chance, stance, etc.) and thus had major implications re definition/s, scope, boundary, relativity, etc..

2) it required the ongoing construction of meaning that evolved through many forms of engagement in partnership activity; ‘solutions’, where they were found, were generally a part of the process within which they emerged, and changed.

3) the representation of this argument is itself an abstraction offered to those who had no direct engagement in the activities outlined in the scenarios therefore presumes that the importance/relevance of experiences/understanding will be mediated to the thesis by the reader. The other narratives serve to support that process.
Project Outlines - Weigh in

Fuel in the tank

This narrative describes some of the basic, collective conditions and developmental stages for the various Projects and activities that are presented in detail in the Scenarios and also in the Research Section’s Conditions for the Study.

The term ‘Project’ is used in this thesis to encapsulate a wide range of activities that can fall within a notional, organised set that represents ‘an extensive undertaking’[^79]. ‘Project’ therefore embodies the conditions, contexts, activities and ways of thinking that collectively represent forms of change and development[^80]. ‘Scenarios’ serve as ‘snapshots’ or images of a sequence of events relating to project developments, integral to which were a host of processes and outcomes of meaning-making. They are narrative constructions or abstractions of (de)contextualised action that only partially represent the multi-linearities of complex action.

The activity that formed the nucleus of the following Scenarios was an important integrating thread, both for the key organisations directly associated with them, and what they represented in terms of wider strategic development across the region. They are explicit representations of:

- a clear knowledge of and engagement in different forms of action that were rendered strategic/operational, influential, and legitimate[^81] in their context. In being both reactive and proactive, actions were sensitive to and congruent with the framing of organisational strategic and operational roles, while showing a certain parity with the new external agendas and political rhetoric at that time. Hence, they were a representation of currency - of having a keen ‘finger on the pulse’

- a capacity to engage at both strategic and operational levels when reflecting and applying national, regional and local strategic agendas - by applying, transforming and adapting the rhetoric to ensure a greater commensurability between the policy and practice
• an indication of growth opportunities within and across organisations through partnership activity. In demonstrating a responsiveness to strategic change by holding a lead in the current agendas and developments, the projects offered a means to represent organisational status, authority, credibility and accountability at a time of great uncertainty and instability.

Activity is thus conceptualised as a form that embodies contexts, processes and products of being. No discrete separation is made between thinking and doing, context and activity, which are ideological constructs based on limited notions of dimensionality\textsuperscript{PM82} - instead activity is a holistic construct that represents dynamic, autopoietic forms or synthesis.

![Autopoiesis](image)

\textbf{Fig. 3} Autopoiesis\textsuperscript{PM83}

It would be misleading for a number of reasons, to suggest that the Project developments occurred simply in response to national or regional policies also under development over this period (though these issues and developments did inform in some way, some of the actions outlined in the projects/episodes).

First, the developments were more of a speculative response to on-going and potential, directed change and as such, may have pre-empted, even endorsed subsequent policy\textsuperscript{PM84}. Similarly, the accountabilities associated with certain
developments were not simply delimited by for example, policy, funding or quantifiable outcomes. Certainly the projects reflected on and incorporated such policies as they arose, as appropriate.

That is not to suggest that there was agreement about the meaning of the term ‘appropriate’. Some policies were more desirable than others due to associated conditions (e.g. those that had funding attached (TEC-Discretionary Fund, Community Modernisation Fund, or other sponsorship, etc.), some brought new forms of accountability (perhaps introducing less desirable conditions of funding!), or suggest the revision of systems/structures (e.g. Learning Partnerships, EBLO). Conflict may have arisen through different levels of perception of the immediate or incidental links. For example, when the new LEA was founded, new policy was circulated that lay questionable terms, conditions and assumptions that did not necessarily fit with existing practice or the rights of schools and other organisations.

Second, many of the key strategic policies (e.g. encouraging the formation of learning partnerships, promoting notions of community, and laying foundations for collaborative, unified infrastructures[PM85]) evolved at a time when the area had already established a number of effective working partnerships. The area necessarily reflected some new policies for example by renaming or modifying existing groups[PM86] and generally widening the brief.

Third, I submit that the change being encouraged by (new) policy focused on notions of participation (e.g. inclusion, partnership, ‘joined up thinking’ and connected society) and would influence fundamental processes arising from collaboration. Motives for participating in partnership activity were perhaps as numerous as the different forms or levels of engagement, as illustrated in the following episodes.

References here to ‘policy’ are clarified briefly in a number of ways. In its ‘loosest’ form, it suggested processes of negotiation and a sense of agreement about ‘principles’ on which a further ‘set of actions’ could, or were to be based[PM87] these might, but not necessarily, be formalised or validated through various forms of documentation (e.g. agendas/minutes of meetings, published development plans and contracts). In the initial stages of the projects or partnership negotiations outlined in this study, there was a blend of (re)formulating existing logistical or operational processes in order to clarify or ‘justify’ the aims/objectives for a project or development, such that its delineation provided a set of ‘qualifiers’ … for example,
definitions, intentions, how and by whom these might be met and measured. Given the uncertainty about the actual ‘status’ of ‘policy’, the practice of alluding to or emphasising policy was exercised as it emphasised a relationship between power, status, rationale and legitimacy, and thereby conformed to ‘established organisational principles and practices’.[PM88].

Important as these practices were, the developments that occurred also represented a practical demonstration of how partner organisations were tackling the problem of trying to provide learning opportunities about, with and through the use of ICT, for a customer base, the basic needs and interests of which were being, or were expected to be, addressed. While each organisation involved with such common interests had their own terms for and forms of engagement, practice and profile[PM89], many of the organisations also cooperated with other organisations to meet their aims and objectives. Indeed, the new agendas that accompanied the changes outlined in the ‘If Then …’ strongly emphasised the overarching principle of working in organisational partnerships.

Me them and it …

Whilst being mindful of the dynamics of the terms ‘projects’ ‘activities’ and partnership within evolving organisational configurations, this narrative serves to the summarise ‘Projects’ as enacted through the scenarios (refer: ‘A few tangibles’ and ‘General frameworks’). The organisational configurations are discussed in Terms & Conditions. Locating ‘policy’ depends on ones interpretation of policy – whether it is something framed by ongoing enactment of organisational practices, a set of principles that are embodied within a community of practice, something that is distilled into formal documentation, and therefore framed by local, regional, national and global contexts. Therefore, the policy context is located in ‘If Then …’, in ‘Terms & Conditions’, in ‘Scenario 4’, ‘Weigh in’, and to some extent within other scenarios.
A few tangibles

Two specific, interlinked ‘Projects’ form the basis of the Scenarios:

1. a Rural Communities ICT Project (RCP)
2. a Computer Redistribution Scheme (CRS)

These are further (re)contextualised by another bounded activity that provided an audit of local partnership and ICT action. This third ‘Project’ development represented a different form of action that sought to encapsulate multi-organisational, cross sector partnership action and consider current and potential strategic configurations. (Refer Steering Groups)

The RCP and CRS Projects overlapped for different, numerous reasons throughout their development, even to the point where they become indistinct[PM90]. In addition to the points made above, in each case, the Projects drew on different partnerships and links between education, business and government. Each Project underwent different stages of development[PM91] and incorporated different objectives and targets (as might be expected at a local level). Each Project closely interacted with other developments, both with other projects (e.g. National Grids for Learning (NGfL) such as those developing across the education sector, community ICT projects and ‘hubs’, various computer redistribution schemes), and also with other organisational partnerships. Likewise, these other developments were key informants and influences to the RCP and CRS developments. Collectively, they provided a means to draw participants together to the point of blurring the formal, organisational delineations and notional boundaries. The ensuing narratives therefore serve to give various insights from a number of different perspectives as they came together under the umbrella of the various projects.
This diagram illustrates a number of links between the three main Projects (RCP, CRS and LLP/ICT) and other key developments [PM92]. The yellow nodes (linked by red lines [PM93]) provided the focus for the research study and the narratives in the Scenarios. A further representation and description is provided by the diagram 'Project rationale' (Fig 18) in Scenario 1, and illustrated in greater depth in Appendix 2. Attached to RCP are subsets or phases of development (RCP1, 2, and 3), beginning with RCP 1 (circa 1997) and concluding with RCP 3 (between 2000-2003). The RCP and CRS Projects were influenced by a host of other seemingly independent developments (represented by the green and grey nodes) some of which were more influential on the various Project processes and outcomes. (e.g. in one sense, the RCP2, CRS and NGfL developments converged in a positive way with regards to improving the provision of ICT resources for schools, and in a negative way with regards to the nature of the interactions between the participants and organisations). ‘Other ICT developments’ also came under the umbrella of the LLP/ICT Sub-Group as the organisations responsible for their development acknowledged the basic tenets of the Partnership. EBL is identified as a key node insomuch that it was key to the developing (local) learning agendas and provided the means which most of the Projects were initiated.

While these Projects occurred within and related to a unique context of partnership, this in turn, of course, reflected other dynamic, if not turbulent organisational changes. For example, an important development during the period of my research study was the process of bringing projects and organisations together in order to strengthen the understanding/working relationships between the different sectors, and explore ways to enhance future prospects across the wider community.
Rational propositions such as ‘joined up thinking’, ‘optimisation of resources’ and opportunities for ‘consolidation, cohesion, unity and partnership’ were all part of the rhetoric at the time. It seemed ‘logical’ to bring together various organisations that were in the formative stages of building new ICT infrastructures to optimise those investments: at one time, the local college was investing in servers and networks, the schools in computers, some local businesses in on-line learning materials – bringing these together made ‘economic sense’. It also related to the governments plans outlined in its various policies such as: Learning to Succeed; Connected Society; Open for Learning, Open for Business; Regional Economic Strategies, and so on, (as referenced in the narratives ‘If Then’, Scenario 4 and the Reference database).

This process of building ‘Partnerships’ was not exclusive to, but necessarily encompassed the newly formed Lifelong Learning Partnership (LLP). They largely reflected the shifting agendas and emphasis on learning, partnership, inclusion and social cohesion[PM94]. This LLP had a number of ‘focus groups, of which, an ICT Focus Group was but one. Those other focus groups included: Steering, Family and Community, Work Place Learning, Information Advice and Guidance, Work Related Learning, and Marketing.

In one sense, the LLP/ICT focus group represented an organisational entity that not only served as a forum for sharing information/ideas but also aimed to consolidate and shape strategic development, and from which further partnership project opportunities might arise. Its declared ‘mission statement’ was: ‘To encourage and co-ordinate the development and use of ICT facilities in support of lifelong learning for the benefit of individuals, business, education and the whole (local) community.’

That the constitution of the group was formed from organisations already involved in the above projects (plus other projects) and who presumable shared the aspirations or vision of the LLP, there was thus an opportunity to consolidate and unify the efforts of contributors and strengthen future prospects for the participating organisations and wider community. This provided further opportunities to explore the specific ICT/ community project developments from different perspectives and therefore became the basis for the narrative, Scenario 4.
This and other forums represented various ideologies or ‘ways of thinking’ that were, at that time, evolving, responding to and influencing further change. They reflected, both implicitly and explicitly, a sense of what was occurring at a national, regional and local and global level, and with it, a view of how these were challenging precedents and a host of established traditions and practices[PM95].

It is important to point out a few other criteria for the Project developments that underpinned the Scenarios and the research approach:

• each Project represented a composite wherein there were several key phases of development, each highlighting different types of partnership activity between the education, business and government sectors. These ‘phases’ were rarely simply ‘linear’ but much more dynamic and ‘multi-linear’, even chaotic[PM96].

• the Projects outlined in the Scenarios mainly evolved between c1996 and 2002 in highly dynamic and fluid circumstances[PM97].

• the Projects had multiple associations[PM98] with each other and were highly interconnected with other projects, organisations and partnerships. It was possible, though unrealistic, to focus on one project, organisation, or phase without referencing others. The interrelationships were dynamic and highly interactive.

To contextualise this interesting, interconnected profile, it would be naïve and impractical to disassociate these important developments with other developments that were occurring outside the auspices or locus of control of the ‘Project’, such as, for example, the organisational conditions in which the projects were supposed to occur.

(The previous two points are illustrated in two networks diagrams or Maps: ‘Network of interrelated Organisations & Projects’ Fig 5 shows the network of interrelationships between the various organisations and Project developments, Green boxes signify the organisations that were involved in the Projects (yellow boxes). Links indicate the collaborations occurring between organisations regarding those projects. These relationships are explored more fully in Weigh in (Figs 11-19)
The ecological network illustration ‘Scenario/Project links’ (Fig 6) shows the relationships between the Projects and how these are addressed in the five Scenarios (represented by the large numbers 1 to 5 and explained more fully in the text ‘General frameworks and relationships’.

Red circles represent the respective ‘Scenarios’; other nodes are described more fully in each scenario. Each Scenario highlights in different ways the links between the Scenarios or Project developments, represented by the blue lines.
General frameworks and relationships

Generally, the local ICT projects each shared common aims and objectives, although inevitably, the weighting and implementation of them differed according to other conditions, such as local settings or contexts, who was the contracted organisation, who were their partners, and the recipients that *inter alia* included target group in the community.

**Aims**

The common aims can be summarised as:

- to build a stronger region through social and economic regeneration, by investing more effectively than hitherto in its skills and learning infrastructure, particularly through developing people’s technological skills that are appropriate for a skilled workforce entering the 21st century
- the provision and extension of learning opportunities[^1], (to a non-statutory/wider audience[^2]), incorporating ICT, that was intended to build closer, stronger links between the contributory sectors[^3], and to support directed partnership activities occurring within and between the lead, and partner organisations.

While the incorporation of ICT was a key criterion for funding and project development, the interpretations for integration into planned learning opportunities varied, not so much at the principle and policy levels, but in the change tactics that were subsequently implemented. For example, ‘Consolidation of strategic and infrastructural and technological networks’ was often cited as a key goal, thereby setting a precedent that, where and when these existed, they had worked and had value, that they could be consolidated, that consolidation constituted an improvement.

The diagram ‘Project Rationale’ (Fig 7) illustrates the means of conceptually bringing together different groups, including stakeholders and beneficiaries. The two sets, Prospects, Purpose and Process can correspond to both stakeholders and
beneficiaries according to the forms of engagement, as does the inner set, Provide, Perform and Participate. The emphasis or nature of engagement therefore changes according to the focus, that is to say, depending on how the terms apply to either the stakeholder or beneficiary, and by putting into the centre a concept such as ‘Learning’, ‘ICT’, ‘Partnership’, or ‘Opportunity’.

![Generic Project Rationale](image)

**Fig. 7**  
*Generic Project Rationale*[PM102]

**Objectives**

The stated objectives were to:

- increase provision of, and access to ICT*[PM103]* that can contribute to the development of knowledge, skills and understanding with, about and through the use of ICT.

- prepare people to be better equipped to meet the demands of modern life by giving them the appropriate ICT skills*[PM104]*

An objective that entered into later development plans recognised the implications of ‘convergent technologies’ and forms of social empowerment*[PM105]* Thus, project developments such as the above had two important drivers. First, they provided or generated ‘an energy*[PM106]*’ for the development of opportunities, which in turn, influenced or were influenced by some form of Rationale, Action, and Impetus.
Second, the project developments were tangible manifestations of Learning, Organisation, Partnership and ICT, irrespective of the drivers, by whom, and on whose behalf these were generated.

In the early stages of my research study, this diagram was a simple representation of the central drivers for the actions in which participants were engaged. In that sense it is a meaningful representation of known terms that were shared and formed the focus for negotiations. Even in those early stages, clear distinctions were emerging regarding the perceived differences and diversity in the interpretations of those terms. However, these terms were not being discussed in terms of those differences. Rather, they were generic terms that bonded different groups in the sense that they shared a common interest in those terms and how these could manifest themselves through activities (for the wider community) and assist them in realising their aims (and even though the specificity of those aims was uncertain). A particular difficulty for me in my research was not so much finding a means of ‘quantifying’ or ‘qualifying’, but rather, understanding those terms dynamic as forms of expression through action. That is to say, as they became associated with complex (open) systems, with semantic/ambiguous connotations (refer diagram Meaning in the making? Fig 68), my concern was whether these terms are essentially more meaningful if there was no consensus to the meaning of those terms. This issue was later linked to other terms and actions, particularly as the partnerships sought to make action ‘meaningful’ by recognising and handle differences. This model is used in Scenario 5 but has a different title and description (Refer: Action Focus Fig. 9); the development of such models is also explored more fully in One in the Eye.
These kinds of developments were identified as ‘Project’ type developments insofar as ‘initiative’ or ‘protected funding’ was available to organisations for significant ICT developments that (allegedly) enhanced/extended current practice, or established a new area of development arising from the emergent new skills agendas that were in the ascendant at that time. In nearly all cases, Project funding was ‘restricted’ - that is, it was ‘ring-fenced’ so that it could only be used to serve the aims and objectives identified in the Project brief and subsequent contract. It is somewhat ironic that despite the significant capital funding made available for these projects/initiatives, and the investments that were also being made on hardware and software, the specification was in all cases, a notable improvement on the equipment used on a daily basis by each organisation. Similarly, in those cases where the revenue funding covered ‘training’, the programme being put in place rarely did it reflect that being offered to the staff within the host organisation[PM107]. These attendant perspectives on the life trajectories, ICT projects and developments are explored and described in more depth in Scenario 5.

Rural Communities Project (RCP)

In 1996 a pilot Project[PM108] was set up in a small rural village community to explore ways of supporting young people/teenagers disadvantaged through rural isolation. This pilot followed a collaborative research project[PM109] with the Education Business Link Organisation (EBLO), the local District Council and a University exploring the needs and interests of young people in rural communities in the area. This had in turn, resulted from discussions within the EBLO in response to concerns being expressed in the public consciousness (mediated by the media and especially the Government ‘spin doctors’) nationally, regionally and locally about skills, regeneration and growth, particularly in respect of young people, rural isolation, disadvantage and ICT. The outcomes of the Pilot research highlighted a range of issues that emerged through the lack of access to ICT.
To explore ways of addressing these issues the EBLO then rented a small computer equipped office in the centre of the village for two evenings a week and provided tutored support for the teenagers. Rapid and overwhelmingly positive response from the young people imposed heavy demands on both venue and resources such that additional funding was sought and subsequently acquired by the EBLO to substantially enhance the level of provision. The decision was taken by the EBLO to locate these new resources in the local primary school.

The idea of relocating to the primary school arose from: discussions with the young people about solving the problems and limitations they were facing, what they wanted and where it could be situated; also the EBLO took account of other issues - alternative locations in small rural communities are very limited, particularly those that could/would accommodate young people); the EBLO were seeking ways to enhance the level of support that they could extend to primary school sector; primary schools at that time were poorly resourced or supported for ICT … the EBLO had good insights into the level of ICT provision in the local primary schools and this knowledge contributed to where other RCP centres were located in future developments.

This mutually convenient solution saw the provision of ‘state of the art’ technologies to a small school that had insufficient funds of their own to acquire similar resources. The school was encouraged by the EBLO to use these resources to address their staff/pupils needs during the day. This arrangement provided a rent-free venue to which the EBLO had access for the evening sessions for the teenagers. To invest some cohesion into this new partnership, support and training were offered at no cost to the school should they require it. Following the success of this development, the EBLO applied for and was awarded further sponsorship and allied funding in order to replicate this Project to two adjacent rural communities in the area. The above developments are portrayed in more depth in the following Scenarios: Scenario 1 provides insights into how these schools responded to the provision of these resources, whereas, Scenario 2 provides a different perspective by reflecting on the comments of the young people for whom the resources were intended.
Yet further opportunities arose serendipitously through drawing on a number of 'incidental' links that supported the most valued aims of the RCP and also highlighted other technological developments that could potentially benefit local businesses and the education community. As such they collectively led to a Project ‘extension’ that resulted in a further Centre being opened in a fourth primary school. Again, this development attracted sponsorship from a variety of organisations and was opened by a minister from the DfEE. Such was the scale of support for these developments that within a matter of months, the EBLO was extending this again into a 5th small primary school. These developments are explored in more depth in Scenario 3.

This significant growth leading to the resourcing of five school based ICT centres occurred over a period of two years. The Project development was significant in that it:

- pre-dated the National Grid for Learning (NGfL) and many other community networks/hubs
- consolidated strong, important education business links
- anticipated well the subsequent organisational change about to occur in all sectors
- provided important growth opportunities for the EBLO, which was a small, independent company and registered charity with no core funding
- represented a highly significant project innovation that should contribute to and strengthen the newly developing partnerships
- represented partnership activity through proclaimed support from a wide range of organisations from the business, government, education and community sectors

Collectively, the scale of development and investment was considerable as measured in terms of funding, number of organisations, level of provision, etc. given that it evolved through piecemeal, speculative, proactive efforts that were facilitated
with commitment by a small enthusiastic company espousing a strong argument. Much of the development was likened to “flying by the seat of one’s pants”, “precarious”, but very much reflected the EBLO’s approach to change - “not something one waits for, its much better, and more interesting to take a proactive role[PM118]”.

As alluded in the preceding text, this Project development represented significant development for a small company. In addition to those qualities identified above, the EBLO Project preceded larger, core funded projects such as the ‘Virtual College Network’, and the National Grid for Learning (NGfL), though the Company was well aware of those developments and remained very well informed about them through the work of its own staff and also embedded in its network of partners. For example, the Company had acquired insights into the ‘Superhiways Initiatives’ (EDSI) and other more historically situated ICT developments[PM119]. Where possible, key attributes of such projects informed the development of the RCP, such as:

• ensuring that various forms of training and support was offered in addition to equipment
• considering the opportunities for the pupils and young people as much as the teachers/schools
• considering the relationships between ICT in education and its role within other parts of society
• how the small nuclei within each location might be drawn together into something larger than the sum of its parts, and perhaps become part of other ICT and community networks, thereby extending the learning opportunities to other beneficiaries
• inviting other organisations to reflect on their roles and consider that these centres might provide new or additional ways to meet their targets
• considering the more creative and fun applications that could emerge from that provision, rather than merely adopting the more conventional approaches and making assumptions on behalf of young people about what their needs and interests in ICT were.
The EBLO encouraged the inclusion of the RCP into bids for the funding and development of further ICT and community projects by other organisations, and thereby, assisted in raising the perceived level of core funding. This approach did not however, strengthen the links between those developments that were hoped for. Even though the LLP was, by that time, becoming successfully established and beginning to find diverse ways of representing partnership activity, it seemed that ‘joined up thinking’ and ‘building on best practice’ still had its difficulties.

For example, the LEA bid for NGfL in 1998 declared £150,000 of match funding (50%) that was required to successfully secure NGfL funds. This was ‘provided’ or underwritten by the EBLO’s RCP and other ICT project developments. Whilst this notional funding provided a huge boost for the newly formed LEA it may have also, unwittingly, explained the subsequent difficulty (or reluctance) for the LEA to not make huge assumptions about its authority over the RCP. That is to say, if it could allegedly, harness the RCP funding and resources and bring it under the auspices of the NGfL, then what reason had they to doubt their wider authority over the RCP? (Ref Scenario 3)

Running on a ‘high’, the EBLO members again successfully gained additional funding from ‘Sponsor 7’ to extend the Project to four other rural locations in the area and to integrate more fully the Project into other, newly developing ICT networks. By this time (mid1999), ‘community’, ‘ICT networks’ and ‘partnership’ were high on the political agenda nationally, regionally and locally, and other organisations had become more established, alongside which, the EBLO was actively involved in strategic change and policy-making in Education Business Links at all levels on behalf of those organisations. So, potentially, there was scope to integrate aspects of the project into other developments. (Scenario 4)

The RCP development was underpinned by on-going formative, and latterly, summative evaluations and discussion by a number of formal and informal groups ranging from senior EBLO Managers and Board of Directors, a Project Steering Group, informal participant groups (e.g. tutors, ICT Coordinators Headteachers, Managers) and other contributors such as sponsors and organisations that stood to benefit from the development of ICT resource centres. This outward manifestation of authority and accountability undoubtedly assisted with aspects of the Projects development although the nature and quality of multi-directional information flow did not necessarily hold in ways that occurred or were expected. (Refer: Scenario 4 and Scenario 5)
The most important project aim of supporting young people remained unchanged. However, the aspirations for wider community use grew with the Project, as did notions of what the learning opportunities might look like in practice and how they might be supported further.

From this particular Project development there were three specific aspects that formed the substantive basis of the first three Scenarios:

1. A declared purpose of the Project was to provide learning opportunities for the wider (learning) community - that is to say, non-statutory provision for participants who wished to learn outside traditional educational systems such as school, college, business training. Generally, the participants were young people within school age and the learning opportunities were intentionally not typical of educational systems they were likely to encounter at school. Likewise, adults that attended were accommodated, where possible, according to their needs, rather than a pre-determined and pre-configured 'course' that assumed some kind of 'fit' between content and learner. (Scenario 2)

2. That the resources were, in many instances, were situated in a school environment, for use by the staff and pupils of the school provided another means of exploring some of the interrelationships between organisations arising from the new learning opportunities attributable to the Project. Scenario 1 is illustrative of the different ways that the school staff, and especially teachers took advantage of the resources (both equipment and training opportunities), considerer aspects of integration and management, and liberated learning opportunities for their pupils. It reflects on some of the strategic and operational issues that emerged during and after the installation of the resources in schools from a variety of actors' perspectives.
3 Integrating new technological functionalities into a learning environment or system introduced a host of challenges for the implementors. Opportunities did not appear from ‘thin air’. Likewise, the process of building a capacity to recognise and enlarge on the potential that accompanies ‘opportunity’ was complex. This is because, generally speaking, the beneficiaries did not have in depth insights into how or why the Projects eventuated, but rather they were encouraged to recognise and build on the opportunities, which (potentially) appeared to relate to their own or preferred needs and interests, on which they could build, with support, as and when required. Such issues are explored in Scenario 1 while Scenario 3 offers a rather different perspective on learning and ICT as it reflects on the changing environment and various forms of support for education from other sectors.

So, the RCP represented a speculative pilot that grew well beyond the initial expectations of the founders to encompass: three phases, nine plus locations; multi-organisational partnerships, significant private and public sector funding; and numerous links to other projects, strategic developments, and influenced changes in: expectations, participation and involvement, (whether or not this was overt or beneficial) and also wider strategic organisational partnerships.
Across the development of the RCP the EBLO used a number of strategic and technical support mechanisms to assist and sustain the Project aims and purposes. Fundamental to the Project’s success was the way in which others related and became committed to it – largely due, for example, their understanding of its aims and objectives, the range, scope and flexibility for becoming involved as a stakeholder/provider, and the opportunities for participants to take ownership and control of its various facets according to their particular needs and interests. However, along with the technological issues that are discussed in Scenario 5 the practices of some other participants became a highly contentious issue and which, in combination, eventually contributed to the Project’s demise.
Computer Redistribution Scheme (CRS)

A very different yet relevant type of development, that also sought to enhance learning opportunities with the use of ICT, arose from the redistribution, or ‘recycling’ of unwanted computers for ‘educational’ use on being made redundant by industry. There have been and still are numerous examples of industry passing on computers to schools, charities and community groups. Some of these might be formalised, large-scale redistributions that constitute ‘Schemes’ with formalised policies and procedures, while others were more unstructured, yet vague and arbitrary, such as ‘one-off’ handovers between friends.

Various strategies and statements associated with the practice of redistributing computers, on one hand, aim to sanction that practice, being endorsed as being ‘beneficial to learning opportunities’, represents an ‘optimisation of resources’, and an ‘environmentally friendly’ practice. On the other hand, the practice also arouses considerable doubts and opposition irrespective of whether the computers were redistributed beneficially to disadvantaged individuals within the local community, local schools and charities, or third world countries.

The CRS outlined in Scenario 3 represents a specific and sufficiently large scale computer redistribution scheme that is not only illustrative of similar schemes elsewhere, and operating in its own right within a cross-sector environment, it is also highly interconnected with ICT learning developments and projects referenced elsewhere in this study. The discussion illustrates the practice of redistributing computers and its relationship to fundamental technological and ideological issues as they emerged and articulated by those in the education, business, government and community sectors, particularly those within the local partnerships that were seeking ways and means to enhance learning opportunity with, about and through ICT. Importantly, it reflects on the notions of, and relationships between functionality, potential and adequacy in technological, educational and wider contexts (see Fig 31). This discussion is informed by the Scheme’s close links with other key Projects and associated developments that formed the basis of this study.
Steering Groups (strategic/operational)

Each project development had its own formal strategic and operational processes and teams, and key considerations relating to the specific projects are logically explored within the relevant episodes germane to each Project. What occurred within each Project was attributable to and endorsed by the organisational systems and explicit nature of the partnership practices and *modus operandi* employed by participants (providers/stakeholders). Each development reflected the fundamental conditions as determined or outlined by the lead organisation, the project/s, and circumstances to which they were being applied.

An important part of the wider condition meant that significant, yet inevitable overlaps also occurred between Projects, each finding different ways and means to integrate components adopted from another. This phenomenon appeared to have been due to, or emerged from, commonalities factored into the Projects’ basic remits, such as common logistics, mutuality, common respect for one project incorporating facets of good practice of another [PM125], competition [PM126], or simply that the necessary partnership membership that enabled the Projects often drew on the same people. These factors could of course provide further development of cognate opportunities for providers to reflect on wider practice, notions of cohesion, unity, optimisation, and the other symbols and obverse rhetoric that typically helped initiate and (re)situate the Projects themselves [PM127]. The former could provide a means of differentiation, disagreement, introversion and territorialisation.

During the time over which other ICT project developments occurred, other strategic partnership activities nationally, regionally and locally were leading to the formation of other entities, for example, Lifelong Learning Partnerships (LLP). In the case of the local LLP, this group contained an extensive if short history of cross-sector partnership activity [PM128] and which was used to help frame its responses to the ‘direction’ or forms of emphases being conveyed to groups and instrumentalities by central government.

*While emphasis on developing partnership practices occurred at national and local levels, not all partnership policy and practice was attributable, or accountable to government policy. Likewise the interpretations of Lifelong Learning as expressed by for example, the LLP, educationalists, and government agencies was not consistent. This was a point of irritation to some of its members when the*
'ground rules' were being established, but once each organisation established the parameters or extent to which they 'agreed' and operated within those terms, it then only became an issue when one organisation tried to overrule or dominate the interpretations and practices of another.

The newly formed LLP served as a ‘melting pot’ for specific forms of development conceived and manifesting nationally, regionally and/or locally, and its members sought to reflect upon, support and take a strategic lead in infrastructural developments across partner organisations, and for the local community. In this sense, the LLP sought to inform, advise and be, itself, informed by the practices and endeavours of its participant organisations, while serving concurrently as a means by which to assume a strategic role in leading subsequent partnership developments. The LLP was therefore, held as ‘an interesting’ and ‘potentially helpful’ means to catalyse partnership operations and practices, particularly where organisations shared roles, responsibilities, and Project developments.

Early in the life of the LLP, the decision was made to establish sub-groups in order to optimise opportunities in specific areas such as work related learning, work place learning, and ICT). The ICT Sub-group (LLP/ICT) served as a melting pot reflecting national, regional and local change and developments, supporting local learning initiatives, and where appropriate, seeking out new opportunities outside the boundaries and remits of existing projects  (and in response to the main LLP group). To those ends, the membership of the LLP/ICT group comprised of the organisations with prior involvement in various community ICT Projects, together with the Local Authority and LEA over different time-scales. These became involved with NGfL and other wider networks. Scenario 4 includes an unpublished report commissioned by the LLP/ICT sub-group, to which I presented during the formative stages of both the LLP. I have incorporated this in my research study. The Report served as an initial feasibility research study investigating the conditions that were influencing the developing agendas and what framed the concerns and considerations of the LLP partners.
So What?

The Projects typologically represented a plethora of activities that were highly complex, interconnected and interactive within and across each other. These activities encompassed many different forms of strategic and operational processes as the developments found a dynamic way of interacting with on-going, (un)directed change in the contexts to which they were responding and creating. Reporting each in isolation, via reduction or inviting atomisation of the project activities would be a misrepresentation of the dynamics in operation over the course of the reported activities. This demanded an approach by me as researcher that could discern and manage day-to-day complexities - for example, there were on-going political/strategic (power) struggles that: represented the different ideologies and logistical and procedural tactics and strategies that the partner organisations were employing in trying to find and deploy solutions on behalf of the beneficiaries; shifted the projects emphasis of reconciling those challenging issues at the expense of the declared aims of the project and what this should have provided for the key beneficiaries (i.e. young people and the wider community) as intended by and through the LLP.

Fig 11 indicates that the relationships between these key organisations responsible for Project developments were not equal at that time. For example, even though the events were short lived between the LEA and the college, there was considerable rivalry between them due to their catchment schools being encouraged to develop their own sixth forms, thus threatening the College of Further Education's potential enrolment base. Also, the EBLO did not enjoy good relationships with the LEA, for reasons explained in more depth in the Research Section, Conditions for the Study and Scenario 5.

The Projects were in one sense, under the circumstances prevailing at that time, a diversion from each of the respective organisations 'normal' or traditional practice. For example, the College of Further Education was engaged in the development of a
(virtual) network of colleges and Community ICT Provision that represented a new venture to increase significantly the means by which and levels at which access to on-line learning could be effected, though, its internal resources were very limited \[PM132] and substantially accounted for. The EBLO was predominantly concerned with education business links, work related learning and preparing young people for the future - the RCP was also a new venture into ICT mediated learning opportunities for the Company. The new LEA was in the process of being set up and had no history of providing substantial support for ICT in schools and systems in the catchment area \[PM133\]. Concern was being expressed about small to medium enterprises (SME) in the locality with regards to the disparities in knowledge and understanding about ICT and how it might contribute to effective day-to-day business processes. Then the preponderance of local SMEs had no fax, email, computer, mobile phone ... I need to point out that these comments are not referring to the beginning of the 20\textsuperscript{th} century, but to 1998 \[PM134\].

While the main project developments were contractually run or directed of ‘owned’ by a specific organisation, overlaps occurred in interest, contribution and participation by the participants for different reasons. Exemplified in the following network maps, the notions and practice of partnership, stakeholder, beneficiary, motive, driver, and relationships was variable.

Fig 12 indicates ‘ownership’ of the respective projects, mainly based on contractual obligations. This is not to suggest that other organisations did not ‘contribute’ to or influence other projects.

\textbf{Fig. 12} \hspace{1cm} Project ‘ownership’

‘Ownership’ was generally a contentious issue for several organisations, despite the public claims of and for ‘Partnership’. ‘Ownership’ (even when it appeared to be defined by history, organisational, legal and/or contractual obligations and accountabilities), was from time to time, contested for some projects. ‘Giving ownership’ to stakeholders and beneficiaries could represent an essential form of consolidation, though this meant that the individual interpretations, needs and interests may become manifest in different ways and not necessarily according to the wishes or accountabilities of the ‘host’ or contracting organisation.
Fig 13 represents the sector interests (EBGC) across the various Projects. The only ‘weak links’ are between the Unitary Authority’s Community Project and business, and between the community sector and the NGfL.

**Fig. 13**  
*Stakeholder interests*

Many sectors and organisations participating within the LLP were openly supportive of most forms of project development irrespective of the extent that ideas and opportunities grew from such collaborations. The red lines indicate ‘ownership’ while the grey lines between projects show cross-fertilisation or shared interest and/or commitment to the project of another organisation.

The illustration Stakeholder/Beneficiary links (Fig 14) shows that, when the Projects’ ‘beneficiaries’ are identified (schools, young people, business, community), the interest or participation of stakeholders also shifts within the networks. This issue is also discussed more fully in the Scenarios.

**Fig. 14**  
*Stakeholder/Beneficiary links*

This diagram suggests that the rhetoric of support and mutuality was pronounced by sector policy documentation and transferred to key representative organisations. It emphasises the key aims at that time to support learners within and across different contexts (e.g. between phases of education, within different locations, etc.) and the overlaps between the different projects in support of those beneficiaries. The relationships between ‘stakeholder’ and ‘beneficiary’ is also discussed more in Scenario 1 and illustrated differently in Fig 14, Fig 18 (Project rationale) and ‘Swings and balances, Fig 21.
Evident from the composite diagram ‘Stakeholder/Beneficiary links’ is the increased number of links and complexity that emerged from stakeholder interests in what was essentially, a ‘limited’ market. In some respects the size of the local community stressed the competition between organisations for ‘clients’ despite the claims for ‘partnership’, ‘cohesion’, ‘unity and consolidation’, terms that could have otherwise, provided a means for multiple organisations to find outlets for collaborative enterprise through fewer Projects.

**Questions, Issues and More ...**

The narrative of the Project outline section has given a summary of the main Projects and developments in order to be able to navigate the Scenarios and understand better how these are closely interrelated. While these developments occurred within a geographical area bounded by a new unitary authority, ‘Weigh in’ does not readily convey a clear image of time and the emergent properties or the extent that these initiatives were innovative, sequential and phased. Fig 15 (Project Timelines) gives an overview of the rate and scale of the project developments:

![Project Timelines](figure15)

**Fig. 15**  
*Project Timelines*[PM135]
There are three clearly identifiable features from this form of representation of the Projects:

1. The start and end times are rather ‘fuzzy’ - for example, a Project, (represented in blue), may have deemed to have ‘started’ from the time of its inception, when it was formalised by openly declaring it as an idea, or setting in motion its operational processes.

2. There may have been several start points or ‘phases’ or ‘breakpoints’ over the life of a Project's development, perhaps, as new funding or development opportunities became available, or the Project shifted its focus and rationale. The diagram RCP Time (Phases of development) illustrates further detail regarding the phases of development of the RCP as new funding, opportunities, centres, and other such developments occurred.

3. That the process of decision-making and implementation took longer in some circumstances than others. Certain organisational constraints or practices had a major influence on the rate of change and decision making within an organisation.

Fig. 16  RCP Timeline (Phases of development)

The two lines are indicative of (growing) ‘impetus’ as the Project[PM136] acquired funding and opened new centres. The major diversion indicated by the blue dotted line[PM137] is discussed in Scenario 5.
**Activity Section**

**Weigh in**

**Anticipated Outcomes …**

From a research study perspective, the most salient issues that emerged from activity centred on four main points:

1. the process of finding a means by which I could appropriately reflect upon these dynamics. The process of visualising and representing complex action required establishing a methodological commensurability (refer One in the Eye).

2. clarifying the form of these project developments/interactions (encapsulated by the Activity Section).

3. establishing the nature or bases of the social interactions that occurred in the name of partnership activity (Scenarios).

4. in clarifying the bases of the activities, establishing how these can inform our understanding of: partnership, learning, organisation and ICT (Scenarios).

**Focus, focus, focus …**

As explained in the Research Section, the basis of the naturalistic, holistic research approach drew upon the notion of ‘emergence’. In the sense that a narrowing of the field could have influenced the essential qualities that may have emerged, a ‘wide-angle lens’ or ‘distance’ was maintained where possible. Nevertheless, the predominant focus for the study at this stage was vested in two particular issues, namely:

1. **Partnership:** that is, how would partners come together to negotiate ideas and help take forward the learning agendas.

2. **ICT:** what influences would ICT have on the nature of those transactions.

**Bridging the gap**

The Scenarios offer insights into how the various partners, stakeholders and beneficiaries similarly related to the different opportunities for, and/or arising from partnership activity. They each focus on different facets of the community ICT Projects. The Scenarios serve to convey an image of the events, experiences,
practices and issues that emerged through, and were informed by the feasibility study. These narratives provide an abstract of ‘Practice in Action’, in which actions were represented through the central practices and ‘themes’. These are interlaced with detail that symbolised the dynamic contexts, actions, thinking and meaning represented through those practices and themes by reflecting on practice-in-action provided through different perspectives or lenses (model[PM138]). This not only provides deeper insights into the main events, experiences, themes and issues, but also emphasises the conditions that are central to the thesis[PM139], and further exemplified by Eisner (1998).

‘Each of these (different) explanations is in some ways plausible. No one of them is necessarily truer than another; it depends upon the perspective one takes. As one’s ability to take different perspectives grows, what is considered relevant shifts. The data one seeks change. The interpretation that is appropriate alters. Taking various perspectives is a way of examining situations from different angles. It is not so much a matter of ultimately achieving a coherent integration among the many perspectives, as one of being intellectually versatile or theoretically eclectic. It is a matter of being able to handle several ways of seeing as a series of differing views rather than reducing all views to a single correct one.’ (49)

NB: The key elements of ‘context, action, thinking and meaning’ (CATM) are embedded within each Scenario as they are seen to capture a particular set of circumstances. For reasons discussed in the Research Approach, it is neither realistic to ‘lift’ each as a separate component, nor are they singularly exclusive to each scenario or any other narrative. That these scenarios are highly interdependent emphasises further the synergy existing between them, giving an impression of collective occurrence in the autopoietic sense helps convey this as a cumulative and emergent quality. Offering yet another narrative as a synopsis (Scenario 5) does not seek to formally generalise, although it does allow for a certain naturalistic generalisation, and re-contextualises action in its various guises. Rather, it can be seen as a bridge between the scenarios and the approach, where the approach offers but one lens of visualisation and representation. Three kinds of sub-documents are provided in order to convey an image of the interrelationships between CATM in the sense of how these are subsumed within these practices.
**Scenarios** In one sense, these five narratives are intended to convey insights into a number of events that embodied practices, that in turn, shaped those events; in another, the implied linearity in them is a contrivance that serves to ‘simplify’ the events, actions, and thinking that may not have been quite as ‘cohesive’ or ‘contained’ as implied by the boundedness of the scenario. The scenarios can be approached in any order as defined by the reader and there is considerable overlap between them in terms of the sequence of events that occurred and the influences or issues that underpinned or emerged from the latter. (*Numbering of scenarios is for navigational convenience only.*)

**Scenario 1** Following the provision of ICT resources into four small rural primary schools made available through the introduction of a community ICT project, this narrative describes the influences this had on the staff and pupils as they sought to address and manage the implementation of new teaching and learning opportunities. It also reflects on the perceptions of ‘outsiders’ and how these related to the overall Project development.

**Scenario 2** Behind the provision of resources as outlined in Scenarios 1 and 2 was the notion of providing resources for young people ‘within a different setting’, and which could be extended to adults from that local community. Thus, this Scenario reflects on the perceptions, needs and interests of these beneficiaries in relation to the overall aspirations of the organisations or stakeholders.

**Scenario 3** focuses on the provision of ICT resources that can be used to extend learning opportunities through a computer redistribution scheme (CRS) and on the implications that arose from this kind of development. It provides insights into the nature of ICT provision from the perspective of the sponsoring organisations, the intermediaries, the recipients, and onlookers and questions the balance between technological functionality, potential, and adequacy within various learning environments.

**Scenario 4** While each Scenario reflects different facets of management in multifarious ways, this Scenario reflects on the more formal umbrella groups that influenced the superordinate, strategic developments at that time, and upon which the other scenarios enable introspection to take place within their own development. This scenario is the embodiment of unpublished research report that was
commissioned by the LLP/ICT as part of the process of partnership activity and how it might inform the integration of ICT infrastructures.

**Scenario 5** reflects on developments and projects that related in some way to the events and experiences of the key participant groups identified in the other scenarios. It also presents, in another way, the salient principles and issues that emerged, grew and developed over time. Thus, it provides a bridge between two dimensions (represented by the Research and Activity Sections) whilst synthesizing those key motifs that underpinned or emerged through action, contributed to the main themes, and formed new patterns and textures, irrespective of whether or not these may have been apparent at the time.

*Fig. 17 Project / Scenario links*
Scenarios
Scenario 1  Stakeholders and Beneficiaries?

Who?

This Scenario provides insights into the ways in which people, having been offered a loosely structured opportunity to enrich teaching and learning arising from the provision of new ICT resources. It indicates how the participating organisations dealt with this innovation as a means to realising their own organisations' ICT mediated learning needs and interests, as determined by them. The four small primary schools that provide the focus for this endeavour were part of a Communities ICT Project. From 1998, these schools were provided with some new ICT resources that met both the aims of the Project (as described in Weigh-in) and those of the school, essentially, to enhance learning opportunities with, about and through ICT. This Scenario critically describes the interactions that eventuated within the school community amongst the staff and pupils following the installation of a significant addition of new resources. It also reflects on the strategies of adoption, adaption and implementation decisions as a result of the infusion new technologies.

Scene setting

Following a pilot Project in a small rural village community[PM141], where young people were afforded opportunities to attend evening sessions to access and use computers[PM142], the active role of the lead organisation enabled the chance to extend this further[PM143], in a number of different ways[PM144]. As a result of their efforts, an agreement was made[PM145] with the local primary school to receive an extensive range of new resources[PM146]; that could be used:

- for their own purposes during normal school hours
- by the young people in out-of-school sessions[PM147]
- in extra-curricular activities by the wider community[PM148]

The implementation of this development[PM149] was such that this opportunity was also extended to a number of other primary schools[PM150]; within the local authority in which the research study took place. It is important to point out that the partnership or community developments were the drivers advancing, and enabling the further
development of the Project - this being ‘to provide learning opportunities that addressed the needs and interests of the young people attending the extra-curricular enrichment (evening) sessions’. As this initiative underpinned the opportunity for providing the resources for the primary schools, it inevitably influenced other aspects of the overall development in the Project schools. Offering the resources to the primary schools not only provided the school with opportunities to assist with their ICT curriculum development and the applications of teaching/learning strategies for staff and pupils, it also ‘added value’ to the overall Project aims (see p52). As such, this was not a ‘school’ Project per se. It became a concept that most of the schools (and later, the LEA) found particularly difficult to understand and thus, to come to terms with:

“It is not a ‘schools’ Project even though they (schools, LEA) think it is! It is the fundamental reason they ‘want it all done for them’, why their concept of and need for control and ownership doesn’t fit, and they will never understand that the fallibility of the proposition is largely in their hands!” (a business member of the RCP Steering Group - B1/Senior Manager/1)

Fig 18 illustrates some of the key attributes and relationships that led to the idea of using primary schools as hosts for the Project.
'RCP Project Rationale' (Fig 18) illustrates a number of complex relationships that collectively, indicate the EBLO's rationale for working in partnership with the local rural primary school(s). Essentially, this model (described more fully in 'Appendix 2') draws together and represents many of the issues and potential opportunities relating to the unique circumstances during the formative stages of the Project.

Choreographers and stage hands

This Project had a steering/strategic group[PM156] that had some responsibility for its development[PM157], and upon which the headteachers from various local neighbourhood schools became participants. Thus, strategic developments occurred in a number of ways and with different forms and lines of influence. There was no clear boundary between these strategic developments that seemingly were specific to the schools represented in this Scenario and those described in the other scenarios[PM158].

The overlaps between key aspects were simply that: ‘the schools’ wanted[PM159] the resources for their schools as ‘they’ had a view as to what this could enable[PM160], while also negotiating and agreeing to the Project aims. Though these conditions in some cases did impinge on some of their (more immediate) needs and interests[PM161], the schools never fully undertook to come to terms with the wider initiative[PM162] and partnership expectations.

Rehearsals

The sequence of development for the four schools outlined in this scenario[PM163] was largely a matter of replication and occurred within a reasonably short time-scale. In fact, it was little over one year, three of the primary schools had been offered ICT resources as part of the communities Project development and each agreed to the same basic conditions for acceptance of the resources. Inclusion of the fourth school referred to in this scenario (School 6) occurred in ‘Phase 3’ of the Project’s development (i.e. c.18 months later[PM164]) as a result of successful negotiations between the EBLO and business sponsors and other funding agencies. Negotiations with the headteachers and Governing bodies led to an agreement[PM165] that
enabled the developments to proceed amicably, if a little warily[PM166]. Each of the schools was provided with similar resources[PM167], and offered free support[PM168] that was largely made available via the Project Manager and four ICT tutors. These tutors worked in the primary schools at ad hoc times, either providing incidental support[PM169], or working with young people in the ‘out-of-school-hours’ sessions. There was an open relationship between the schools and the Project Manager and tutors were welcome to visit during classes, chat with staff, pupils and headteacher - they were part of the ‘extended team’. These links also provided a rich source of information about the Project’s strategic development and teaching/learning practices in the schools[PM170].

Underpinning the intention of enhancing learning opportunities with ICT the EBLO, as the main stakeholder, had two primary concerns: first, that the resources sought were actually needed, and appropriate to the aspirations, needs and interests of the beneficiaries - funding and resources were scarce enough without exacerbating this further by poor evaluative judgements - hence, the logistics of provision were crucial[PM171] to implementation success; second, that appropriate support was available to ensure that the beneficiaries benefited[PM172]. This meant ensuring from the provider’s perspective that:

a) ‘the beneficiaries gained from the access to the resources provided’

b) ‘technical’ issues could be quickly and easily overcome in a timely manner. e.g. that users had a basic technical knowledge of how to deal with the resources and insight afforded into how these could be integrated into a learning environment.

The participating primary schools did not appear to have difficulty interpreting, and relating those Project aims to align with their own organisational aims and objectives[PM173]. It was generally agreed[PM174] from the early stages of the Project that interpretations and processes of implementation could and should be different and adjusted to ensure the best possible fit. Nevertheless, differences in interpretation and diverse expectations in due course led to a different understanding and this had a major contributory influence on the Project’s eventual future[PM175].
Commentaries

The following comments by participants in the schools and the Project team give a number of indicators about how they thought about the opportunity, and how this fitted different insider/outsider expectations. Some comments were part of day-to-day conversation with school staff, but some emerged through formal appraisals conducted with various members of the Project team. When the proposition was first negotiated with the schools, it prompted a variety of responses from participants. For example, at the opening of one of the new school ICT suites, a headteacher commented:

“While he (the project tutor/ESA) is up there in the air flying around with the kids, getting excited about what all this wonderful technology can do, me, I’m down here on my bike. But I will learn! We owe it to the children, to ourselves, as society becomes more and more techno oriented. Its hardly possible to do anything these days without technology playing a key part, even when we don’t realise it. Perhaps one day in the not too distant future, we will have computers in schools and be using them as if they were as incidental as a text book or the school bell …” (School 1/HT)

This indicates that, while the headteacher did not consider his/her own technical ICT skills and understanding to be well developed, s/he was nevertheless, clear about the strategic vision of the Project, and had, in consultations with the EBLO and school’s governing body, established a sufficient rationale to justify engagement in the Project.

Through my discussions with the teachers, they maintained that several aspects of the Project were not clear - the headteacher had only passed on what s/he thought the staff ‘needed to know’. A teacher later commented:

“When I first heard about the ‘sponsor organisation’ you know wonderful and then I felt oh blimey, where is it going? And then in terms of access, there was a lot of discussions where they should be located, start of with locating it in the main school, which would have meant difficulties for me because I would be expected to use them, but if I am down here, so obviously we came to a compromise, they were located down here better for the “evening sessions”; anyway, I thought, I can’t understand this, you know, I have no idea what they are talking about, but it actually turned out fine, because I was just picking up what I need to know along the way and gradually, I mean I had to get used to one aspect of it. I’ll go and ask (the tutor). If I don’t know how to use this, you know like the scanner and so on and obviously when the Internet put on get the line in and focus on the conferencing thing. Then obviously again, I am going to look towards him to help me, but I do not know. So, after the initial concerns of oh, oh, what am I going to do, it’s yeah, I was pleased because of the equipment will come in but a little bit because it was about what they really expected me to do with it. I don’t know, I sort of thought I hope they are not expecting me to be scanning and using videos and my Goodness knows what, in the first week! But it wasn’t like that at all - much better, much less confrontational or frightening that I ever thought it would be.” (School 1/ICT co-ordinator,)
“Bizarre! I mean, why should an organisation come along and give a school several thousand pounds worth of equipment - there had to be a catch” (School 2/Teacher/2)

Clearly, from the above comments, there was a great deal of uncertainty about the Project and its implications for staff personally and professionally. An ICT coordinator in another school gives some further insights:

“What was the catch? What they (the EBLO) were going to expect from us in return in terms of the equipment! And I still don’t know! Very exciting though - I thought when I saw the equipment, I mean wonderful! Then I thought, this is all going to land on me - its worse than admitting you can play the piano in a primary school. Suddenly instead of sorting one or two computers the number had tripled, much harder, different. I had only just got a windows machine at home - my son uses it more than me, they seem to just get on with it, Its harder for adults.” (School 3/ICT co-ordinator)

When the Project Team was discussing the progress of the Project the members described the initial stages and reflects on the point made by the ICT Coordinator as follows:

“With hindsight, I think it will be reasonable to say, a good word would be slightly bewildered. I don’t think they (the school) really understood that anybody could really come along and give them £12,000 worth of equipment and say it’s yours! I hope you get on with it! But we (the EBLO) will support you and any training and advice and guidance and technical support we will give, it will be free! I don’t think they fully, I don’t think they (the school) have got over the shock of that, so that wasn’t a very good start! Yet in a way, they didn’t actually have to understand why we did it, the bigger picture, because it wasn’t a condition. The teachers didn’t really have to understand too much about the community issues, because it wasn’t really their problem. They only had to basically just get on and draw on the opportunity” (School 1/ICT co-ordinator)

Those points were supported by further comments from the Project Manager in a later discussion with other EBLO managers:

“The headteachers at the time were pleased and appeared enthusiastic. Of course, for anybody to come and offer that kind of support for the school to help them profile their school, yes, of course they will be delighted and they were. The IT Coordinators were less enthusiastic and on reflection it could be that suddenly they were being confronted with something that put pressure on them and in some respects they were suddenly be going to become far more accountable to technology that they have never been before. It’s easy to be an IT Co-ordinator when there is a computer in the school. It’s harder to be an IT Co-ordinator when there is a computer in every room and you’re responsible for advocating effective use of it most of the time and you keep increasing the demand and you can see you need a real enthusiast who would feel comfortable, when suddenly saying you’ve now got four in your room with all of this functionality. And what about incorporation into teaching and learning practice? So, there was, you know again with hindsight there were quite a few demands being placed on them and I don’t think they were so enthusiastic, which is sad!” (EBLO1/Project Manager/1)
S/he went on to comment:

“... but one of the problems was that a teacher might have been made responsible for ICT irrespective of their expertise or interest - someone had to do it, most of the schools only had three or four teachers. You wouldn't expect the 'one that got nabbed' as music coordinator to rush out and learn to play the piano would you? I think when the Project first started the majority of staff didn't have computers at home, and if they did, it was the 'family's.'

Training and support

An important part of the initiative to place the resources in primary schools was that it was an important stepping-stone for the EBLO to build strong links with the primary schools and offer comprehensive support - not a matter of "dumping and running". To that end training and support was a key element in the discussions with the headteachers - this included the offer of technical training and also covered further aspects of curriculum integration, teacher/learning strategies, with any of the teaching staff:

“That is really helpful. However, I think it would be really good for the ICT coordinator to cover staff training - good for their professional development. We have a pretty good idea of the national curriculum requirements, know what the children need so its just a matter of adapting what we know and doing on a daily basis.” (School 1/HT)

Another headteacher commented, when asked if any training was necessary:

“No, I think what we do is we consolidate what we've got already. [...] And also using the equipment such as the scanner perhaps a bit more, the video camera a bit more ... Nothing too adventurous! There are some things we definitely want to develop like the keyboard skills, which we don't need the equipment for.” (School 2/HT)

Another said:

“No, that's not a problem, not with my staff. Basically most of the staff and myself are proficient for delivering up to the equivalent Key Stage 2 technology. I wouldn't say we are beyond that, but we can certainly get children to function at a reasonable level.” (School 3/HT)

Several teachers expressed this differently. First, they were evidently not aware of the offer that had been made to the headteacher; second, they had different views about the need, importance, of training at different phases of the Project’s
development. Some of the following comments were made to a headteacher visiting
the schools[PM176] who expressed some interest in the Project and who enquired
about technical support and training. S/he mainly highlight the different perceptions
of need, responsibility, and commitment:

“This is a problem. I mean I have training days to teach the rest of the staff how to
use it, but you see that’s not enough either and of course some of the staff have no
computer background, they don’t have the advantages I have and so when
something like this is put in front of them they haven’t got a clue what on earth to do
with it, you know and even if you are given all the machinery in the world and you
don’t know how to cope with that! Of the training days we have in a year, how many
do you think can be allocated to ICT? Anyway the school can’t afford to send people
out on courses - I learnt most of what I know from my son! (School 1/ICT
Coordinator)

And the ICT Co-ordinator in another of the schools:

“I would say, let me think, fifty per cent of the staff of the school have adequate IT
skills and I am one of them! So, we are talking two teachers! And it really starts with
me! And I’ve got to make the time and then my colleagues also. Now I have a
windows machine at home, and a word processor, I have got into it more and can do
what I have to, and I know a lot of staff because they are not very familiar with IT, just
see it as another thing to worry about rather than see it as a brilliant resource to use.”
(School 2/ICT Co-ordinator)

A Project tutor gave a somewhat different version of these issues, instead
suggesting that there seemed to be a cycle of justifications based on one assumption
that then led to further assumptions:

“I think at the time some of the IT Co-ordinators wouldn’t have minded some insight,
but bear in mind, at home they had got Windows ’95 and Word, so therefore deemed
themselves ‘competent’. And in that respect, because they were ‘competent’ the
Headteacher thought they were ‘competent’, so all they really needed to do was just
sort out just take a slight shift across from one system to another, that wouldn’t be
difficult, wouldn’t it? So, therefore the Headteacher considered that any training in
the School that could be done for the staff, the other staff, could, should actually be
done by the IT Co-ordinator in the School.” (EBLO1/Tutor 2)

By way of contrast, the Headteacher in School 6 said in response to the offer for
training:

“Great! Anything you can. We can find some time to brush up on what we think we
know. We will arrange a time to chat over the main things we can do already and
then you might like to map in what facilities are offered in the new computers so we
can take better advantage of them. Better still if you can do it with some of the kids
and we can sit in we can kill more than two birds with one stone.”
This was typical of the way that particular school responded to the technology, but was the only school to take up on the offers. The need for training was based on the insights of a headteacher or ICT coordinator whose personal knowledge and attitude determined the knowledge and competence of others. This raised a research question: if they, themselves, didn’t know, how could they then know what they or the others knew?

“Usually the headteachers passed on the responsibility of training to the IT co-ordinators because the headteacher may have a perception of the IT co-ordinator should or could deliver training to the other less IT literate staff. And that begs the question to how literate the IT co-ordinators were and whether that was being judged by a person i.e. the headteacher, who was actually not IT literate, so how could he really judge other than the fact that the IT co-ordinator told them, or implied that they were more IT literate than the headteacher. So, how does the headteacher judge?”
(Project team – EBLO1/Tutor/1)

Performing rights

When teachers in the four Project Schools were asked about what they felt the resources had enabled, or what the major benefits had been for their school, their replies also gave insights into their perceptions about ICT competencies:

“… they are getting used to the machines they will be familiar with in life. I mean this is the current technology. Previously they were using very, very old machines. It’s frightening to start off with but when you start realising it is far easier to use than the old machines, far easier! I mean they are already starting to realise that is the same for printing and saving whatever you are doing. So the fact that its current computers, not ten, fifteen years out of date, and also the number as well. I am going back to just having the opportunity to use more IT skills because once they get improved surely the work would be done much quicker because now you’ve got three instead of one, you know just the numbers as well. (School 2/Teacher/3)

“The choice of software was good - it’s not the computers. (School 6/Teacher/2)

“The fact that we had five computers, we usually have one to 25 pupils, so we had a far better ratio to achieve. That meant that a lot of children even if they were in pairs or threes got hands on experience so it was a numbers question. Then the Claris Works has got parts the spreadsheet, the data handling, the word processing, the drawing, the painting. Actually the software.”(School 2/Teacher/3)

“Once the children could get into word processing if they knew actually how to word process then they could get into the others and they knew how to do that. So because they are familiar with actually the menu on the Claris Works it enabled them actually to go and do other things and pick it up. It was good to see how they picked it up so quickly - I couldn’t keep up really.” (School 1/Teacher/2)
In relating those issues more specifically to the difference the computer technology made to the pupils learning the teachers made various points:

“Well at the beginning teachers would turn it on but now they don’t. I think now they have learnt that the children have to actually know how to operate the machine right from the beginning. So they come, they put it on, they know how to log on, they know how to do a task and well they know all the differences now. They seem to know which menu to pull down. They know how to go across the top. They are not worried at all. They have to be able to read don’t they? Because if you can’t read, its all right having the pictures on the windows but when they are going into edit and file they have got to be literate and numerate.” (School 1/HT)

“… actually mine knew how to draw a picture and they found the drawing program but they didn’t necessarily..., this control, this motor control, this is something we are building up, which helps them with painting things as well, to control a mouse, somehow it’s not easy but somehow it helps them with their sense of control, there fine motor skills will improve, definitely. Just knowing how to load, write, save, print is just what they need to know.” (School 2/Teacher/3)

“The scanner is a wonderful thing, yes, they can do that. They haven’t used the conferencing camera and the Internet but they are going to have those facilities, but they can do a lot, even if they don’t know it because sometimes they don’t know, children they do not know what they are doing when they are looking at that computer screen. They even know how to stop it going to sleep even though that annoys me. They do, they have learnt a lot about them.” (School 3/Teacher/3)

“Well, actually it surprised me how many of them picked it up as quickly as they did, particularly some of them, some of the less able children. They immediately seemed to know how to save and how to print, so I was quite pleasantly surprised.” (School 1/ICT Coordinator)

The Project Manager and tutors gave a different perspective on the issue of staff training and competence, those points giving a clear indication of the relationship between the teachers and pupils skills and attitudes, and the extent that the resources were used:

“… there were things like ‘Quark Express’, ‘Page maker’, ‘Illustrator’, ‘Photoshop’, programs that not long ago, you would have found in publishing bureaus, there was video-conferencing, there was real-time video capture and editing, digital editing capacities! We didn’t ever expect the primary schoolteachers to embrace those technologies. They were largely speaking for the ‘evening sessions’ particularly if we got business people coming in to run session for the teenagers who in most cases could relate to those technologies very, very quickly. There was no, absolutely no pressure on the teachers to incorporate that kind of technology into their curricula at all! But, that’s where ‘School 6’ stands out - not just their enthusiasm but their whole approach to letting the kids have a go, not being frightened. They saw it was their task to provide an opportunity, excite the kids, support them, ask questions, and make sure it fitted with the basic teaching/learning requirements – they were one of the first schools to use the digital video and editing equipment.” (EBLO1/Tutor 3)
“The privileges made available to the pupils or to the staff, were very carefully selected so for example, to start with, they perhaps only had access to Claris Works and CDs. Even with the interface for Word and Excel, I actually went through the program with the ICT coordinator and said ‘Do you really need all these things in this menu? Shall we customise it? Here is an example of a customised version of the program where we have taken some items out and simplified the interface, such as the icons are bigger.’ We offered customised versions to suit different ability groups and explained that we could limit access to these and other things. But they simply didn’t want these templates, even though they thought some ideas were ‘interesting’ and they didn’t have to do it themselves. Having said that, if we are looking across other schools, because if you want to situate where these people were coming from, with their enthusiasms and motivations and the way they did or did not embrace the technologies, ‘School 6’ would have torn your arms off to improve opportunities for the kids. And yes, she left her kids, the 8 and 9 and 10 year olds that is, to play with the digital cameras, the digital camcorder and do video editing, because to her the technology wasn’t an issue - consequently they got interesting results with them. Unfortunately some teachers made it an issue!” (EBLO1/Project Manager/1)

“We fully appreciated that the technology was new for a start, that they would not be familiar with it. Suddenly, there were three or four computers in one room, so you could suddenly look at a totally different range of issues. It wasn’t just a matter of, did they have the technical skills or techniques to do tasks with the technology. Could they start it, could they stop it, could they run it, could they print, could they open a program, could they word process? It wasn’t even as simple as that, because we understood that they would not only need to gain a basic idea of those fairly basic skills. Because there were four machines, there would be new questions of management and integration and perhaps teaching techniques and style and learning styles and opportunities which, would have been completely new to them at the time. And yes, we offered support and training on any of those issues individually, separately with the IT co-ordinator, with the staff, with the headteacher, working with the pupils, what you like, but virtually none was picked up as an issue. Bear in mind also, at the time, it has just been running for a year on, I think, I can’t remember which came first the Literacy or the Numeracy program, they were just introducing the second but also NGfL it was going to start a year later, so it was even prior to any information and guidance and support relating to NGfL, whether was from BECTA at the time or NCET or the LEA, bear in mind there was no LEA in the area, so really they had no other alternative support mechanism, but still didn’t use us even knowing it was offered for free, even they knew that our background was from education or that we could even find alternative providers if they didn’t like our style or even our personalities.” (EBLO1/Project Manager/2)

“We were quite adamant that the technology put in is that easy to use. It really is a matter of ‘point’ and ‘click’ and if you can’t do that then ok. You’ve got problems. If you can’t read ‘Bold’ and ‘Underline’ well, ok. It is a different issue. In that respect, I don’t think that was possibly the problem. In terms of the basic skills they were two things. One was whether they said they had it and yes we were assured by each of the teachers that ‘oh well I’ve got a computer at home. I use this. I’ve seen that, if I click print it will print, if I click save it will save, if I click quit it will quit’. They understood that. ‘If I cut, copy it will cut and copy!’ The next bit is, if they had those basic skills, could they therefore, integrate it into their teaching? That’s a completely different question. Could they incorporate that basic functionality into their own teaching process? Could they incorporate it into the learning process? There was less evidence that they were doing that and the question of course would be why is that? There was the question of attitude, was it time, was it fear, was it confidence, was it all sorts of other issues that stood in the way. Because it was quite clear they had the basic skill to be able to ‘open’, ‘close’, ‘quit’ say ‘print’ you know, type words
According to his/her opinion, the teachers in the Project schools had the basic skills to operate the computers, however they could not incorporate the technology effectively into the teaching and learning. Part of the problem was a difficulty on these teachers’ behalf to enthuse and allow their pupils to experiment with the technology. The Project Manager was more specific about the issue of ‘embracing the opportunity’ by saying:

“I don’t really think the kids were given the opportunity to embrace the technology either. And what really saddens me was the kids’ enthusiasm for the technology was fantastic! And they were never given the opportunity! It would be like taking a class of kids swimming for the first time or how often do they go swimming to the pool, and you get them all lined up by the side of the swimming pool in their trunks and say ‘right, I want you to look at the water. I want you to imagine how warm it is, what it would feel like, go and get change please!’ And it was being dangled in front of them all of the time. I saw kids sitting down and literally shaking with excitement that the opportunity to use that technology and then been basically told to go and sit down! It was just being taken away all of the time! And eventually of course the kids were becoming dismissive of it! It was a tragedy in that respect!” (EBLO1/Project Manager/1)

Each of the tutors who had worked with the teachers and the pupils had similar comments and were frustrated more by the lack of opportunities for the pupils than the level of competence of the teachers:

“I think there was an occasion where the teacher was expecting to do some work with the digital camera. S/he didn’t own a digital camera - fair enough she didn’t understand how to use it and she was expecting somebody else to show the kids to use it - take a picture, print it, cut it out, add it to a calendar to take home to mum. When I turned up and s/he told me s/he was going to have to think of something else to do as the ‘demonstrator’ was ill. I said ‘I will show them if you like.’ So, I just took a couple of kids and I asked them to tell me how they thought it works - which they could - hardly rocket science is it? I then demonstrated the advantage of the digital camera - ‘put the card in there, drag the icon onto that, edit it, print - now you show
me and tell me what you are doing.’ And they went straight through it. ‘Good! Now just grab those (pupils) over there. I want you to now to explain and show to them what you just told me.’ Which they did. ‘Right, now you two get on with editing your picture while these two show two more (pupils). And the speed and the capacity for the way they picked it up was as quick as I expected it to be. They embraced the technology, they embraced the opportunity, they were enthusiastic about it, they found it easy, it was exciting and they just simply did it because it wasn’t really a difficult task. I explained to the teacher what we have been through so any of those should be able to explain to you or anybody else in the class what to do and how to do it.’ ‘Great’, s/he said. And I know they didn’t do a thing with it after I left! S/he made them sit down and they moved on to something else! And I know because I asked the children afterwards! That was one of many examples! The problem is that the teacher at that stage no longer needs to know what to do, how to do it with the technology. They didn’t actually need the basic skill of how do you operate the camera! For Christ’s sake you turn the thing on and you push a button on the top! Anyone knows that! Because it’s not different, because it’s a digital camera, for Christ sake! Getting into the computer that was different and that’s what the kids did. In fact they actually had to play around with just chopping bits out as well. I said, ‘well that just like you do in paint, isn’t it?’ ‘Oh yes, exactly the same in paint!’ So, it was nothing radically new about the program, once they got the image in. It is just the process of getting it out of the camera, into the computer. And they even print it with something there. So, the teacher didn’t have to know what to do and how to do it so long as the kids knew what to do and how to do it. What the teacher needed to know was ‘why’, and what it will then enable. What kind of activities could that promote? What scope did they give him/her? How could s/he incorporate this into languages or into geography or into school trips or into whatever! How could s/he incorporate it, where would s/he incorporate it, when was a good time to do it? And that’s what they didn’t want to know either! They never took it on school trips or used it on fete day or concerts.” (EBLO1/Tutor/1)

Further similar comments were made by the tutors who were working in Schools one, two and three about the teacher/pupil, teaching/learning relationships when opportunities to integrate ICT emerged. In contrast, the following comments were made about School 6:

“I was teasing (him/her) the other day and said ‘Ah but I bet you don’t use ICT in every subject do you, to which s/he replied that s/he did. So I asked about PE (physical education). ‘Oh the kids had great fun with that - we did a mini Olympic games. We arranged via email, a number of activities with 10 schools in different parts of the world, recorded the results and exchanged them, and a few pictures, made charts, graphs and put the results into our new website. Have you seen our new website - the kids just finished it last week!’” (EBLO1/Tutor/3)

A headteacher from a different school also provided the comment:

“I go round and see the computers are always on, they have fascinating screen savers!” (School1/HT)
Reflection-on-Action

Various precedents have been set that underpin the nature of change and development in education. Some of the ‘important ones’ are laid down in policy documentation and ideological literature that enthusiastically expounds the virtues of adopting particular approaches to teaching and learning, to the incorporation of ICT into those processes, and the long-term benefits this will have for schools, teachers, young people, businesses, the economy, society, the future.

However, some precedents are more evasive, circumstantial or incidental yet representative of the system, and will perhaps only over time, find some effective explanation or resolution. Irrespective of legislation or eulogies, education is nevertheless faced with the issue of deciding how it can actually deal with the concept of opportunity including the ability to filter out the meretricious, and how to make it work, rather than assuming it is a recipient of opportunity and that’s the end of it. After all,

“Teachers are creative, engaged in the important processes of empowering young people, and ensuring that common-sense prevails … it’s just a matter of establishing conditions that are most conducive”. (B2/Senior Manager/2)

As can be seen from the Project timeline diagram (Fig 15), a great deal of activity went into accruing project funding, developing relationships with a host of agencies that could offer various forms of support, or drawing on the opportunities and extending these in a variety of ways, including extending the opportunity to schools and encouraging them to engage for the benefit of the young people. The nature and speed at which the EBLO was empowered to pursue ‘opportunities’ that potentially contributed to change, improve standards, and the enhancement of learning opportunities, etc. did not appear to be congruent with the aspirations and change priorities of other organisations. By the time the EBLO had made the judgement that “the returns from investing the resources into schools was not commensurate with expectations”, “too much of an imbalance between input/output”, and withdrawn their support for future development of ICT in the schools, the schools were embarking in Year two of the NGfL.
Having invested a considerable amount in the provision of high quality resources, technical support and incidental advice over several years for each of the primary schools, the eventual decision by the Project Team was to not only withdraw further support from those schools, but also that such opportunities would not be offered to primary schools in the future. This decision was not based simply “on account of other ICT project developments that had occurred since the beginning of the Project”. Furthermore, the perceptions that informed the decision had been formed over the entire period of the Project, not only from observations by Project staff but also support by independent comments from people known by the EBLO who worked closely with the schools.

**Widening participation**

The EBLO was in a privileged position of being able to work closely with many schools and provide resources and opportunities that could potentially, enrich the curriculum, support staff development, and influence the quality of pupils’ learning. That position extended well beyond the ICT Projects outlined in this thesis. The company stated that they had ‘many other commitments to consider’ and which ‘questioned the suitability and sustainability of continued investment’.

General perceptions that led to the arrival of this decision within the EBLO were that, on balance, “the overall responsibilities were not sufficiently shared”, and they (the EBLO managers) expressed “disappointment over the emphasis of control and ownership”:

> *Without that ‘ownership’ it seemed one never really felt there was full ‘control’, despite the fact that this was not a school project, and as a Project, was far more complex than the schools or LEA could grasp*. (EBLO1/ Manager)

The EBLO considered that the notion of ‘adequacy’ depended on complex interrelationships with other conditions, needs and interests that extended beyond the school. Two years after the commencement of the project, NGfL funding via the LEA provided each of the schools the opportunities to consider how the existing ICT resources in the school could be enhanced. Scant information, advice and guidance (IAG) was offered to schools by the LEA. At this time, the teachers’
knowledge in the Project schools about technological specification was ‘limited’\(^{\text{PM181}}\), and most generally bought more computers. In the case of School 1 and School 3 additional funding from an additional independent source enabled the schools to purchase a server and network the school. A year later, neither school had turned on the network hubs or set up the servers to store pupils or teachers work. School 2 bought five more computers and integrated these into the existing network, only to remove the earlier computers “as these were now nearly three years old”. These became part of the computer redistribution scheme and were allocated to other schools.

EBLO judgements about the use of computers in the Project schools not only took account of the views of the Project Team (i.e. all the tutors, and the different managers involved in the Project development) but also considered, for example, criteria outlined by NIAACE and BECTa (1999); relationships between functionality, capacity, potential of the resources as demonstrated by teachers and pupils usage; the extent that potential/benefit had been realised; and levels of access to the resources during and out of school time. These points are discussed more fully in the Activity Section Scenario 5.

While this scenario may seem critical of these four schools in demonstrating their capacity to adopt and adapt to new opportunities, and seems to urge them to take a more critical, yet creative approach to enhancing learning opportunities and ICT, there are other complexities that also contributed to the overall perspective. At the time of the study and these Project developments, the EBLO were aware of many other pressures on schools, for example: numeracy and literacy schemes/hours, curriculum changes in other subjects such as science and ICT, NGfL, Ofsted, added to which were the new expectations resulting from the Project, and of course, the introduction of the new LEA, bringing with it, additional forms of accountability, pressure and expectation. Where applicable, these were also taken into consideration by the EBLO in forming a view about the Project outcomes.
Other economies of scale and ‘value for money’

The overall investment in the Communities ICT Project over a four-year period exceeded c£0.3 million, largely accrued from private (e.g. business, charity) sources, rather than public funding sources (i.e. government funds). Of that, c.£100,000 was spent on resources (equipment, tutors, technical support) on the four schools over four years. That the EBLO withdrew from actively developing the Community ICT Project in collaboration with and through schools has meant that:

a) while the EBLO had been highly proactive in generating interest and support for the overall proposition, the company had come to the conclusion “it no longer represented ‘value for money’ in hard economic, strategic or educational terms”. Irrespective of the criteria, and whether schools believe this is an accurate representation of the ‘facts’, this perspective was not a healthy one for schools, particularly as current trends are at the time of writing, placing greater onus on schools to develop and refine partnership arrangements with other organisations and other sectors.

b) despite the Project funding initially, being ahead of national schemes such as NGfL or the New Opportunities Fund for a further two years the EBLO had sufficient momentum and interest to continue attracting funding which it diverted to community groups that were not receiving statutory funding, and which also fundamentally supported ‘enhancing opportunities for young people’. At the time of writing, claims that there were ‘significant pressures’ concerning the use of ICT in schools included: the matter of ‘sustainability and growth’ in terms of ‘maintaining levels of provision’, ‘keeping up to date with resources’, ‘meeting increasing demand’, and ‘finding adequate and appropriate support mechanisms’ (BESA 2003). The local schools lost a considerable asset in terms of the support and interest that had previously been expressed in ‘education’ or ‘schools’ by the various Project sponsors. Yet, a major contributory factor to the EBLO withdrawing from the project was that, “overall, the nature of relationships and associations that were emerging from the Project occurring in schools were such that it was no longer beneficial to us” (EBLO CEO). In this sense, the balance of ‘mutuality’ had shifted such that it appeared to the EBLO that: “schools were being critical of the technology, of the EBLO, of pressure, of time; they want ‘more’, but want ‘less’ … an issue for which we alone are neither equipped nor responsible.” (EBLO1/CEO)
The EBLO commented that it recognised that:

“New legislation had shifted the agenda and technically, we no longer need to be a necessary part of that development. Time has changed things. Schools have now got a more formalised, even statutory basis for incorporating ICT into teaching and learning - not that they like that either, but we recognised that we were no longer the best means for them to move on. It is right for them that the LEA or contractors provide that support now - perhaps they will be happier with things that way!”

(EBLO1/CEO)

By way of contrast, in the first year of NGfL the Government grant to the LEA was just over £300,000, which was spent on improving ICT provision in primary schools in the local authority[PM182]. This was matched in the following two years, of which £160,000 was delegated to primary schools - thus over a three year period, each primary school received a total of c.£6000[PM183].

Irrespective of the legitimacy of the judgements being made by independent agencies, whether or not they were objective of subjective, whether they were underpinned by legislation or written policy, whether or not they were acceptable to the education sector, whether or not the redirected funding streams were more appropriate and effective that had otherwise been invested in schools, the perceptions and decisions that were taken by the EBLO were not taken lightly. They were informed by developments that emerged over several years, and informed by close contact with the key participants. The company had attempted several different approaches to overcome the issues but reiterated the comments of another business that had been drawn into sponsoring the NGfL:

“Schools think they have a clear idea of what they want, and how to achieve it without the understanding of the accountabilities or financial implications behind those aspirations. The reality for us is that we are haemorrhaging money at a rate that makes the proposition simply untenable. They don’t know this, and if, and when they hear that ‘yet another company has withdrawn support’ they wont understand or accept why, however brutally or sensitively they are told. It’s more sensible for us, and more ethically correct, to gradually shift our ‘corporate responsibility’ to another charitable area.”

(B5/National Business Manager/NGfL sponsor)
Like a bridge over troubled waters

Through the actions of a particular group of participants, this Scenario illustrates that a variety of different strands or influences, such as strategic, political, educational, financial and technical actions and issues all contributed in some way to the development of Project opportunities that sought to bring about innovation and change. The Scenario also indicates that irrespective of the potential associated with innovation and change, there was a distinction that could be made between the personal views regarding how this might potential might be initially perceived and harnessed by different people in positive ways. It also indicates that the interrelationships and partnerships between the players can also have a significant impact on that realisation of that potential. To summarise briefly, there were key relationships between the provision of resources, the potential and opportunities arising from that provision and how this might be energised and/or realised. There were also further key relationships that were influenced by key concerns about purpose and intentionality – particularly where the concerns focused on the questions of providing ‘what’, ‘by whom’ and ‘for whom’? Furthermore, there were other key concerns regarding ‘adequacy’ and ‘capacity’, not so much of the technology but rather, in terms of human resource. These represent key findings, not only within this Scenario but also to others in this thesis. These issues informed and are reflected in my models that are presented and discussed in Scenario 5.

I shared drafts of this narrative with various people in order to help me corroborate the events and issues highlighted within and to affirm, from their perspectives, whether it was accurately represented and/or whether other issues that could have been brought to the fore. According to the various roles and forms of engagement in the events portrayed these people each had different insights and views about the Project and the actions portrayed. The tutor worked in only two of the four schools; the Headteacher was from School 6; the Director of the EBLO board had insights based on his/her role as college principle, due to its endeavours to develop wider links in rural communities, and also due to the reporting procedures within the EBLO; the CEO had been fully briefed on all aspects of the Project and thus his/her considerations were based both on those specific developments and
how these related to wider EBLO practices. While this narrative is synthesised sufficiently to represent the main issues arising from my observations of the research focus, it is particularly important to note that the insights of those who were contributing to that further analysis were framed to some extent by their personal experience of the actions and/or issues being reported, and/or how they considered these within the context of those immediate actions or to their wider roles and responsibilities. The Headteacher and tutor largely considered the aforementioned ‘strands’ within the context of their participant roles as Headteacher/Tutor, wherein they focused on the relationships between teacher/learner, what had or could have been achieved. Their comments were comparative to their own personal and professional styles of working and how they might deal with emergent issues pertaining to quality or methods of teaching, training issues, capability of staff to understand ICT in relation to that of the students – more pragmatic issues. They also confirmed that there was little evidence to suggest that there was much collaboration within and between schools about the Project and its associated opportunities beyond the formal Steering Group meetings and the active role taken by the EBLO managers who were trying to ensure the Project was accessible to different participant groups within the local communities.

The other two reviewers were more concerned with the wider implications such as strategy, effectiveness, partnership, value for money and so on, and tended to base their concerns on broader generalisations highlighted by the details of the Scenario. Arising from those discussions, I was invited to present some of the models and associated theories to staff within the college who at that time, were embarking on training to become personally and professionally conversant with ICT. These reviewers also confirmed that it was most unlikely that any of the schools were ever fully aware of the nature or significance of the inter-organisational partnership transactions that occurred between the education and the business sectors, the sponsors and the community sector, despite this being not only an essential facet of the Projects development, but also as it was a regular feature of the Project’s Steering Group meetings.
From another perspective, the narrative could be seen as a means to validate the perceptions and rationale of the EBLO and its later decision to no longer continue with its Community ICT Project with and through schools and to pursue those interests via community based organisations. To counter that possibility, I shared the draft of this narrative with the Headteacher of School 6 long after the decision was taken by the EBLO to relocated its Project within the community sector. That Headteacher had not been aware of the rationale behind the EBLO’s decision to discontinue the Project. However, it should be noted also, that School 6 (and School 4) did continue with the Project and successfully extend ICT based learning opportunities to the wider community. They continued to pursue those interests independently of, and with no support from the EBLO or the LEA despite that being one of its claimed aims for investments in its schools. Further insights gained from the Headteachers are included in Scenarios 2 and 3.
Scenario 2  Youth and Community?

Prince or pauper?

Behind the principle of providing ICT resources were a host of interests that were motivated by ideological notions of: ‘providing opportunities’, for ‘the community’ to engage in ‘learning’, particularly by ‘investing’ in young people, planning for and contributing to the future, and to enable economic regeneration and growth. ‘Participant groups’ could be defined in a number of different ways, even if distinctions between these terms were ‘fuzzy’ or ambiguous: participant and non-participant, stakeholders and beneficiaries, organisations and individuals, providers and recipients, adults and young people, the informed or empowered and the disadvantaged, included and excluded, learner and non-learner. This congeries of expressions was represented through a range of determinate actions that in sum, aspired to reform, enable, value, support, motivate, confer, engage, empower, include, bestow, improve, achieve. In particular, the ‘goal’ was to ‘develop’ young people so that they became more creative, self-sufficient, knowledgeable, skilled, innovative, entrepreneurial, adaptable, motivated, inspired, productive, competitive, participating learners. Such aspirations were integrated in an assemblage of policy documentation of central Government such as ‘Education & Training 2000’ (1999), ‘Investment for Reform’ (2002), ‘Learning to Succeed’ (1999), ‘The Learning Age’ (1998), etc. and cascaded through associated documentation, rationales, programmes, schemes, projects, opportunities, criteria, guidelines, criteria and evaluation and reporting procedures. So, ‘opportunity’, to exist, (already) generally fitted an ideal, where assumptions and precedents had already been set, and the ‘supporting organisation/s’ would either be part of the statutory funded clique, or independents with a propensity for creatively bringing together appropriate rhetoric, accountabilities, and the ‘ways and means’ to captivate the interest of sponsors and become part of that bandwagon. Some of these dynamic conditions are differentially represented in the illustration ‘Stakeholders and beneficiaries’:
Scenario 2

Key questions that lay behind this diagram concern the rationale that underpinned, or processes by which one group informs the other. This is described here in terms of for example, the determinisms that lie between stakeholders and beneficiaries, and the basis on which those relationships might be motivated or informed, and depending on whether they are one of the same. The possible answer might be partially determined by the notion of ‘brokering’ in the sense that some participants may have been acting as ambassador, arbitrator, enabler, go-between, and having some sense of mutual concern. According to postmodern theory, distinctions of identity, such as strategist and strategy, organisation and environment, are ‘narrative constructions’.

They are the result of actors attempting to make sense of themselves and their experiences by concocting notions like strategy and organisation ... This view implies that strategists and organisations do not exist as objective realities, but rather, are objectivised by our subjective orientations toward them. (Hatch, 1997)

Therefore, what is key to this diagram then, is that the essential question of ‘definition’ (e.g. identity, motive, purposefulness) is based on complex relationships wherein there is no single answer. While that might be perceived by some as a ‘flaw’ in the model insomuch that it is vague, that can be countered by the notion that this is a common, if not characteristic feature of representation and meaning.

Handbooks manuals and guides

This Scenario illustrates selected insights into partnership activities arising from the ‘provision of opportunities for young people’. It contributes to the rich collage of ‘needs and interests’ as different participants expressed various interpretations as compromises evolved. An important question that emerged from my analysis of the situation was ‘for whom does a provider provide’? The following illustration asks the question in another way:
There is an implication from the diagram that the driver for the idea may (or not) start with the provider and may be inspired by opportunities/activities and participants' needs and interests. One feedback loop may be derived from (potential) ‘outcomes’ as determined (directly) by/from the recipients or transformations that may have occurred through identification and/or provision of the opportunity itself. Likewise, feedback to/from the providers may or not contribute to further change in the opportunity … This model has implications not only for the rationale that may underpin the provision (resourcing) of opportunities, but also for pedagogy in terms of subsequent relationships between teacher/learner …

To gain perspective on the interrelationships between key stakeholders and beneficiaries this Scenario focuses particularly on the responses of young people, on their needs, interests and aspirations as they engaged in the opportunities being provided for their benefit. In particular, these young people were those that attended ICT sessions of their own volition – there was no formal directive that dictated that they should attend these sessions that were provided out of school hours.

**Pilots and nurses**

Following a number of incidental conversations during 1997 between the EBLO and various partners from the business and government sectors who expressed a range of concerns (e.g. regeneration, workforce issues, sustainability, young people, skills, rural issues such as isolation, growth of demand relating to ICT), a questionnaire survey was conducted by the EBLO in two rural secondary schools. Students responses affirmed the problems of rural isolation - staying after school led to huge difficulties in getting home; going home denied the opportunity to engage in out of school hours activities; each highlighted problems of access to computers on account of divisions of privilege and access to ICT at home. These students' views
were summarised by the EBLO in terms that then conformed to and supported the current policy agendas and thus helped the EBLO secure funding from a national charity that sponsored, in this case a Project for: ‘enhancing access to ICT for young people who would otherwise be disadvantaged through rural isolation, inequality …’ and of course, there were other concerns of young people disengaging, becoming ‘dis-applied’, de-motivated, disaffected … Though concrete evidence was scant, such rhetoric ‘rang the right bells’.

Following this initial research study that elicited responses from young people about their access to and interests in ICT, a pilot Project was set up initially in one small village location. The sponsorship for the pilot Project just covered the cost for the hire of a computer room based in a small community based ‘call-in centre’ and also, for a tutor to support young people during evening sessions. This pilot drew on a small community ‘call-in centre’ that offered information, advice and guidance and access to resources for the local community. Project aims were stated as:

- an initiative that brings together people from local business, education and the community in order to:
  - extend the opportunities for learning within the local community
  - provide appropriate support and training to enable people to develop skills and competencies in order to equip them better for the world of work and beyond
  - improve access for people in rural communities to leading information technology systems and expertise.
  - promote lifelong learning

… and obviously written with the beneficiaries in mind! Additional revenue and increased participation of young people allowed those aims to find tangible forms through negotiated processes that included: the acquisition of more suitable venues, provision of new resources (additional tutors, equipment). As the Project became formalised over this time, objectives were defined as:

- providing a range of educational opportunities (e.g. training, courses, workshops, support, facilities)
- extending and enhancing a person’s range of skills and competencies (particularly those that draw on information technology);
- improving access to information technologies within the local community (e.g. by providing information technology systems that offer high quality information and reprographic facilities, high speed communication, coupled with technical and educational support).
Underpinning this dimension was a principle that was foundational to the philosophy of the lead organisation and how it viewed the opportunity:

“It is not just about provision for a specific community but rather a process of developing a network of expertise.”

These ideals (identified as key words) can be mapped diagrammatically to indicate emphases:

The above aims and objectives were formal representations that generally complied with necessary organisational conditions (e.g. it is unlikely that Project funding would have been acquired unless the lead organisation could clearly demonstrate its organisational status, accountabilities and inter-organisational relationships to partner organisations that would help consolidate the overall project aims). Thus, the aims and objectives were largely written for the benefit of the stakeholders, in terms that were indicative of intentionality and means. Few of those aims and objectives explicitly portray the nature of the principles or activities to either stakeholder or beneficiary.
What emerged was that, irrespective of the Project’s aspirations to support or engage young people in ‘learning’, interpretations about its definition and means were diverse and contentious (e.g. ranging from indifference to concern, academic to recreational, vocational to social). The orange arrows in the diagram ‘Swings and balances (Fig 21) suggests that young people were predominantly focused on three attributes, recreation, ICT and social, irrespective of the full scope of opportunity or organisational intentionality.

Learning curves ... for some ...

“On the first night there were four, the next night a few more. But it increased rapidly after that. They were all pretty ‘cool’, and mainly seemed content to have somewhere to go, somewhere to chat - but it was raining. They fiddled with the computers and obviously had no difficulty with any of the office software … except they had nothing to write, no reason to. Clearly they picked up on detailed functions quickly and easily - but no reason or interest in applying them. They were a bit interested in the challenges[PM196], but as one pointed out, ‘using the technology isn’t really a challenge is it?’” (EBLO1/Tutor/1)

“I must admit, it was pretty boring only having available a few computers with office based software and while a few kids were happy to sit and chat and fiddle, I couldn’t see how the sessions could go anywhere, or retain their interest[PM197]. To make it a bit more interesting than fiddling with WordArt or ‘patience’, I took my own camcorder and computer in - the computer had a video capture card and so they could be impressed with themselves on screen and so on. However, this highlighted three big issues: first of all, it went so well over the next few sessions, the numbers of young people increased to the point where we could simply not cope, so there was a real problem - but they (the teenagers) sorted that out for themselves[PM198]. Second, having basically set it up, I pointed out that a camera was a camera, the software functions were pretty obvious and basically let them see if they could work it out for themselves. I’ve run whole day courses for adults and achieved much less than that lot did in just over half an hour[PM199]. Third, I had huge problems convincing some of the managers in the Steering Group that what the kids were learning far exceeded that which they would ever do with a word processor[PM200].” (EBLO1/Tutor/1)

“The concerns expressed by the schools were obviously based on assumptions about what they thought the kids could and couldn’t do, what they and should and shouldn’t do, though it was debatable whether this actually referred to ICT or more to do with their attitudes to the kids.” (EBLO1/Tutor/2)

The teenagers commented that:

“At school they don’t really let us use the computers much, and when they do, its to do pretty naff work - like formatting a poem to make it look pretty is supposed to be worth doing or hard. All a bit pointless really. Its like they think menus aren’t obvious, like you have to be shown how and why and when and if you can do stupidly simply things like cut and paste, like it makes any difference which program you’re in.” (Centre1/Student/5)
Dump and run

The different ICT centres seemed to attract different ‘types’ of young people to the evening sessions. In three village locations there was a predominance of girls, in three locations only boys, in the other locations were an equal mix. The nature of interests did not differ much according to gender or age, only the means of expressing those interests\[PM201\]. In one, male dominated location, the participants demonstrated more ‘challenging’ behavioural traits that did not seem to fit well with the aspirations of their school/s or members of their local community. Comments from the youths were typically along the lines of:

“They don’t like me at school cos my brother threw a chair at a teacher.”
(Centre1/Student/9)

“I do go to school - on Fridays.” (Centre1/Student/12)

“School? Why?” (Centre1/Student/15)

Interests were very much centred on skateboards, rollerblades, BMXs, ‘having a laugh’ - in the highstreet, market place, pathways, walls and motor-biking in the woods.

“They (the villagers) would rather we hid away but then would only accuse us of taking drugs or something like that. If we go out on the bikes or boards they complain, so what’s the difference. If they complain whatever we do, we might just as well make it worth our while” (Centre1/Skateboarders)

“If you were upset by swearing or attitude there is no way you would let them anywhere near the place! But they were fun to have around in a bizarre way. I mean, wasn’t that the kind of kid we were supposed to be attracting to the sessions and supporting someway? (EBLO1/Tutor/3)

The tutors had different ways of relating to these interests:

“One evening it was sunny so they preferred to bike around the playground. I suggested they cleared off to the woods with the camcorder. “What! You mean you will let us go off with it? Teachers wouldn’t even let us in the same room with it so why should you?” “Ah Yes, well the condition is that you record yourselves being superheroes and get some good pictures. Impress me, I assume you can do better stunts than you are doing here. Then you can print off the best ones when you get back … and don’t go to the car boot sale tonight! … They got some pretty good stuff on film, grabbed some stills, and only did 25 copies! The following week it was raining so they spent the whole night editing the clips and compiling a movie with a sound track and burnt it onto CD. Apparently one of them took it in (to school) to show the CD to one of their teachers who commented that the school policy didn’t allow students disks to be loaded into the school because of the threat of viruses.”(EBLO1/Tutor/2)
“I mentioned that a possible sponsor was going to visit so they might like to consider it in their interests to ‘consider their behaviour’. When (the sponsor) was chatting with me, the kids had quickly taken a digital picture of ‘him’, edited it by placing his head, part body and blood trails coming out of the mouth of a T.Rex, printed it and gave it to ‘him’ for a laugh. ‘The sponsor’ was obviously so upset by this that he donated another £5K to the Project to ‘make sure it wasn’t published’! As I told ‘him’ at the time, I was ‘quite upset’ because I hadn’t shown them how to use the program yet [PM202]…” (EBLO1/Project Manager/1)

“The majority of young people were mainly interested in activities that were ‘recreational’ - each time there was any suggestion that the facilities or activities could support academic or vocational ‘work’, most were quite ‘explicit in their rejection’. As illustrated earlier, the approach eventually adopted by all of the tutors [PM203] was to allow teenagers to just ‘play’ with the resources, and offer incidental comments if there were any difficulties or when asked. Technical questions were very rare - most young people found the software interfaces and general functionality quite ‘straightforward’. In those cases where idle curiosity was sustained or outcomes ‘just happened to emerge’, incidentally; the values about those outcomes as expressed by the creator or peers were complimentary and positive, and very rarely explicitly associated with any formal learning outcomes and values.

“When the Project first started many of the kids had never had the chance to use the internet. When we found out that what they wanted to spend a lot of their time doing downloading new mobile phone tunes, we set the condition that they first of all had to set up their own (free) email account. This was done by getting one of the kids, who already had an account, to show others how it was done. They in turn would have to show the next person. Within a fortnight 24 had accounts, and had already cracked the fact that one could download the tunes, and then pass it on quickly to others that wanted it. That was how they got into mpeg files, e-cards, free email to text messaging and all sorts of things.” (EBLO1/Tutor/1)

This was a pragmatic way of using the technology for purely ‘functional purposes’ - the teenagers were more interested in the tunes that the processes of acquisition. If one person could do it for everyone so much the better!


**Scenario 2**

**Youth & Community?**

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**Nerds and dawks**

One of the tutors was also the Youth Club Leader in one of the primary school centres (School 3 – Refer Scenario 1). S/he was also an educational support assistant (ESA) and technician in another school that was not part of the research study. Some differences of opinion about the purpose of the Project came to a head when the school declared that ‘the area allocated for the youth club’ was not the same as ‘the area allocated for the computers’ and refused to ‘allow’ the youth club access to the computers. A rather frustrated, and perhaps sceptical tutor suggested that:

“The annoying thing is that quite a number of the kids attending the youth club also go to the school. But it seems that they are not really allowed to use them in school time either. Perhaps the teachers don’t want it to become too obvious what the differences are between them and the kids in terms of ICT competencies.”

(EBLO1/Tutor/4)

Nevertheless, this issue manifested itself in several of the school-based centres where students attend the school and the after-school or evening sessions.

“In one centre, there was a group of young lads that turned up regularly who were obviously a bit nerdy. At the time we (the EBLO) were involved in the computer redistribution scheme and they (the teenagers) often helped do some troubleshoot on a few machines, or doing installation/reconfigurations … pretty basic stuff to them[PM204]. (EBLO1/Tutor/2)

“I found out that one of 14 year olds already was Microsoft certified, immersed in about ten different programming languages, built computers for his mates, etc. ‘Real’ social problems though - so nerdy that he couldn’t communicate unless it was in hex or machine code. I managed to get him to ‘help me’ set up all the computers in one of the centres - software installation and configuration, network and peripherals, ISP, logon privileges, etc. I paid him for his work as I would have any other.”

(EBLO1/PM204)

The Project Manager went on to explain that during work experience placement a year later in an army depot basically shifting boxes, that a member of staff found out he ‘knew a bit about computers’. He was shown an ICT room with the comment, “if you can sort some of those out it would help.” Within a couple of days he got them all up and running properly, but incidentally, pointed out that none of them were secure and could be accessed from ‘outside’. Next day he was back in the store. The boy expressed no surprise saying,
“I can understand their problem. They thought they knew what I was talking about, but you could tell the moment I mentioned NTFS - their faces went blank - they didn’t want any explanation even though it was obvious they didn’t know. A bit scary! But it’s just the same at school. I mostly get D and E grades for ICT - like that’s any more meaningful to me that it is to them (the teachers), just as it would be pointless me making a comment about ‘their’ ICT skills.” (Centre6/Student/20)

It wasn’t until he handed in exam coursework a year later that his ability became more ‘apparent’[PM205] such that the ICT teacher asked for his support for the development of a database driven website for the school … The Project Manager also made the comment

“I’ve been playing around with IT for around 20 years and he already knows more about certain things than I ever will - but that’s only the same as drawing on the network of technicians, all who seem to understand the inevitable limits of their own knowledge in a complex subject and who are prepared to help each other out - the ones I deal with all know when to ask a mate. Its no different to suggesting ‘the musician’ is ‘the one’ that can perform, or ‘the one’ that can read music, or ‘the one’ that can compose, or ‘the one’ that has a library like knowledge of the repertoire.” (EBLO1/Project Manager/1)

A question is not so much whether the capacities of this teenager were any more or less identifiable within the circumstances he faced in schools than those of the other, less proficient teenagers, but whether they were ever likely to be relevant. If there was limited opportunity for them to express or demonstrate what they knew or understood, or it was framed by the capacities of another who had a different way of relating to those competencies and interests, then advantage of the ‘key’ resource[PM206] would never be fully realised.

“I happened to mention something about a possible Linux pilot project one day to the head of ICT in another school. He admitted he didn’t know much about it other than a couple of Year 10 students ‘were into it’, so if the pilot happened, he would probably ensure that they would get involved and take a lead role[PM207].” (EBLO1/Project Manager/1)

**Game plans**

In many of the centres, the young people preferred four types of activity: using the Internet, using the digital camera/camcorder/animation work[PM208], games, and socialising with their friends. Due to the amount of pressure on the tutors and Project Manager by the Steering Group, new strategies were developed to ensure the
activities reflected ‘the correct interpretation of the Project’s aims and objectives’.

The tutors on one hand, tried to inspire the young people with opportunities that ‘related to’ the more formal learning tasks by devising a number of very open ended challenges that indicated a range of ‘possible applications for which the resources could be used’ [PM209], and which might relate to the circumstances in which the young people found themselves [PM210]. While very few young people responded explicitly to those challenges by ‘doing one’, some incidentally, produced outcomes that could have been ‘misunderstood’ as one … On the other hand, the tutors clear recognised the importance of attendance - if the young people were denied the opportunity to play games, they would often simply walk out leaving the tutor with the inevitable failure which ever course of action they took [PM211]. To overcome this, they introduced a number of ‘adventure’ or simulation games [PM212]; and set up league tables. These went down well with the young people. When new funding was available, the project manager managed to purchase ‘interactive problem solving and 3D graphics and simulation software’ [PM213] for the computers and this again helped with retention of participants.

The tutors and Project Managers also devised new strategies for reporting to the Steering Group: ‘Learning outcomes’ were outlined in terms such as:

“In this example, the ‘student’ has used a number of peripherals, such as ‘xxx input device’ to acquire a digitised, high resolution image which has then been manipulated with a variety of editing tools (such as kerning, cropping, quantising, framing and tweening). The ‘student’ made important decisions about the appropriateness and application of various formatting and reprographic techniques, transferred it into a (different) file format to produce a hard copy, and burnt the final work onto CD-R, and took their work home with them in at least two different media. An important aspect of the work was the team work, wherein there was a lot of decision making about formalising the ideas, establishing appropriate technological principles and techniques, learning and applying new things where necessary, collaborating and the allocation of different tasks, ongoing assessments about the ideas and outcomes [PM214].” (EBLO1/Project Manager/1)

Such ongoing challenges of finding the most appropriate terms of expression were not exclusive to the Project Manager and tutors in respect of ‘project outcomes’. In securing a major sponsorship award to extend the Project, the bid had reflected on ‘new ways’ of thinking about ‘suitable ICT resources’ for community projects and the ‘shift in emphasis’ to encompass recreational learning [PM215], as outlined in recent ‘policy documentation’ or guidelines for LLL initiatives (e.g. the IT4All, Community
Modernisation Fund[^16]. However, problems were then encountered with ‘the sponsor’ who refused to pay for ‘games machines’[^17] even though they were prepared to pay for games software for the computers, and suggested that

“We understand that the games machines relieve the pressure on the computers such that these could then be used for ‘non games’ applications such as the Internet … However …” (Sponsor 5)

_Clique, cluck, clunk._

So what was ‘the right technology’ and what was construed as ‘ethical practice’ was never fully agreed. As one irate tutor commented shortly after a Steering Group meeting:

“Of course I can run the … sessions without any kids, but you might think I was the one that was ‘messing you around’. Of course there is a ‘value to study support’, using a word processor and perhaps on a good night someone might stumble into a spreadsheet almost as well as you might be able to one day - and of course there is a view that that would be ‘much more productive’ than playing silly games, messing around, fiddling with this and that. It's all relative. However, you keep overlooking three things: first these are the kids ‘you’ wanted off the streets to minimise the disruption in the local community, by thinking ‘they’ have to conform to ‘your’ ideals. Secondly, I am not so … arrogant to think that I am the one that is best placed make judgements on other people’s behalf about ‘their’ needs and interests and how these are best met [^18]; third, I would agree that in some cases ‘the wrong technology’ is being used, but perhaps those are mostly an inherent flaw in the ‘system’ - too many lose nuts clunking around. Perhaps some time should be found to see if these actually fit.” (EBLO1/Tutor/1)

The idea of having a Steering Group was part of the expectations that provided a form of self-verification or authentication for organisational transactions. It also served to provide a forum for sharing practice across organisations and the hope that greater use could be made of the facilities. An end of year report (2001) stated:

_A hope had been that the schools would take advantage of the offer of some basic training opportunities but pressures from additional curriculum changes (e.g. literacy / numeracy hours) have hindered this progress. This has had some influence on how well the schools have been able to integrate the ICT facilities into the wider curriculum and cover basic trouble shooting. However, the new NOF funding and associated expectations may contribute to resolving this issue. (13)

_An approach that was taken was to encourage other potential providers / developers to see the facilities, discuss the principle concept underpinning the project and generally help with the promotion of learning opportunities through those agencies ... (20)

... though it went on to say that:
The key to the success of this particular issue is not determined solely by the EBLO’s immediate provision of learning opportunities for the different groups but rather the extent of involvement of partner organizations in wishing to take full advantage of the facilities on behalf of their own ‘membership’.

Further reference was made to the issue that had been highlighted regarding the interpretation of the overall aim of ‘extending opportunities for learning’:

There are particular balances that still need to be addressed and have in some respects been beyond the immediate scope of the project, namely, influencing attitudes and behaviours regarding the place of learning and the inter-relationships between academic, vocational and recreational learning opportunities and fulfilment. Also the difficulties of matching need and aspiration of providers and participants still needs further investigation particularly where these concern social disadvantage. Newer ‘edutainment’ and ‘consumer based technologies’ will be considered as a means of addressing this in subsequent centre development.

This was facilitated by the EBLO taking

“the strategic decision to restructure the overall Project in the light of new conditions arising from recent sponsorship agreements and overall changes in the circumstances within which the Project now finds itself.” (Letter to Steering Group members)

But is it cricket?

Pursuit of the ‘most effective outcomes’ not only shaped the discussions and actions of the Project Steering Group, they also led the young people to making decisions that were (not) shared by strategists and managers making decisions that were (not) shared. The young people attending the sessions voted with their feet. To their mind, they were there for their benefit - if the sessions were for them then they felt they should have some say in the nature of the opportunities to be provided on their behalf. If the ‘establishment’ didn’t agree, then the young people felt ‘empowered’ to react and take steps to emphasise a different point of view. The result was a confusion of ideals that in some cases were never reconciled. The initial project claims of ‘supporting young people’ were highlighted an area of tension between the support that was informed by organisational politics, policy, funding, accountability and other such precedents with those that were more responsive to the needs and interests of, rather than for, young people. This was perhaps, in part, due to the lack of agreement about ‘what young people need’ as determined by whom – the ‘establishment’ or the young people themselves. In some cases, the
young people attended evening sessions, perhaps because of the climate (attendance always increased during winter months) or lack of alternatives, or because the tutors acted as a ‘buffer’ between the views of the young people and the ‘establishment’. In some cases, the lack of attendance by young people induced a particular tension for those with accountabilities to organisational ‘targets’ and the policies of those that had difficulty relating to the achievements of young people and/or the project. As one member of the EBLO Board[PM221] said: “If the Project keeps just one young person off the dole then the overall cost of the Project can be justified. However, the policy makers and sponsors may not see it that way – particularly if they set an arbitrary target for attendees.”

Each of those ploys was rational - it was the irrational that created the tensions. As Williams (1988) comments:

*To be reasonable or rational is to have certain assumptions of purpose, system or method which are then so deeply held that for others to challenge them is not only unreasonable, but irrational (and probably a rationalization of some quite other emotion or motive).* (256)

This ethical principle is expressed by de Laine (2000), but surely extends to ‘fieldworkers’ in any practice, and serves to indicate possible relationships between intentionality, procedures and evaluative processes:

*When fieldworkers have established networks of reciprocity with subjects who are equal and treated as total human beings in the round (with feelings, aspirations, idiosyncrasies and so on), and relationships are established on shared emotions, certain standards of morality apply rather than purely rationalized and intellectualized norms.* (28)

The young people had quickly discovered that rather than continue to be ‘the subjects’ of assumed organisational power and authority, this could quite easily be challenged, thereby going some way to redressing the ‘balances’. (In Swings & balances, Fig 21, the deliberately faint links between recreational and academic, vocational and social were relationships that were largely negotiated between tutors and the young people. As with other diagrams, the weights or emphases may be determined by numerous technical, aesthetic or perceptual factors – the distinction between the lines is relative.)
From my perspective, what I found of particular interest with regards to the issues portrayed by this narrative was that the notion of organisational unity, partnership practice, general aims and the beneficiaries learning outcomes was largely framed by 'strategy'. This was largely deemed attributable to ‘strategists’ – that is to say, those holding positions of authority within organisations. Whilst some strategists might, on reflection, recognise that ‘strategy’ occurs on many different levels and in many different forms, these ‘alternative’ strategies are often overlooked when it comes to policy making and subsequent practice, or at least, until such time that possible conflicts emerge. This issue of organisational strategy is explored differently in Scenario 4.
Scenario 3  

Land of Milk and Honey?

Heaps of IT

The intention of improving resource provision encapsulates a host of principles that, while often corresponding to altruistic ideals, social reform, aspiration and desire, may not always fully reflect the complexities and pressures of effective implementation in realising these. For example, simply providing more computers to improve user ratios may have educational and political advantages, but also, may overlook the long term and far more significant implications, and hence, may then lead to a shift of emphasis. For example, from the early 1980s when computers were being provided for schools, the amount, nature and quality of training, and whether this occurred prior, or subsequent to provision of equipment, was hotly contested. Those arguments continued into the late 1990s as educationalists again, declared that resources preceded training. Strangely, this is not an argument heard in business as the cycle of providing equipment, training, equipment, training is assumed to be cumulative.

Escalating the level of provision requires an appreciation of other sensitivities re purposefulness, appropriateness and wider logistical issues of providing resources that collectively contribute to an understanding of the potential benefits. It must also be pointed out that from the perspective of the EBLO, this was assumed to be a shared responsibility. If they provided equipment on the basis of what schools said they wanted, and were well placed to provide training and support, they assumed (wrongly it seems) that teachers would take this (new) knowledge and opportunity and adopt and adapt current practice to take advantage of the (assumed) potential. Depending on the context, the nature and extent of an ICT provider’s responsibility to a user are therefore, likely to be determined by a host of factors.

This Scenario explores some of these general aims and concepts by focusing on a Computer Redistribution Scheme (CRS) and reflects on the different responses of individuals and groups associated with it. Through this Scenario, it offers a way to consider the emergent issues and relationships, and whither the ‘real issues’, as distinct from the perceived, may lie. It describes some of the relationships between
potential, functionality and adequacy within technological and sociological settings, although for both of these dimensions it is a matter of degree. It also highlights different perceptions about uses of ICT in relation to learning as understood from the perspective of organisations from the business, community and education sector, and individually with managers, technicians and educationists.

**Computer redistribution schemes**

The processes of engaging in computer redistribution have generally been sporadic and handled in different ways by different organisations. The following provides an overview of three facets of computer redistribution:

1. some insights into the strategies and practice of computer redistribution as it was handled locally by the EBLO and sponsors
2. a brief summary on some of the Schemes that occurred nationally and
3. some associated issues arising from concurrent developments.

**Local CRS - Contexts and Issues**

Since 1996, the EBLO had taken a leading role in redistributing to schools free computer equipment to schools that was no longer required by local business. The process by which the EBLO became involved was based on a set of complex interrelated education business link (EBL) activities that underpinned its organisational constitution and role. This included discussing with local businesses, the needs and interests of local schools, exploring prospects of increasing participation through creative EBL activity and sorting a range of logistical issues, such as minimising intrusion on business time, balancing expectations, and anticipating an effective, equitable solution. (Refer: Understanding an EBLO) Through discussions such as these, the increasing practice of redistributing computers to local schools by those businesses led to the EBLO sharing some concerns. Emerging from those discussions were a set of principle aims that sought to:

- enhance education business links (EBL) and partnership opportunities [PM224]
• minimise (unnecessary) direct contact between schools and businesses[PM225]

• enhance schools’ technological infrastructure and attendant resources (at minimal cost to the school[PM226])

• extend the then currently, usable life of the PC[PM227]

• minimise unnecessary obsolescence through the ‘dumping’[PM228] of serviceable resources into landfill sites[PM229]

While the EBLO dealt with several local companies in this type of activity outlined above, this scenario focuses predominantly on one company that was illustrative of this more general activity:

• it was representative of salient issues relating to redistribution from a multiplicity of perspectives[PM230]. These are discussed later in this narrative

• this large company had a policy of phased resource renewal, thereby projecting an annual cycle of redistribution, which it sustained (officially) between 1996 - 2001

• senior members of that company with whom the EBLO negotiated, with responsibilities for learning within and across that organisation[PM231], were expected to have a broad knowledge of technological development and change, and were also active members of the Lifelong Learning Partnership (LLP). These people also had contingent roles in other areas of education (e.g. school governors, and were “keen, participative and active learners[PM232]).

• the Company’s involvement gained a profile nationally, regionally and locally, and which prompted different reactions from a range of organisations and participants, and which thus helped establish a clearer picture of the overall issues.

The nature and scale of the redistribution can be represented in different ways:

1 the diagram CRS Timeline (Fig 22) provides a more graphic timeline of development
Key shifts between 1998 and 2002 for the CRS were: the premise for the redistribution of PCs (for schools, for education, for learning); the shifting agendas for learning, in the community; new ICT Project developments (including RCP, other community ICT Projects; the introduction of Government funding through NGfL for schools; the views of the EBLO and business providers about the logistics, benefits and issues that emerged from the provision of PCs.
Referring to the overall network of activity below, it can be seen that the CRS contributions to other projects were widespread in their influence across other organisations and projects.
Handling principles - an ethical dilemma or just a technicality?

It would seem to me that certain terms held emotive connotations that were considered unrepresentative of intention and therefore avoided. Thus, redundant, obsolete, recycled and unwanted were regarded by the management as negative terms that became synonyms for lack of value, unnecessary, superfluous, insignificant, outdated, useless. On the other hand, to ‘redistribute’ holds more positive implications of rearrangement or reorganisation, rationalisation, an optimisation through shifting priorities. For a company to donate, or pass on resources to a ‘charitable cause’, as was the case here, held further complications.

What for example, makes education a charitable cause? Schools do not tend to refer to students as beneficiaries or themselves as stakeholders. If the framework for formal school education is manifested as a statutory condition, then why should other sectors ‘compensate’ for its seeming inadequacies - especially if, in so doing, precedents are then set which propagate ethical dilemmas or off-sets responsibilities and accountabilities? Implicit in the political slogan of ‘education, education, education’ is the fundamental dilemma as to whether this should be principally, economically or intellectually motivated. As Garner (2000) highlights:

In most parts of the world, the realms of business and education peer nervously at one another. Business is seen as powerful and headstrong, education as caring and vulnerable. When conditions are favourable in the land, the tensions between business and education are muted. In times of conflict or scarcity, mistrust flares up. (190)

A further dimension arises from the notion of ‘corporate’ or ‘social responsibility’ wherein the wider community and business sectors are encouraged to ‘engage in education’ in the fullest sense. Yet, there remains some scepticism about the notion of altruism and how this manifests itself, for example through education business links, of intrusion, ‘dabbling’ in and reforming the concept of education. Insofar as this debate extends beyond this particular scenario, the following selection does provide a number of indicators in a local context as to why business wished to pass on some of its resources to support education, and reflected in so doing, how this activity related to the wider education policy agendas at that time.
The Basics

Four types of Company involvement occurred which might have been sporadic or planned through different forms of organisational policy; based on the notion of dichotomous alternatives (schools or the dump), and which may or not have been consciously furthering current EBL and learning agendas: For example,

Type 1: a small reprographics firm that predominantly used very high specification computers for desktop publishing, multimedia and computer aided design (CAD). Speed of operation and quality of their projects was key to the economic efficiency of the Company that necessarily kept abreast of technological change by buying new equipment annually. The Company no longer required the replaced computers for other more basic tasks such as word processing so made these items redundant and thus available to the EBLO for onward redistribution to whichever beneficiary they chose to nominate. They also passed on other cognate, redundant, obsolete items such as colour printers, scanners, cameras, and other multimedia peripherals.

Type 2: a large multi-national organisation, which had a policy of planned annual refurbishment. Prior to donating the redundant/obsolete stock to the EBLO, it simply took redundant equipment to the nearby landfill site.[PM238].

Type 3: an organisation that only contributed to the following redistribution scheme once. The local branch had just replaced its entire ICT stock only to be told by the head office that ‘the decision had been taken’ to replace all equipment in all branches across the country. The Company offered its redundant/obsolete stock to the EBLO for recycling.

Type 4: projects that we specifically devised to build on the resources made available through any source and where the source was not the issue.

Each type of company had the choice of consigning the equipment to a landfill site, handling the recycling process with ‘beneficiaries’ themselves, or passing on the latter responsibility to the EBLO to effect the further redistribution of equipment. The comment expressed by some bystanders, that this was “merely an evasion of ‘green’ or ‘environment’ taxes” evidently showed that they did not fully understand that the decision taken on economic grounds alone, generally cost far more that its alternative[PM239]. Finally, the responsibility for the decision was taken consensually in
collaboration between the ICT Manager, a Managing Director, and senior representatives from the EBLO, most of whom were people who had significant insights and understanding of the levels and state of ICT provision in schools pertaining at the time. Likewise, they had some insights and views as to who the beneficiaries were, which from their perspective, were the students and young people, mediated on the latter’s behalf via schools.

**Previous local redistribution processes**

Prior to the EBLO becoming formally involved in the companies’ computer redistribution initiative, the schools, charities and other organisations tended to approach local companies with general requests for computers in the hope that they might be donated any usable computers surplus to company purposes. The companies would hold these requests on file until such time when they were in a position to distribute the computers. Over time the number of requests escalated considerably and this was beginning to have a deleterious impact on both normal company business and its other EBL activities. The EBLO was also becoming concerned about the processes and motives driving school/business links, and sought to instil a better understanding, mutuality and respect for the needs and interests of the participating sectors. As part of this dialectical process, the EBLO negotiated with the various providers to restructure the process of redistribution in order to ensure a fairer system of redistribution to potential recipients and add value where possible.\[PM240\].

*This issue was not limited to redistribution of computers but included, for example: participation of business in schools (activities, events, funding, etc.), continuity across and between the sectors, and developing a process through which the two sectors were better informed about each other and how they could develop a stronger, more valuable relationship … When some schools who continued to make requests to companies direct were informed that the EBLO were managing the process of redistribution, those schools were explicit in their criticism to the EBLO: e.g. “our independent negotiations with local business should not be mediated by you” and “why should our school suffer the consequences - you have ‘taken the initiative on behalf of other schools …’” (Headteachers: School 8 and 14 respectively)*
**Baggage handling**

**Year 1**

In the first year of operation where the process was jointly administered by the EBLO and sponsors, approximately 180 free computers were made available via the scheme, and these were distributed equitably, at no cost to the schools across the local authority. The EBLO collaborated with the business representatives to ensure that other schools and organisations resident outside the boundaries of the locality that had requested computers were also recipients of the redistribution process. The process of redistribution was subsequently considered to be fairly simple and effective in reaching the intended recipients by the companies offering the free computers in concert with the EBLO. Most recipients appeared to be happy with the provision of resources.

**Year 2**

The second major redistribution (about one year later), comprised approximately 250 computers with a minimum specification of 486/DX66/100mHz processors of sufficient capacity to run ‘office type software’ (e.g. enable basic word processing and run a spreadsheet or database program). Priority of distribution was given to primary schools to partly in recognition of the fact that local secondary schools generally had more extensive IT resources and infrastructures, and also the escalating interest in the lack of ICT provision/curriculum integration in primary schools. (A few secondary schools also received PCs in response to specific requests). The computer allocation followed an audit by the EBLO that requested more detailed information about the school’s current ICT provision and expectations of use so that it would help inform the redistribution process and then be conducted according to relative needs and interests of the individual schools. In the leading letter to schools, potential recipients were actively encouraged to consider alternative interpretations under the rubric of ‘educational use’ such as the ‘reallocation of PCs for use at home, by staff or pupils’, for ‘supporting homework clubs’, etc. In response to this audit, many schools received no PCs while the allocation of over 120 computers went to twenty-eight (35%) primary schools, with seven (50%) secondary schools receiving in the order of 75 PCs.
The allocation of computers to secondary schools mainly contributed to establishment of another IT room networked for class work, or the placement of a few individual computers in quiet study areas for the dedicated use of upper school pupils. Primary schools generally also made the machines available for general or whole class use, with space permitting. Two primary schools networked the computers; only one primary school interpreted the opportunity for ‘wider educational use’ by innovatively providing ten computers to disadvantaged pupils/families for personal use in the home.

The pilot project development in a primary school (School 4) that was enabled through this redistribution illustrated many of the potential advantages of this type of scheme under the right conditions. Part of the condition and principle underpinning the Project was the integration of ‘new’ and ‘old’ technologies as a means to increase the technical capacities of the computers being redistributed. By the time of the Year 3 redistribution, this pilot gave sufficient evidence that this type of development offered a cost effective, appropriate solution that could meet basic curriculum requirements. Also, on-going conversations with BECTa and awareness of other national government developments supported this proposition. Particularly, the profile gained locally offered a solution that might be of interest to other schools in similar circumstances. It is relevant to point out that the specification of the computers were explicitly declared as sufficient for the support and development of basic skills (e.g. basic office / keyboard skills and browsing) and could be extended at minimal cost if required.

**Year 3**

The third major redistribution process resulted in a further refinement of the strategy for redistribution recognising that:

a) there was a greater level of uncertainty surrounding the nature and extent of provision of computers afforded by the principal sponsor. This had repercussions for the EBLO, recipients, and other major community ICT projects that were being developed at that time.

b) the EBLO were aware of, and took greater account of, the increased interest nationally in the advantages of redistributing PCs to schools. Also, the principle of extending learning opportunities to those that might otherwise not have access to ICT; account was being taken of levels of provision by the EBLO, particularly when it affected non-statutory funded organisations such as playgroups, nurseries, and other charities

c) the recent developments in Lifelong Learning Partnerships led the EBLO to re-define the terms preferred by many businesses of providing computers for
‘educational use’ to one of ‘enhancing opportunities for learning’. The significance of this change in nomenclature was that other organisations/individuals could now apply for resources under the auspices of the scheme. The letter was thus, circulated to organisations on the EBLO database other that just schools [PM261]. Further, as the ideal of deploying ICT as a means to enhance learning was a central platform underpinning the LLP agenda, it highlighted a clearer distinction between the nature of education generally and learning in particular, and how ICT might be used for those purposes within both formal and informal settings.

The ‘computer allocations’ table below indicates the scale of redistribution of computers to various local organisations:

![Computer allocations](PM262)

**Other local CRS developments**

The EBLO decided to retain a number of PCs for other developments [PM263] and other education/community ICT initiatives. Further considerable uncertainty arose about how these would be allocated due to a highly speculative opportunity arising from a new partnership project proposition being discussed between the EBLO, the College and another large business [PM264]. Due to compressed time scales for decision-making and a need for the provision of contingencies, the EBLO considered it appropriate to make most of the Pentiums [PM265] available for a new ICT suite in preparation for what rapidly became a much larger community ICT project [PM266] innovation.
Other independent redistribution schemes developed over the same period in which the EBLO was formally occupied in providing computers for a range of beneficiaries. On another scale, some companies were collecting huge numbers of computers for redistribution to third-world countries. However, many CRS were small, local projects that centred on programmes for youth and community, the ‘disadvantaged’ and other notions of extending learning opportunities. For example:

**Computers within Reach** was defined (2002) as: a ‘prospectus for computer recycling organisations and ICT suppliers working with the learning community’ that outlines ‘an initiative’ that commenced around the time that the redistribution in the authority in which the research was undertaken was drawing to a close. (It is noteworthy that a senior representative from the DfEE opened the pilot project in School 4 two years earlier.)

Similarly, another Project that focused on the socially disadvantaged was:

**Environ**, Leicester (1998): 300 computers were sold to individuals/charities - a key motive would appear to be that: ‘ICT equipment forms an increasing part of the waste stream’ and the project sought ‘to reduce the wastage of materials and increase ICT access to those on low incomes’ (12).

A slightly different approach was through project developments such as:

**Camp Lane Development Company** (Birmingham) sought to involve students in the Project to undertake a computer-service training course, which was a mixture of practical and theoretical training and leads to a national vocational qualification.

*During the course, the students developed their skills from fault finding to the actual rebuilding of the donated computers to a general specification. The computers, which they purchased and upgraded/rebuilt were sold in the training centre’s computer shop. Students offered ongoing support once the computers had been sold or donated. (13)*
The Recycling Project (DfEE) launched in 1998 recycled computers\textsuperscript{PM268} donated by government departments (DfEE, DETR, DTI). Local schools used the recycling venue opportunistically as a drop-in centre to evaluate hardware and software.

These two projects were similar in form and outcomes to an opportunity being pursued by the local college as well as a training provider. Until the EBLO provided them with computers, the students had been engaging in learning about the basics of computer technology (components, construction, troubleshooting) theoretically rather than practically - both organisations acknowledged they did not have sufficient technological resources to let the students (re)build computers, but by providing computers, the students and tutors were pleased to engage in practical work and gain further insights. Several local secondary schools subsequently followed this lead\textsuperscript{PM269}.

Another ‘Charity’ received unwanted computers from companies in order to refurbish them and donate them to schools. It had established links with several large multi-national businesses and aspired to handling the redistribution of several thousand PCs across the UK and beyond. Publicly declared motives were akin to those of the EBLO: optimising and extending the technical functionality of the PCs, addressing ‘green issues’, and increased levels of accessibility for disadvantaged people. However, this Charity was keen to advocate increased functionality by linking the PCs within a network to a server running WTS. This was paralleled to the development the EBLO had piloted at School 4, but there were some aspects of the practice with which the EBP did not agree in principle. The EBLO’s interest in PC redistribution was more impartial and not conditional on the incorporation of a WTS network in the host organisation.

Responses

While the EBLO had been the main link/broker in facilitating this local partnership initiative, the nature of its involvement was more extensive than generally perceived by recipients and partner organisations, and views varied considerably across the stakeholder group about the principle of redistributing computers and the processes by which it was achieved:
**Recipients**

**Non-statutory organisations**: A driving school, numerous charities/ agencies, preschool groups, and the like were generally appreciative of the donations. Most sent letters of appreciation both to the EBLO and the company offering the computers. Many of these recipients used the computers at a convenient central venue or otherwise situated by arrangement in individual’s homes. As previously mentioned, their interpretation of learning opportunities enabled by a computer were not necessarily directed by curriculum expectations but rather encompassed similar but more informally circumscribed learning needs and interests (e.g. basic familiarisation with a computer (WIMP), basic keyboard/word processing skills, etc.). Due to budgetary constraints, this kind of redistribution scheme offered the chief (if not the only) mechanism by which these organisations could provide a computer for their beneficiaries.

**Statutory funded organisations**: The variation across the responses of schools was interesting, particularly those identified in years 2 and 3, and especially as the allocation was derived from their ‘informed’ requests and responses. The staff received the same information of the specification, and the donor organisation offered suggestions as to how these could be optimally allocated (in/out of school, to staff/pupils, and others). Technical assistance with installation was also offered should it be required. Year 2 responses were generally more positive than in Year 3. The number of schools seeking assistance in setting up the computers from the EBLO was higher in Year 2 than Year 3. The expectations of the resources allocations changed in Year 3 in spite of the provision intending to support similar learning opportunities as in Year 2. There was considerable confusion arising from the prevailing teacher perception that the Pentiums offered radically different, enlarged curriculum opportunities and out of which the technical specification became a key issue in spite of the fact that most complainants did not appear to have an understanding of the technical issues and differences. What was more disturbing was that many teachers were not paying due regard to functionality and how they could support many curriculum requirements.
Local Authority

The formation of the new Local Education Authority (LEA) occurred towards the end of the second major redistribution. By the time of the third redistribution the NGfL development group had just been formed, as had the LLP/ICT group\[PM273\]. In the interests of partnership and sharing opportunities, the EBLO informed the LEA about the new offer of computers. The LEA’s formal response was stated:

“This represents a positive step towards improving ICT resources in schools and is to be commended. We should be pleased to assist with this process, if for example you need somewhere to store them, or help with allocations.” (EG1/Senior Manager/1)

On hearing about the specifications of the computers, LEA staff further commented that, “This is quite a lot better than many of the machines we have in the LEA!” Despite the aspirations of partnership, members of the EBLO became suspicious as only shortly before a partnership meeting, the Authority’s IT department was remonstrating over the huge problem within the Council of their very old computers (386 and older), and a senior IT manager commented that “the redistributed computers would help us overcome some of these problems”. However, within a three-month period, this ‘opportunity for schools’ was in many respects negated as the computers were declared to be “crap” as, “they aren’t multimedia\[PM274\]” and “many schools haven’t used them yet\[PM275\]”. Furthermore, “They don’t conform to the LEA/ICT policy”. When this issue was taken up in a later LLP meeting with the newly appointed LEA’s CEO, his/her immediate response was “Policy - what policy? We haven’t even had time to have a meeting to discuss which policies we need let alone define them!”

On account of the increasingly explicit differences of opinion that were forming over the technical specification of the computers, a senior LEA manager took a personal interest in the issue of the technical specification of the computers and independently enquired of those whom s/he had a professional respect, their understanding of the situation.
LEA/SM1 “Did you receive any of the redistributed computers?”

HT (School 7) “Yes, fifteen. We haven’t incorporated them yet but we did have offers of support should we need it. We are waiting for some other new ones and a network to be installed so they can all be done at the same time.”

LEA/SM1 “Are they multimedia computers?”

HT (Sch7) “No, but the specification was made quite clear at the time we were notified of the opportunity to have some - in any case they are upgradeable. Let’s face it, it’s only a matter of putting in a soundcard and possibly a CD-ROM. However, we aren’t interested, mainly because we only wanted to use them for basic ICT skills like word processing, keyboard skills, etc. and because we are expecting to put them on a network so they will all be able to share a CD-ROM if necessary without us having to put one in every machine.”

LEA/SM1 “Are you not concerned that they don’t have modems, and that a requirement for the new NGfL is Internet access?”

HT (Sch7) “They all have network cards which are far more valuable than having loads of modems that couldn’t be used anyway. It is due to the network cards that the computers can more easily provide Internet access”

A key purpose behind this highly significant discussion between a particular Senior Manager from the LEA and a Headteacher was to validate the conflicts that were emerging between the EBLO and the LEA at that time. The Senior Manager in this case was the newly appointed CEO to the LEA who was trying to establish the foundations for the inflammatory claims being made by others about the supply of inadequate ICT resources by the EBLO. S/he sought to establish from a range of people who were beneficiaries of the EBLO’s actions what their views were about the nature of the technology within the current educational, technological and financial climate and what they felt about the transactional processes with the EBLO. As a result of these independent inquiries, s/he was prepared to share his/her findings with the EBLO. This had two key benefits. First, it allowed me to triangulate and validate my findings for comments that underpinned findings described in Scenario 5. It is also important to note that triangulation and validation occurred within and across the scenarios and multiple forms of action if only because the scenarios represent a narrative form or strand. Second, it enabled the EBLO’s CEO and the newly appointed LEA’s CEO to formulate and agree a strategy that helped to overcome the difficulties that prevailed between the two organisations. While it was not possible for me to fully establish how these decisions brought about subsequent change within the LEA, the absence of further antagonisms from the LEA to, or about the EBLO, were quite apparent insomuch that they ceased.
Further Education

The interpretation by the staff at the local college and another local training organisation contrasted with that of other recipients. First, the computer allocation offered them a means of replacing their lower specification computers (386/low specification 486) - as the cycle of replacements occurred over the years, this ‘replacement’ meant oldest computers were discarded[PM276]. Secondly, the additional computers provided a means by which they could be used in partnership activities with link organisations (e.g. basic skills, or basic computer training where the computers were used by students in practical activities such as re/building and troubleshooting). Third, the college technicians were interested in both the WTS and Linux propositions since they had recently become aware of colleges elsewhere with networks of up to 150 computers. Fourth, this opportunity aligned with a collaborative community ICT project development that offered free access and ICT training within high-street venues. Those computers were still being used at the time of writing as the staff considered that “they were adequate for those tasks then, and the tasks haven’t changed - of course it would be ‘nice’ to have new ones but they wouldn’t make a radical difference to the tasks in hand” (IT Project Manager and course tutor). Indeed, as a later tactic, the staff housed these and other PCs in cabinets to deliberately conceal the identity and specification of the computers.

EBLO

The EBLO’s rationale underpinning the computer redistribution scheme did not change radically over the course of the study. The first, initial priority for the EBLO was to ensure ‘strong relationships with local business in EBL/WRL’, and generally required ‘keeping both business and education sector organisations well informed’ of conditions/needs, and helping these organisations understand the relevance of partnership practice between education and business. Second, the EBLO’s escalating involvement in ICT, e-learning communities, and engagement in national, regional and local developments demanded “a wider (strategic) view than could be expected from most schools[PM277]”. The consensus within the EBLO regarding future developments of the kind reported here was prompted by the responses of schools and other beneficiaries. The EBLO’s early highly positive responses were eventually modified and can be summarised in terms such as: “next time I’ll help
them take the PCs to the skip”, and “the balance of returns from providing schools with ICT resources no longer warrants the effort”:

“When it was first conceived, it was evident that resources in schools were ‘not that good’. Since then, significant statutory funding, development programmes, policy, advice and guidance have all shifted the reasons and priorities, and justifies the fact that we no longer ‘formally’ engage in such activity. The effectiveness of those government initiatives and support services have influenced or actually implemented change in schools in ways that are explicit, positive and accountable is an issue for schools - they (schools) like to sit on the fence between stakeholder and beneficiary, and I reckon that identity crisis merely serves to shift onus and accountability for which we can no longer afford to bear the brunt.” (EBLO1/Senior Manager/2)

Other challengers

Some opposition to the principle of redistributing computers from commerce and industry to education derives from the view of that if the computers are ‘redundant’, why should the schools in effect, become the dumping ground?

Teachers are learning professionals not technicians. This means that you need robust modern computers not discarded old tups that a "kind" local "benefactor" wants to unload on you. Say "NO" to second-hand computers unless they are giving you the technician that goes with them. They are dumping them because they can afford to keep them - think about it. Check out what the Stevenson Report said about it. Schools are where you come to steal computers not to dump them. Chant this mantra daily. (From: Some common sense things you knew already; Ultralab)

On the day a good question was asked here about whether old stuff was acceptable when (the example was a primary school) the school kit was older than the second-hand replacement. My own view is that two wrongs don't make a right but we also used this as a chance to explore the future which might see every child with a cheap personal computer - and intervention for the info-have nots - and the school with a relatively few high end workstations. We should probably not worry so much today about "how many" but about organisation that will build a way through to that inevitable future. (Ibid)

So what is a ‘robust’, or ‘modern computer’ and how do these compare with tat[PM278]? From the beginning of the RCP the decision taken by the EBLO was to only install new, top end specification computers in the new Centres[PM279]. Over time, the age of only some became apparent. The PCs were custom built in fairly plain cases, the Apple Macintosh computers were more distinctive, both types had 17” screens. As additional new computers were added the most apparent difference between the new and old PCs was brand, the teachers’ knowledge of when they were bought, and how ‘grubby’ they were[PM280].
It seems that the provision of a technician is as important as the principle of providing computers. The EBLO did, in fact, provide a technician, and technical training as part of their specification requirements and obligations. Again this highlighted the possibility that the educational benefits of using computers are not simply determined principally by the number, quality, and operating specification of the computers, or the support and the capacity to ensure the computers were functional in their contextual operation and use. Rather it highlights the possibility that teachers, as an occupational group, have yet to come to terms with the principles of integration and management; understand the teaching learning processes better in computer saturated environments, and be amenable to taking a more proactive rather than reactive role in recognising and realising potential and opportunity afforded in new technology-supported education processes.

The above views I have advanced seemed to be predominantly concerned with comparing the specification of computers in schools with those commercially available, and those then being donated locally - and which at some time, was not that different. However, while participating schools apparently sought and wanted those computers those computers made available from business, the perceptions of business about the state of computers in business and schools is also worth presenting.

‘It’s madness! We are replacing the computers with others of the same specification but with a different name simply because of a directive from head office made 6 months after the decision of the local office to purchase new machines. In any case, even the lowest specification and functionality is well beyond that required by the general user in this organisation." (B2/ IT business manager/1)

Another company implementing similar changes commented:

‘It’s easier and cheaper for us to skip these computers than concern ourselves with the redistribution of them, irrespective of the ethics. Anyway, understanding the difficulties locally is sufficient to dissuade me from challenging the ‘informed’ decision taken by head office. (B4/business manager/2; ‘local difficulties’ refers to the likelihood of the company’s closure/job losses…)

Yet another:

“It’s easy to be critical or simply downright negative about computer redistribution but such politically or ideistically motivated criticisms are not that sensitive to the real predicament facing schools.” (School 8/HT)
... borne out by a further comment:

“You don’t have to convince me - I’m also a governor of a small local school where the computers are state of the ‘ark’. My company is skipping Pentium 2s when the school only has BBCs and a few 386s.” (B3/ Business IT Manager/2)

“The educational system simply cannot respond to the conditions and accountabilities being imposed on it. The likelihood of being able to either gag the politicians or inform those that make the judgements about standards on behalf of those same political paymasters is remote.” (BE1/IT business manager and educational supplier to local schools)

While discussing a wider set of relationships with a senior Manager at BECTa[PM282], such as the possibility of combining the CRS with Linux and ‘Open Source’, the proposition of government support for CRS through the Computers Within Reach programme, and what the educational and technical implications were for these developments, there were a number of comments which gave other perspectives on the difficulties being faced[PM283]; Some of the comments included:

“Part of the problem is that schools are being led into believing that they need specific brand computers rather than alternative platforms let alone looking to alternative operating systems.” “They are chasing a specification they don’t understand for reasons they don’t understand. This wouldn’t be so bad if they got on with the far more important job of integrating the technologies into the curriculum imaginatively and in such a way that it enhanced pupils learning opportunities.”

“Its interesting the number of teachers that have old cars who, while they would undoubtedly like a newer one, would probably admit that it achieves the same basic task as when it was new, or possibly just as well as a new replacement would. They don’t seem to think the same principle applies to computers.”

“Its bizarre that most schools now want computers to be supplied with DVD, or at least a CD-ROM even though most still do not have the software titles to run on them. Nor are they interested in considering alternative ways of achieving the same thing (running a CD-ROM) without the need for a drive on each and every machine.”

“While you can’t really expect the average teacher to understand the technicalities behind the specification of information technologies, one would have hoped by now that they could grasp the principle of its potential to the learning process - after all, isn’t that their job? It is unfortunate that the opportunities provided for the pupils are so constrained by the capacity of the staff.”
These comments aligned with emerging views held within the EBLO about the scale and complexity of the task in hand, findings from its various ICT based transactions with schools and my reference to other cases (some of which are referenced in this document) and literature (e.g. BESA and Ofsted Reports) and my discussions with colleagues in the British Computer Society and HEIs. Each represented prevailing views and concerns and a means for me to triangulate my own views and findings.

**Discussion of the Issues**

**Contextual opportunity**

Computer redistribution, as a form of project development differed from other formal programmes and schemes (as discussed in the other scenarios) in terms of how it related to ‘opportunity’. Providing, encouraging and supporting opportunity carried a number of operational or logistical issues that generally ensured a cohesive framework existed. This largely meant:

- clarity of authority, through explicit representation of rationale, objectives, control measures, accountabilities
- clarity about demarcation, purposefulness, stakeholders and beneficiaries, and expected actions or outcomes
- implementation of processes that provided the glue, or identity

Hence, ‘opportunity’ became indicative of a chance, of potential advantage, that might occur opportunistically through a combination of favourable circumstance(s) or (shared) practices. These aspects of innovating may be made in specific settings in which they are more or less explicit in effect depending on the need or value of deciding and acting. Unlike, the RCP, the CRS provided “potential for opportunity” arising from the provision and reallocation of resources, after which, the ways in which the opportunity was realised depended on those who responded to that provision in their setting, as it was ‘they’ who had identified how the potential provision was likely to be congruent with their needs and interests. The EBLO’s declaration of the availability of resources, specification, to whom they could be made available and an intention with outcomes, was sufficient to prompt significant
numbers of organisations (schools, college, charities, individuals) to respond. They made the judgement rather than it being predominantly determined by external policy.

**CRS implementation issues**

The EBLO never publicly disclosed to anyone precisely how many PCs, and only the minimum specification, made available for redistribution, or to whom. This was due partly to uncertainties in provision, continual modifications to the allocation lists and to maintain an image of impartiality.

A number of difficulties were encountered by the EBLO with the third major redistribution:

a) numbers of PCs to be made available were, for a long while, unknown and ranged in quantity from 50 up to 1000. The eventual number acquired and donated was approximately 400 computers and an additional 280 monitors.

b) there was considerable speculation within the company providing the computers as to whether the redistribution would or should occur at all. It cost the company far more to redistribute computers than dump them in a landfill site. The senior management of the donor company were also becoming aware of ‘educational concerns’ about the practice of “off-loading redundant stock” to schools, and “the possibilities of delicate information being left on the hard disks”. However, the senior managers discovered from a private source that the Government were aware of their company’s efforts and decided to proceed with the donation of computers.

c) teachers were being ‘caught up’ in the superficialities rather than the substance of specification. Just prior to the third cycle of computer redistribution, the newly established LEA was becoming more ‘proactive’ in schools, giving clear indicators about its aspirations, concerns and principles for NGfL implementation and development. The EBLO was becoming aware that the teachers were becoming confused by what they had interpreted as justifiable ICT investment against what they were then being told. Furthermore, most teachers did not have sufficient technical knowledge or time to look beyond the superficialities.
It was difficult to precisely establish the nature or ‘level’ of technological knowledge of teachers from the local primary schools. As a member of the LEA’s NGfL Development Group, I was able to scrutinise the applications for funding made by the local schools, each of which gave some insights into how a school intended to use the funding for ICT resources. While some applications were ‘vague’, further discussions that I had with some of the applicants indicated that

“… since the new LEA was established we have been bombarded with forms, policy, correspondence - you name it we’ve had it, in triplicate. If they want a better quality response, they should, for example, provide a better quality form, and also consider that they can’t off-load their lack of insight about local schools in the form of more and more paperwork.” (School 6/HT)

Nevertheless, as confirmed by enquiries of teachers in this and other ICT projects, teachers at that time were generally not conversant with technical specifications of computers - their judgements were based more on the size of the monitor, and whether the computer had ‘Windows’, a CD-ROM drive and modem, office type software, and was a 486 or Pentium processor …

d) the process of redistribution: in previous years the redistribution was effected by the specific company donating the computers which were delivered directly to schools, with most costs met by the company. This service no longer recurred. As a consequence of organisational indecision, delays, and the emergent possibility that the computers would be dumped into a landfill site, the EBLO sought an interim venue and subsequently handled all collections and redistributions, and covered extraneous costs.

Contingent technical issues

Y2K

Coinciding with the EBLO’s computer redistribution scheme there was heightening public concern about the ‘millennium bug’ or Year 2000 (Y2K). The latter emerged as a consequence of procedures taken by the computer industry some 25 years earlier. Specifically, some computer equipment had electronic clocks that counted years in two rather than four digits. The widespread concern was that, on the eve of the new millennium the possibility was that as the clocks moved on from 23:59hrs, the clock would momentarily register 00:00hrs on 0.0.00 that was likely to result in major computer system crashes, with subsequent chaos on a global scale. This ‘hype’ enticed some organisations and local authorities to invest in staff[PM290] that would ‘research and inform the authorities about the problem’[PM291]. The extant view then held by technical staff in the EBLO was not totally consistent with the above. Being
able to potentially pass on these redundant computers was an exciting prospect as the EBLO staff had already established a quick, simple and cost-free solution\[PM292\]. As the Y2K predicament had international and potentially far-reaching significance, the scepticism held by schools’ personnel towards a small local company’s alternative explanations or solutions were perhaps understandable. Plausibility is seemingly viewed rather like that of expert opinion - rarely accepted locally or when attributable to those of doubtful standing.

It transpired that none of the computers allocated under the EBLO’s redistribution scheme appeared to suffer from any apparent ‘technical’ problems. A plausible explanation for this is possibly that teachers did not have the technological expertise to ‘know where to look’ when evaluating hardware. Further, those computers distributed after 2000 but had manufacture dates prior to Y2K no longer carried the stigma associated with the latter. Concern that the computer might not ‘comply’ was quickly dismissed in favour of receiving the machine/s. The world it seems did not end at the stroke of the new millennium. As a result of the massive purchasing by businesses that occurred just prior to Y2K, sales of computers fell significantly in the opening years of the new millennium. Companies had used Y2K as an argument to extend normal ICT budgets, and have since ‘coped’ with machines that, at the time of writing, were ‘getting old!’ Some of the specification and advertising propaganda was subsequently, down-played.

**Free software …**

One of the main, on-going issues facing computer users is that the cost of software and licences can be high, possibly ‘disproportionate’ to the cost of the hardware\[PM293\]. There is a seeming anomaly in this Project when, in providing a free computer that then incurs an extraneous cost of several hundred pounds for basic software. Likewise, the complexities of licensing can complicate the further proposition of passing on computers that include licensed software. One solution to this problem was to evaluate the use of free software such as that offered by Linux or other brands such as OpenOffice’ or ‘LotusNotes’. While the functionality of office based programs such as the above, and/or operating systems was technically comparable to that being offered by more expensive branded products, school
personnel generally asserted that one particular brand was ‘needed’ as ‘it’s the standard that everyone uses’. Irrespective of the extent that the program might be used for ‘keyboard skills’ or ‘very basic word processing’, very few school staff would easily accept the alternatives to the Microsoft brand. This prevailing attitude was similar to that regarding the nature of the hardware viz. the functionality and purposefulness or potential was being judged by brand and specification. Over the duration of the study I was not made aware of more than a handful of teachers who were, themselves, technically aware, or understood that the software could be customised to suite different purposes and students needs. Also, few considered that, in accordance with the nature of technological change, the software, manufacturer, interface, tasks or approaches would, within a just two or three years, reflect those being currently applied. Moreover, the perception of or ‘justification’ by teachers generally hinged on their perception of what was being predominantly used within the world of work, although it is unclear how they gained such insights. These issues are discussed further in Scenario 5.

**Innovation or potential?**

The proposition and processes of CRS reflected some positive forms of innovative thinking; by various organisations and has some links with the concepts of transactional processes explored in the Research Section. The different interpretations of and relationships between functionality, specification, capacity, potential and adequacy, ownership and control within the technological, educational or wider contexts were not unique to this Scenario and is thus analysed in more depth in the synopsis. Different people affiliated with participating organisations demonstrated different motives, aspirations, beliefs, standards about how to extend the level and nature of provision of ICT equipment, and consequently, how this had the potential to further technology-mediated learning outcomes. These were necessarily complex issues, (inevitably) inconsistent, and those differences appeared to be intractable.
Brake failure!

At the time of writing, the EBLO officially claimed that it no was longer involved in effecting computer redistribution. The local schools had steadily, become increasingly, acutely aware that businesses have continued to off-load ‘obsolete’ equipment (e.g. Pentium 2s and 3s, colour laser printers and scanners) into landfill sites, or otherwise, donate them to third-world countries. Unofficially, for several years, the EBLO continued to pass these on at no cost to approved beneficiaries, ‘for the purpose of enhancing learning opportunities’, but not to schools as it was not evident that they represented the only or most effective means to achieve this aim. The computers that were later being redistributed continued to be of a higher specification (Pentium 2, Pentium 3 or Apple G3) than those (now, old) computers bought new under the original NGfL initiative and which despite their age, still being used by those schools many years later. New funding each year has meant schools generally continued to buy additional rather than replacement computers. Perhaps in a further three years the predicament facing schools will lead to concerns as expressed in Reports published during the late 1990s and if the issue gains sufficient profile, then lead to an educational/ICT initiative that attempts to resolve ‘the issue’. The EBLO’s decisions were not based solely on the actions and events arising from any specific scenario, or a function of the great differences of opinion between stakeholders about the guiding principles for redistributing computers, or the logistic processes and issues involved. Indeed, since the decision taken by the company alluded to in this Scenario not to be involved with such a computer redistribution scheme, and the involvement of senior representatives from various participating organisations to resolve the controversies that emerged, more computers nevertheless, became available for redistribution. One such partner organisation in the business sector was highly sensitive to the delicately, complex, technical, educational, political and social implications of redistributing computers but considered the benefits worthy of, risk and criticism accompanied to such an initiative. The technical specification was still one or two generations back, but very few organisations can ‘afford to give away’ significant numbers of brand new computers free to schools, or anyone else, irrespective of benefit to social agendas, education and learning.
The idea behind the CRS became (overly) complex, not only in terms of the links and relationship, but also in the related interpretations and actions of participants. What appeared to have been a ‘reasonable’, ‘rational’, educationally informed proposition to enhance learning opportunities (not just for school pupils but also the wider community when given free access to those resources) became highly socio-economic and technically problematic on implementation. The various schools and general people that were involved [PM299] did not have a common and shared perception of opportunities, benefits and potential (for economic, educational, political or technical reasons) of the educational benefits to be derived. The on-going modifications to the strategy for redistribution were those of the EBLO trying to take account of coterminous developments occurring nationally, regionally and locally, and handling the technical, political, strategic and operational issues as these emerged during the course of its implementation. There was ‘no given formula’ response to these, just as there were no policy regarding how they ‘should or could be used’ other than the attempt to optimise and extend learning potential and outcomes through the use of ICT.

As a scheme in itself, the foundational principles ‘seemed sound to some people’ in the sense that the rationale was shared and sufficiently agreed in order to enable the transactions to occur. The logistics or redistribution were largely a matter of ensuring smooth and effective transactions occurred, such as informing all partners of intentions, options, and processes of transporting the equipment between locations and providing various support systems. However, while the ultimate aim of the companies donating and redistributing the equipment was to enrich learning opportunities, their emergent view was that:

a) schools were not necessarily the only or optimal beneficiaries,

b) there were other complexities that negated the widening participation gains for some groups (Clarke, 2002) to be derived from increasing the levels of access in schools to ICT,
c) the predicament of resourcing schools is at source, the problem for schools, as distinct from the business and community sectors, or external agencies and brokers. In the case of schools, the EBLO and businesses providing resources were bemused that the issue should be so complex as technically, schools should have been building on an existing capacity rather than starting from scratch each time.

In those instances where fully functional machines were provided (OS/office/browser installed and configured) some school personnel still complained about self-perceived technical inadequacies, and therefore, tended not to use them. Most of the non-statutory beneficiaries (e.g. nurseries, charities, community organisations and clubs) on the other hand, simply ‘got on with using the computers’ and addressed shortcomings regarding reduced technical specification such as the lack of modem, sound card or CD-ROM, which, in the event, were overcome by local purchasing as necessary. If recipients didn’t know how to install and configure software, they asked and paid for this to be done, whereas schools and LEA staff reluctantly accepted seeming deficiencies in the hardware and in many cases, rendered the machines prematurely obsolete. Nor were the computers passed on to families in the school that might have benefited. In the case of School 5, the machines were replaced with new computers running the same software, for the same range of tasks. But at least the pupils were using new computers … at least for a short while.

**Recontextualising action**

Some of the issues highlighted in this scenario are presented in a different fashion in Scenario 5 - this describes the relationships between functionality, capacity, adequacy and potential within technological and educational systems that emerged though this and other scenarios. Some of the on-going community ICT based activities, on which the Lifelong Learning Partnership were reflecting during its formative stage, are outlined in Scenario 4. That the actions reported in this scenario were fundamental to the development of the Research Approach is also discussed in more detail in reading the small print.
**Scenario 4   Tops and Tales?**

**Intro - Order in the ranks**

Scenario 4 provides an outline of strategic partnership activity as framed by a particular ‘focus group’, namely the Lifelong Learning Partnership ICT Sub-group. The Group’s remit, while working within the framework largely affirmed by its umbrella organisation, the local Lifelong Learning Partnership (LLP), was to engender notions of partnership within and across a number of organisations, associated activities and projects wherein, ICT provided a particular form of emphasis or bond. To that end, on its inception, it sought to review current ICT policy and practice within and across partner organisations and wider contexts, with the view to using this analysis to inform future ICT developments in a cohesive and unified way. I was a participant member of that ICT sub-group. On behalf of that group I carried out the research and analysis and the writing of the ICT Report. This narrative provides insights into my research methods for this particular audit and report, some of the key issues and findings arising from that activity and how these related, not only to other forms of action occurring at that time, but also to my evolving research approach. It also provides an important bridge between the two major sections in this thesis and highlights the interdependencies between them.

The Scenario comprises four main sections:

‘Shifting sands’ represents ‘context-in-action’ insofar that it outlines the evolving policy contexts for strategic partnership developments and how participant members of the LLP related to these. This text supports other contextual strands to be found in ‘If Then ..’, ‘Weigh-in’ and ‘Terms and Conditions’, by emphasising the highly fluid transitions of policy making occurring nationally and regionally and situating these within a local setting.

‘Interim Report’ explores issues pertaining to my acceptance for the role and responsibility for the research for, and writing of, the ICT Report. It provides insights into some specific research methodologies, accountabilities and steps that I took, not only to assist with my writing of the final unpublished ICT Report, but also how these
informed my subsequent research approach. This strand links closely with contextual information provided in ‘Terms and Conditions’ and also to key emergent methodological issues presented in both ‘reading the small print’ and ‘One in the Eye’.

‘Final LLP/ICT Report’ is the final document that I wrote, presented to, and discussed with both the sub-group and the LLP Board. The ICT Report largely remains as it was presented, as a ‘draft’ that served as a discussion document. As it was part of a presentation that I gave to the LLP, I have since, added comment fields to explain some of the issues or terms in more detail.

The original document did not contain comments fields. Other amendments include:

1) removal of identities of individuals and organisations
2) clarification of some terms as the Report included references that were ‘local’
3) comments fields are added to explain and/or illuminate
4) the page numbers and index are now sequential to the thesis rather than in the original form as a separate document
5) At the end of the document I have also added some comments that emerged from the presentation ….

‘SWOT’s it all about then’ provides a further analysis of the central issues and key findings arising from this cluster of activity-in-context.

**Shifting sands – policy context**

A Targets Task Force (TTF) was a Local Action Group (LAG) comprising representatives operating at executive director level[PM301], predominantly from local business and local government sectors. It was intended that they reflected up local and national information to assist its work and provide expertise where needed. The ‘Local Action Group’ provided one of a number of forums for some business to voice concerns about standards and relevance of education to employability. The key participants generally included high level representatives from the Training and
Enterprise Council, Local Government Association, Education Business Partnership, and Further Education who shared concerns about issues such as regeneration and growth, sustainability of the local and regional economy, particularly as they related to human resources, ‘capacity building’, and the skills and employability of the workforce. Such terms of reference were laid out within Regional Economic Strategy (RES) documentation (e.g. SEEDA 1999; EU, 1998) and considered issues such as labour markets and trends, skill, standards, shortages, shifting patterns in human resources as they affect employment and workforce nationally, regionally and locally.

The new learning agendas outlined in the Government’s White paper ‘Learning to Succeed’ (1999) and related policy documentation led to the formation of Lifelong Learning Partnerships (LLP) in 1999. For the Local Action Group that formed part of this study, this largely meant a change in name from the previously known TTF. Foundational policy documentation introduced at that time included: Regional Economic Strategy (RES), DfEE (1998) ‘the Learning Age’, Education & Training - towards 2000, and which underpinned other strategic developments such as Education Action Zones (EAZ), Investors in People (IIP), New Deal, Skills Task Force, National Vocational Qualifications (NVQ), Work Related Learning (WRL), Fair Play (which was about competitiveness, equality of opportunity and partnership), and University for Industry (UfI) for open and distance learning to further stimulate demand for and access to LLL among businesses and individuals. Prior experience as a LAG meant that, as a newly forming LLP, it already had experience in relating to this type of strategic policy documentation. Nevertheless, in coinciding with the change of Government, the organisational restructuring brought with it a plethora of new policies. Some of these evolved in ways that engendered considerable uncertainty about definition, direction, priority or subsequent means by which that strategic policy might be implemented or funded. Strategic groups at that time often related this uncertainty to their own organisational contexts and likened to ‘treading on quicksand’ or ‘trying to stick jelly on the wall’. To some extent, it also fostered a climate of scepticism, such that, within the context of proposed strategic partnership, it engendered the notion that ‘partnership is the suppression of mutual hatred in the pursuit of funding’[PM302]. For some participants, the climate of uncertainty, doubt and instability seemed to justify their claims that evolving insecurities for
organisational contexts were potentially ‘detrimental’ and ‘risky’, and thus needed ‘managing properly’. Others were resolved to the notion that associated ‘change’ was ‘no different to ongoing organisational transactions to which they were in any case accustomed. They also felt that it also represented ‘a potential’ that could, with appropriate optimism, serve as a means through which participants could proactively shape their own futures.

Therefore, as ‘a single strategic body’, the Lifelong Learning (LLP) served to:

bring together all existing local partnership arrangements covering post-16 and lifelong learning. Learning Partnerships will have a key role in taking forward the Government’s social inclusion and regeneration agendas. Their broad objectives will be to widen participation in learning, increase attainment, improve standards and meet the skills challenge. They will be responsible for the development of local learning targets (post-16) linked to the new National Targets, and for co-ordinating local action in such a way as to create a more coherent, effective and accessible set of local arrangements for learning, careers advice and guidance, student support, etc. (DfEE, 1999; 54)

Concerns raised at that time that there were ‘too many different groups’, helped the notion that the formation of these ‘inclusive partnerships’ would contribute to a more cohesive approach - a ‘one-stop shop’ for learning that was now established as ‘lifelong’. The drivers for ‘inclusive partnerships’ was clearly deemed successful as, by 2001, comments about ‘too many partnerships’ again helped contribute to a ‘new inclusive partnership’ called a Local Strategic Partnership, that would contribute to a more cohesive approach - a ‘one-stop shop’.

The local Lifelong Learning Partnership (LLP) was at that time, ardent about emphasising ‘lifelong’ learning’ encompassing ‘learning from cradle to grave’ rather than the more limited emphasis on learning for those over the age of 16 (post-16).

Contributory factors to this varying emphasis has, over time been attributed, for example to the shift of funding from the DfES to the Learning and Skills Councils (LSC) whose agenda was more concerned with post-16. Also, LLPs nationally eventually dropped ‘lifelong’ and became known as ‘Learning Partnerships’. From its inception, the local LLP frequently debated whether it represented ‘life-long’, ‘whole-life’ or just ‘learning’. Whilst such discussions were time consuming, they represented an important means for some of its members to clearly establish and affirm the role of the LLP within the local partnership context - as was the further matter of concern for some participants, whether ‘education’ represented a sub-set of ‘learning’ (or vice versa). Such principles consequently helped establish which organisational representative was elected to Chair the LLP’s Board. This matter was considered by some members to be very important such that some strategic ‘engineering’ occurred in order to ensure that the Chair would be someone from the private rather than the public sector. (Ref Understanding an EBLO - similar concerns pertaining to membership of the EBLO Board resulted in the new CEO of the LEA being invited to join as a co-opted member, thereby limiting the power of that member within that immediate context.
ICT Sub-group

As part of the LLP’s development, various sub-groups were formed, one of which focused on the wider implications of information communication technologies (ICT) to the lifelong learning agenda.

Other sub-groups included: Work Related Learning (WRL); Work Place Learning (WPL) - and which eventually merged; Information advice and guidance (IAG); Family & Community; Marketing. There was an overarching ‘Steering Group’.

ICT was considered by the LLP as a ‘high priority area’, partly on the basis of the emphasis by central Government, the Regional Development Agency (RDA) and their interpretation about ‘the explosive growth of ICT and potential contributions to learning. Furthermore, it was affirmed by the region’s economic profile as ‘being at the forefront of ICT utilisation’. (as referenced in: DTI (1999) ‘Moving into the Information Age’; Spectrum (1999) ‘Regional Benchmarking Study’; EMTA (1998) ‘Labour Market Survey’; the RDA’s ‘RES’, etc.)

As stated previously, the Group’s remit, while working within the framework largely affirmed by its umbrella organisation, the local Lifelong Learning Partnership (LLP), was to engender notions of partnership within and across a number of organisations, associated activities and projects wherein ICT provided a particular form of emphasis or bond. To that end, on its inception, it sought to review current ICT policy and practice within and across partner organisations and wider contexts, with the view to using this analysis to inform future ICT developments in a cohesive and unified way. Prompted by the LLP’s Steering group, the Report was also intended as part of a broader auditing process that sought to contribute to an overall contextual picture of activity, associated opportunity and indicators of feasibility and subsequent process.

I was invited, by the LLP Steering Group, to be a participant member of the LLP/ICT Sub-group from its inception. This was due, in part, to also being a member of various strategic steering groups for a range of ICT Projects occurring at that time and underpinned by my varied experiences gained through working with ICT in different sectors, including education, at strategic and operational levels. At that time, my work within the EBP as manifest, for example, through its Communities ICT
Projects, was deemed to represent effective cross sector development that could inform the ICT Group’s remit. (This is presented in more detail in ‘reading the small print’, ‘Terms and Conditions’, and the ‘Activity Section’)

All of the other members of the LLP/ICT Sub-group knew that I was, at that time, already immersed in researching strategic partnership activity and ICT and that this would be further informed through participating in this group.

As a consequence of my membership and my wider research interests, I first offered to carry out the research, analysis and writing of the ICT Report and was subsequently invited to do so by, and on behalf of, the ICT Sub-group. My offer was partly based on the view that the Group had at its disposal a number of options regarding the conduct of the research. It could elect any participant member or members, including myself, or appoint ‘an outsider’. However, as the LLP did not only seek to promote but also aspired to notions of ‘organisational learning’ it recognised the benefits from the appointee being from within the partnership. This was in part, due to several organisations holding a key responsibility for learning per se and as such, was indicative of either the growing emphasis towards being a ‘learning organisation’ (Senge 2000) and/or says something about the prevailing ethos towards learning within an organisation[PM303]. Particularly, it also reflected the level of accredited qualifications held by some participant members and their academic insights into this subject. The LLP also considered various issues pertaining to insider / outsider research (such as bias, control, neutrality, costs, etc.) and felt that, on balance, the benefits justified them electing me. For the decision makers, these important issues could find forms of control, validity and accountability, whether methodological, ethical or aesthetic, through a number of means such as the scrutiny of my research procedures, interim reports to the Sub-group, and the devices upheld by the university at which I was registered as a research student. (These research issues are discussed in more detail in the Research Section and later in this narrative.)
Interim Reports

During the process of researching and writing the ICT report, I was required to provide occasional updates on my progress to the Sub-group at its formally convened meetings. This enabled the Group members to keep some track of progress and gain insights into my research approach. It also served as a means for the Group to encourage representatives from partner organisations to contribute to the consultative process and its subsequent Report. My interim reports to the Sub-group at these formal meetings also allowed me, as participant researcher, to highlight evolving issues and, according to elicited responses at that time, both enrich my raw data and triangulate emergent research findings.

I presented my interim reports verbally whilst following a written agenda briefing paper that I had prepared for each meeting and submitted beforehand. However, the formal minutes following the meetings unfortunately only generally provided summative statements ‘for the record’ that I had ‘provided the Group with an interim report’ with an indication of it’s intended publication date and associated presentation. For example, the minutes of one ICT subgroup meeting that occurred during its initial, formative stage, highlighted the fact that I had been elected, by them, to ‘conduct initial interviews to move the auditing process forward’ and that ‘the focus of the audit was to be, namely:

what people and organisations wanted to achieve using the ICT through the following issues:
- the organisation’s plans/aims and what are the commonalities between the organisations?
- the opportunities?
- the barriers preventing us from moving forward?’

(Minutes – dated June 2000)

It was also pointed out in those minutes that I had ‘used a number of presentation slides to explore issues pertaining ‘scale’ and ‘function’, of various strategy/development models shared with and further developed in consultation with the group members, and some of the ethical implications for his own research study.’
This particular reference points to two key issues: first, a public clause about ethical principles, standards and procedures – my own, those of the community of practice in which the research study was situated, and that of the research community. This last point was explicitly emphasised - that all interviews, responses and representations would be informed by and characterize ethical principles, codes and guidelines as advocated by the ‘research community’ (i.e. research policies as promoted and provided by the University of Exeter and other research literature. Refer. ‘Terms and Conditions’). Second, that some of my research models were emerging from this particular strand of my research (as presented more fully in ‘One in the Eye’ and ‘Off the Beaten Track’) and that these were being shared with and discussed by the group. Such negotiations enabled me to confirm and enrich my research findings and understanding of the issues from the perspective of other participants. It also confirmed my view that such models were an effective means to represent key points and issues as this form of representation encouraged further engagement from and discussion with participants. In this way the models represented data in and of action-in-action as well as a form of ‘research outcome’.

There had been general discussion about the purpose of the auditing process and the group felt that it should seek to establish:

- an overview of each organisation’s current facilities, services, etc and proposed ...
- taking account of: how the clarification of individual/collective intention may contribute to organisational strategies and policies; whether there is general agreement within and across organisations; if there should be proper project management for the partnership proposition of a unified solution for ICT

The organisations contributing to the audit included: the local college of further education, Education Business Partnership, LEA, Unitary Authority’s IT department, Youth & Community, several businesses, TEC, representatives from Library & Museums, Headteachers from primary and secondary schools. Some of these were participants of the LLP Sub-groups, others were gained through consultations arising from my other day-to-day practice. Some participant comments are incorporated into other Scenarios. The Report also reflected on other national, regional and local project developments and where possible, on insights offered by the respective Project Managers.
The following text comprises a number of references taken directly from notes that served as the Interim Report and which I presented to the LLP/ICT sub-group prior to the completion of the final ICT Report. This reporting process provided a clear indication to the Sub-group of emergent issues and findings from the interviews that had been carried out at that time. It also provided us with a means to emphasise the importance of their support for and in forthcoming interviews.

It is important to stress that the annotations and associated analyses were not included in the original transcript and were not conveyed to the Group in the terms expressed below. This was partly an ethical decision that I made at the time that reflected the interdependencies between my ‘judgement’ of the associated issues and how this should be conveyed through appropriate ‘conduct’. Further detail concerning the auditing process is provided in: Interim Report and in the Research Section: ‘reading the small print’ and ‘One in the Eye’.

In the formal minutes of one ICT Sub-group meeting (June 2000), my progress with interviewing was noted as:

(Research/Audit of position of participating organisations to date)

a) 11 x transcriptions (c250 pages) to date

(College, LA/LEA/LLL, IT companies x 3, Y&C to date; intended: TEC, HTx2, EBP Manager, Lib & Mus, Vol Org; also other projects:

This point not only served to indicated progress but also as an important means of reminding and encouraging engagement from members that had not so far, arranged a time for their interview or input. For the final ICT Report, I eventually held eighteen semi-structured interviews with participants from partner organisations to the LLP. I openly declared the nature of the questions that formed the basis of these interviews by including these in the appendices of the Final Report with a brief explanation about them. Whenever possible, I recorded most of the interviews on tape and made notes during the interviews. These were transcribed by me and then analysed in various ways as illustrated in ‘One in the Eye’.
Various anomalies that occurred during seven of the eighteen formal interviews eventually led me to find additional and alternative means of acquiring or triangulating evidence and issues. For example, in these seven interviews the tape was deliberately turned off at the request of the interviewee. There may have been a number of reasons for this request, such as: at the time of the interviews, Interviewees 4 and 6 had rarely attended any of the LLP meetings - a different representative from that organisation had attended. Thus, both preferred to ask questions about the other organisations rather than answer questions about his/her own. In the case of Interviewee 4, s/he wanted to express views off the record about those other organisation’s ICT project developments. S/he was concerned that his/her comments would be reported to other partners – and yet, s/he was well aware, and did not mind when asked, that I could write down his/her comments.

Interviewee 7 was similarly keen that his/her comments about his/her own organisation’s ‘approach and contributions to ICT Projects should not be recorded. Outside this formal interview, s/he publicly reiterated the same views on three other occasions, while on another occasion s/he then publicly contradicted her previous statements. At one point during the interview, s/he claimed that s/he was “concerned that (his/her employer) should hear his/her comment about the organisation’s lack of ICT policy”. Yet, that same employer made the same claim, once during another interview and recorded on tape, and also publicly at a LLP/ICT meeting that the organisation had no ICT policy. The point was made quite specifically by a Chief Executive Officer of an organisation that was a member of the LLP Steering and several partnership ICT groups, in addition to being the nominated Chair of an ICT strategy group within his/her own organisation; s/he admitted

“We have no ICT policy, any more than we have any audit of current resources, staff expertise, or analysed what the technological demands are on the workforce and what implications this has for our employees’ future learning”

It was not possible to fully establish if such a declaration avoided the possibility of having to share the policy with ‘outsiders’, if it existed, or merely reflected the organisation’s position within a changing policy context. Certainly, those within the authority that I interviewed were consistent in the view that there was no policy, and even that there was no evidence of a strategy or procedure to define one.
Nevertheless, this guarded and (in)consistent approach by some participants introduced problems for analysis and validation for me. However, I believe there were sufficient ways of triangulating the various comments from participants that it was possible to form a pattern of responses that were indicative of the situation under scrutiny.

As the interviews progressed, there were further problems that may have represented uncertainty about organisational change occurring at that time, or indicative of the doubt about the processes and purposes of eliciting information from and about competing organisations. However, during other day-to-day negotiations, often with same participants, within and/or outside formal settings, I found that they were prepared to share insights about the same subject, irrespective of whether I was recording or keeping notes of what was said. This raises methodological and ethical issues that are discussed later in this narrative, in ‘Terms and Conditions’ and ‘reading the small print’.

The above comments might seem to indicate a negative response by these participants to the proposition of the LLP, the audit, or possibly, a reflection on my capacity as an interviewer or researcher. There was a general sense that was nonetheless, conveyed by these participants that: there was ‘a fundamental belief in the value of engaging in partnership practice’, and that to strive towards the aims and objectives of the Partnership was ‘reasonable’, ‘rational’, that it ‘should help most organisations’, and ‘probably inevitable’. As stated by a Senior Manager from the College of Further Education:

“Our hands a largely tied - many current proposals for development must now clearly demonstrate, at least on paper, that we work closely in partnership with other organisations and that this partnership relationship will underpin it’s the proposals) implementation.”

In the interim report I deliberately drew attention to some of the emergent research issues I was facing under an agenda item termed ‘Issues’. The first of these statements highlighted the problem of ‘ensuring objectivity, difficulty of data analysis’. I illustrated this by referring to emergent findings that indicated that there were low
levels of agreement by different employees within an organisation regarding its informed/audited position regarding ICT and/or learning; that the different linguistic styles of interviewees meant that identification of some forms of specific information being sought for the Report was made more difficult, (for example, some interviewees had been ‘economical’ in their responses - they were reluctant to divulge or clarify information due to perhaps, the lack of that information); that if it was perceived by them that disclosure could have value to a ‘partner’ organisation / competitor and therefore represented a potential threat, then they misunderstood my role and that of the report. It also emphasised the issue of objectivity and subjectivity in discourse and its subsequent analysis.

Drawing on Patton (1980); Mason (1996); Robson (1993); Silverman (2000) Weirsma (1991); Miles & Huberman (1994); Walford (1991) and others, I reflected on their comments (in this case, regarding observation/participant relationships and interviews) and thus applied various forms of discourse analysis ranging from keyword search to the use of technology (e.g. Nudist and Atlas/Ti) to assist with the processes of analysis and interpretation.

I shall say that handbooks can provide helpful insights - to a point, though clearly they cannot take account of all circumstances that may be encountered: as highlighted for example, in this case where I was searching interview transcripts for words, terms, references or relationships regarding ‘strategy’. Interviewee 8 specifically used the words ‘strategy’ and/or ‘strategic’ 151 times in a 30 minute interview; Interviewee 1 and 2, respectively, made 5 and 0 references. This did not suggest that Interviewee 8 had a understanding of, or implemented ‘strategy’ that was ‘better’ than other interviewees. From a methodological perspective, the emerging issue however, was whether discourse analysis in its various forms provided a reliable tool for comparative analysis, coding/decoding and constructing stable representation of meaning. This matter is discussed more fully in the Research Section (‘One in the Eye’, ‘In Search of the Lost Chord’)

The second statement about research issues highlighted a procedural matter of accruing ‘evidence’ as ‘revisiting respondents/on-going’. Returning to some interviewees to confirm or clarify ‘raw data’, or perhaps triangulate with other information was also problematic and frequently prompted comments such as “did I say that”, “that was three weeks ago, its different now”, and simply, “I’ve changed my mind about that”. These responses began to seriously challenge the basis of the raw data, the fickle, strategic or political nature of the expressions being made, and the purposefulness of partnership practice. As my research interests extended beyond the LLP/ICT group and its’ specific ICT research project report interest, I was accumulating data outside ‘formal interview contexts’. This further confirmed that the rhetoric of public meetings did not always match formal comments made for the
Report and/or other (in)formal occasions. Furthermore, the very act of being accountable to the Sub-group meant that I could discuss my concerns and emergent ideas, and hence provide a further source of data and hopefully, affirm my analyses. This point highlights a characteristic of the data – that it was terribly volatile. Moreover, it challenged the validity of a structure built by drawing together data from different times and while this provided an insight into the partnerships it was also a research methodology problem.

The third key point was a statement that referred to the ‘balance of receiving / providing information’. This comment was, within the setting of the formal group meeting, an attempt to encourage a greater level of openness - within the formal setting, the collective agreement had been made to provide and analyse specific forms of (uncontroversial) information to help with the main agenda of the LLP.

The fourth key point was a statement about ‘disclosure / raising issues in reports - not my views …’. These partly defensive comments were to, again, raise the matter of ethical research conduct and procedure (e.g. non-disclosure, anonymity, harm and detriment, etc.) within this research process and that the report would, likewise, be worded such that those principles would be maintained. I reiterated those points, for example, at the beginning of each interview and during LLP and other meetings.

Not one single interviewee would agree to sign any form of formal ethical agreement and generally dismissed ethics with comments such as: ‘I don’t think we need to worry about that’, “Why, can’t we trust you by now” and “It’s all rather too late for that isn’t it!”. Occasionally, after a ‘hats-off’ or ‘informal/personal chat with a colleague’ I might get a comment such as, “Oh God, I bet you are going to use that in your thesis … never mind, I only told you what you probably already know or have heard from someone else!” (This issue is explored in more detail in ‘Terms and Conditions’)

A key point emerging from the formal research process for the Sub-group and included within the interim report was:

… currently there are different levels of understanding, commitment, involvement from ‘participating’ organisations (inevitably).
This comment offered a preliminary hypothesis that surprised no one in the meeting. However, I reiterated their assumptions (that is, those points that had been agreed by the group prior to the research study) that presumed the need for the audit and for the partnership group. Irrespective of the nature of responses inside and outside formal partnership meetings, a general sense about the need and value of partnership prevailed for the majority of participants, though perhaps, cynicism, politics, evasiveness and other pressures on participants (such as time, or seeing the relevance of partnership all of the time) meant that much time was spent ‘looking beyond’ what some might see as the ‘raw data’. That the prevailing sense of attitude and belief was difficult to represent, it did not make it any less ‘raw’! This was, for me at that time, an important issue that I wished to resolve so much so that I included the following comment in the Interim Report:

*Each organisation’s responsiveness to internal/external influence should/could provide the very rationale for partnership.*

*Perhaps there is a greater need than expected to reinforce, promote, reassure those within the group, NOT that the long term benefits from collaborative/ coordinated strategy will significantly strengthen the range, breadth and quality of provision and enhance paybacks to the organisations themselves, but what each organisation actually means when they speak in these terms.*

This was a (poorly worded) personal reflection that was expanded on during this partnership meeting, regarding the nature of the findings to date. It highlighted my view, supported through the analysis of participant responses, that the rhetoric was only a stepping stone towards embedding the principles into organisational practice, and that if the basic tenets of partnership were largely agreed (?), it was then, a matter for the group to find the expeditious means, from within, where the knowledge, experience and belief resided, in order to take this forward in terms that were mutually helpful. As such, the Report was intended as a manifestation of those views.
LLP/ICT Report

July 1999
1 Introduction

This report aims to provide an overview of the current position of ICT/Learning infrastructures within \( \textit{the local area} \) and how this may contribute to the aspirations of the (...) Lifelong Learning Partnership (xxLLP) to enhance and optimise learning opportunities for the participating organisations and the wider community. It is important to stress the highly complex and dynamic nature of the environments and contexts within which these development occur, and writing this report has been rather like trying to pin jelly onto a wall. Therefore what it contains is only partly indicative of the actualities, potential or otherwise.

The report has three main sections:

1 the context within which the developments are occurring and principle considerations and issues facing the ICT group
2 a review of the current ICT position within and across the organisations in the Lifelong Learning Partnership
3 some proposals for future progress

Sections one and two underpin section three such that the value of the proposals may be limited if the interrelationships between the sections goes unrecognised.

I should like to express my thanks to those who contributed to the information and compilation of this report. The report has been written in such a way that I hope it offers a stepping-stone to future developments and opportunities by helping to establish a shared view of the main issues[PM305].

Finally, I hope that the main issues in the report can contribute to both the individual and collective developments that occur within and across the participating organisations. The actual representation of the Lifelong Learning Partnership does not rest simply in what it promotes for others but also through the learning that occurs from the partnership itself and without which, the notion of partnership is debatable[PM306].
2 \hspace{1cm} \textbf{Contexts}

A view of the current position and future prospects holds little weight without having some bearing on the environmental and strategic contexts within which the developments occur. This section therefore offers an overview of these contexts and some issues that are principle considerations for the group and the organisations they represent.

2.1 \hspace{1cm} \textbf{Environmental Contexts}

2.1.1 \hspace{1cm} \textbf{Infrastructural/Technological developments}

Specific technological strategic and infra-structural developments occurring within each organisation may include: e.g.

a) implementation of ‘telematics’, including: communication systems that can encompass Internet/Extra-networks; telephony systems
b) courseware investment, development and delivery mechanisms
c) ICT training: training with, about or for ICT
d) ICT support: technical, services, etc.
e) development and dissemination of information and services
f) access and entitlement
g) website developments
h) security systems
i) Internet service provision (ISP)
j) service agreements
k) procurement
l) funding
m) trading
n) technological / system compatibilities (hardware/software/networks)
o) management and administration systems
p) ICT strategic and policy developments
q) ICT projects: e.g. Video Conferencing, Kiosks, IT4All, Impac, etc.

The ‘motives’ underpinning these developments, or the means of implementing them varies considerably between sectors and within organisations[PM307].

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1 Local Area Networks, Wide Area Networks and Internet - the nature and scale of which is down to individual interpretation.
2.1.2 Other technological developments

Technological developments occurring at national, regional and local levels that particularly relate to learning opportunities and accounted for in some of the above activities necessarily include:

a) National Grids for Learning (NGfL): e.g. for schools, libraries and museums\(^2\); now being orientated towards post-compulsory education and training (ILT); EUN\(^3\)

b) Community Learning Hubs\(^4\) (HE, FE, UfI): networked grids, skills challenges/targets

c) Educational Superhiways Initiative (EDSI) (forerunner of NGfL) and also established wider strategies and policies

d) EC Objectives/initiatives including 4th Framework, ADAPT, TAP\(^5\), etc.

e) Technical developments (e.g. hardware/software/connectivity)

f) HE developments and partnerships

g) Edutainment market developments

h) (xx) Virtual College Network/Future Focus developments

i) Further Education Information Learning Technologies (FEILT)

j) Skills Centres

k) Library systems: e.g. (Super)JANET, digitisation, etc.

l) Rural Communities Project developments

m) ‘E&T 2000’ developments\(^6\)

n) Anywhere Anytime Learning

o) Developments in telematics and information and communication technologies at all levels (e.g. ISP/0820, 2000 compliance)

p) Professional training projects and developments: (e.g. TLTP, TROJAN Project, T3, ADAPT, QUILT, EdNA, etc.)\(^7\)

q) training (provision, brokerage, accreditation)

r) recruitment and retention

s) tracking and monitoring systems

t) employment trends and skills\(^8\)

There are various common themes running through these.

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\(^2\) It is important to note that collective networking opportunities that encompass business and community are foundational to these National Grids

\(^3\) EUN: European SchoolNet

\(^4\) Key and Supplementary Recommendations (KR/SR) from Fryer 1998

\(^5\) TAP: Telematics Applications Programme (part of 4th Framework)

\(^6\) as referred to in ‘Education & Training Development Agenda - towards 2000’

\(^7\) see index

\(^8\) e.g. Target 2000
2.1.3 Partnership issues

Bringing together business, education and community 'environments' requires some recognition that[PM308]:

a) each has its own rationalities, organisational and technological systems and responsibilities to particular markets

b) commonalities exist within and between these environments and they may be contextualised in various ways as, for example: vocational, academic and recreational learning; personal, professional, social; physical and virtual learning, or simply learning networks.

c) motives for and processes of engagement may be determined not only by institutional demarcation and territorialisation but also by wider interests and efforts that may optimise and enhance opportunities[PM309]

d) the complexity of the environments within which learning occurs or is promoted means that control of it is limited[PM310]

e) that the richness and diversity of what learning represents is its strength

f) development is responsive to not only national agendas and 'recognised needs' but also the consumer markets[PM311]

g) partnerships occur and operate on many different levels[PM312]

h) ICT may or may not be incorporated into any of the above

2.2 Evolving Position of the Group[PM313]

1. The group is well represented by (company), (company), the College, the Council, the EBP, LEA/schools and TEC[PM314];

2. The expectations and congruity of the ICT sub-group necessarily evolving from the visions and expectations of the xxLLP grew from uncertain beginnings[PM315].

3. As previously mentioned the group membership was operating within evolving and highly dynamic environments and conditions operating at national, regional, and local levels. Obviously not all organisations represented were involved in all initiatives, nor was there group representation in many of them.

4. There was an expectation that the group would naturally understand and agree on the terms, conditions and concepts that existed within the rich and different technological contexts - this is not yet fully resolved[PM316].

5. A summary of the group’s progress is provided in the appendices and gives further support to the thinking/views underpinning the report.
2.3 **Aims of the ICT Group**

The process of establishing the aims has grown from the need to be more aware of the nature of ICT developments, how these may be co-ordinated to enrich further opportunities for the participating organisations and the wider (local) community. The process then includes: auditing ICT developments[PM317], agreeing on feasibilities and rationale, and seeking appropriate means to consolidate and co-ordinate opportunities (current or potential[PM318]). This is consolidated in the following Statements

2.4 **xx LLP Vision & Mission Statements**

2.4.1 **xx LLP Vision Statement**

‘We are building a community, where learning is for everybody and we learn from each other, throughout and across our lives.

We are building a community where learning is: for fun, for everyone, for life.

**Task:** To realise the learning potential of people in *(the locality)*, to meet the community’s needs.’

**Terms of Reference:**

1. To develop a local vision for a lifelong learning strategy for individuals and organisations within *(the locality)*

2. To share an understanding of the *(region’s)* Education and Training Targets and their contribution to personal development and economic competitiveness locally and nationally.

3. To consider local analysis of the economy, and progress towards the *(region’s)* Education and Training Targets by geographical areas, institutional types, gender, ethnicity, employment, investment and sector.

4. Produce detailed action plans, which will set out the year-on-year approach towards meeting targets for the year 2000 (and beyond).

5. Produce marketing and communications plans for key audiences to establish an appropriate strategy for each group.

6. Generate cross agency bids for funding projects to raise achievement.

2.4.2 **ICT Mission Statement**

‘To encourage and co-ordinate the development and use of ICT facilities in support of lifelong learning for the benefit of individuals, business, education and the whole *(of the local)* community[PM319].’
3  **Review[PM320]**

This section provides an outline of ICT developments occurring in the (...) region. It reflects on current ICT provision, needs, developments and intentions of the participating organisations in the Partnership. It also draws on trends and participation in other projects and developments. By offering a synthesis of both the notions and tangible outcomes, it sets the context for suggestions for further development in the next section.

**3.1 Audit**

The audit offers a qualitative and quantitative overview of ICT strategic and infra-structural developments occurring within and between organisations. The aims were negotiated through the ICT group meeting and established the main focus. Assumptions influence dialogue so I have outlined these along with an overview of the ICT/partnership facets being explored.

**3.1.1 Aims**

a) to conduct an audit that provides a picture of the current and proposed ICT developments occurring within and across the xxLLP organisations

b) to identify provision, opportunities and intentions of those organisations

c) to identify possible barriers, commonalities, feasibilities

d) to consider how the information may contribute to developments for the various organisations individually and collectively and to subsequent evolving strategies

**3.1.2 Assumptions[PM321]**

A core of understanding assumed to be in place includes a view of ICT required or represented by that organisation in terms of:

1. current provision for/needs of that organisation

2. ICT functionality (telecom/networks/general hardware & software capability)

3. Infra-structure/management systems

4. access issues

5. benefits or opportunities for collaborative projects

Also, the process of partnership itself recognises long-term possibilities for each organisation and collectively for the (local) community, and that the xxLLP can represent an effective forum for sharing and promoting information and opportunities.

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3.1.3 ICT Provision

The focus would therefore be on the provision of ICT infrastructures and capabilities (including physical/virtual, current and intended) and therefore includes:

- Strategies, policies and practice
- Admin. and management systems
- Resources
- Training
- Access

3.1.4 Sources

Data has been collected through interviews, documentation, meetings, etc. Interviewees were from (the local FE) College, EBP, LEA/LLL, (the local) Council's Corporate IT, (company), (company), Youth & Community, some Headteachers and other organisations involved with ICT project developments. Documentation included policies and ICT proposals, project reports. Information was also acquired from other projects including:

- local: e.g. (village), (town), (centre), Y&C Cybercafe, EBP's Community ICT Project (including PhD research by one of the tutors working in some of the schools)
- national: e.g. Gemesis, Adapt, T3, TLTP, EDSI/NGfL, and information from BECTA, DfEE, BCS, FEILT, JISC and NIAACE, etc.

3.2 Initial Outcomes

3.2.1 Analytical tool

Unstructured interviews were recorded, transcribed, and analysed for common themes. From this a brief discussion document was offered to the ICT group for comment. Some of these issues have been progressed through further conversations and reference to available documentation. To facilitate the interpretation and representation of the outcomes a set of questions arising from the interviews were constructed against which answers could be analysed quantitatively and these contribute to the points in section 2.3.

3.2.2 Outcomes

There are limitations to both qualitative and quantitative analysis but together they have contributed to the interpretation of the main issues arising from the responses, review of activities and documentation.
3.3 Representation of Current Position

The following points offer a collective representation of the current technological situation arising from responses during interviews, meetings, and documentation. The points are not indicative of the processes by which the issues arose or dealt with[PM322] but do offer an overview.

1. Several organisations have new or highly developed telecommunication systems that enable high band-width transmission for large numbers of simultaneous users. Those less well off in this respect include schools, many of which are still using a standard phone line (PSTN) for all aspects of telematics.

2. Most organisations have intranets or Local Area Networks (LAN) enabling transfer of information between machines on that site. The larger organisations also have or are developing extranets whereby the LAN can be accessed outside the immediate organisation, or it is part of a more extensive Wide Area Network (WAN).

3. There is some encouragement for schools to become part of a wider area network, for example, primary feeder schools linking with the local secondary, or the secondary schools linking with the Council or College.

4. Access to the Internet (World Wide Web or www) is achievable by most organisations in most instances. However, this is a rather simple picture that does not fully portray the complexity involved, or the levels of access and by whom.

5. Most organisations are concerned about providing unrestricted access to the www and either, restrict access to certain users, apply restrictions or ‘filters’ to specific sites, or monitor access. Other codes of conduct are not generally applied (e.g. contracts, personal judgement/etiquette).

6. High-level security systems (e.g. firewalls or privileges) often stop access to the www. Similarly they are used to restrict access to the LAN from outside. In most cases this includes access to the LAN by the workforce, remotely (when in the field), or from home.

7. This has wider implications for accessibility to any forms of information, data or training materials and courseware by a workforce within and between organisations, and least of all by the general public.

8. A particular theme to Learning Networks (e.g. NGfl, Ufl, library systems, etc.) is interconnectivity by networking networks. Through this has not been fully addressed yet, though there are a several examples where this has been achieved quite successfully. For example the (xx)Virtual College Network serves as an exemplar, also the College and (local) Library have established a common registration scheme, and the Council is progressing with their connectivity between different Sectors.

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NB See 3.1 (Weaknesses in the report)
Most organisations do not fully understand their potential role in the developing community learning grids, nor the projects and that were the forerunners to existing developments. Similarly, there is little secure knowledge of other community developments occurring elsewhere in the country.

There are several successful local community projects that demonstrate the advantages of collaborative projects (e.g. the Community ICT Project, Community Hubs such as that developing at (school), (town) Methodist Church, or the (town) Youth & Community Cybercafe).

Recent negotiations have been established through the Learning Partnership that seek to draw on expertise from nation-wide projects and include: NTL - this is looking to a comprehensive telematics solution including telephony and Internet Service Provision; Anywhere Anytime Learning (Microsoft) which offers an interesting marketing strategy that encourages the use of portable computers in schools. Each seeks to build on successful pilots or developments that have occurred in other regions. ICL Fujitsu on the other hand offer an interesting model for learning. On a smaller scale, a video Conferencing Project with (local) Federation of Primary Schools are drawing on expertise from the (ICT) Centre at (a) University and through which other training opportunities will be more widely available.

A few organisations have invested heavily in courseware (content and delivery mechanisms) and anticipate this being made available outside that immediate organisation. However, it will be difficult and time consuming to modify some existing technical systems (e.g. security, marketing, support) to widen access in some cases. Two organisations have established delivery mechanisms that enable open or distance learning.

Most organisations, ranging from small schools through to multi-national organisations are keen to access both physical and virtual courseware and training systems.

Most organisations are keen to develop a clearer understanding of the range of courses or training programmes available, particularly those that offer business, management and ICT training.

ICT training ranges from training with, about, or for ICT. Most organisations are keen to develop more open systems whereby the training with existing ICT facilities is optimised. This can then enable more specific training about ICT. Currently it is only business or some specialised College courses that training is specifically for ICT development (e.g. hardware or software research and development).

Trainers being stretched to capacity is a concern for many organisations, through collective training arrangements have not been explored fully. Similarly most have not secured significant funding or embarked on national/EU training initiatives.

Training for teachers under the New Opportunities Fund (NOF) is about to be started, though there are considerable limitations here for similar reasons, in spite of the efforts of the Teacher Training Agency (TTA) to implement a nation-wide strategy. Other EU training schemes have not been tapped at present.
ICT support (technical, services) is generally confined to larger organisations that have their own support staff or buy in as necessary. There are no examples of shared/collaborative support systems and services being drawn on by organisations within the Learning Partnership.

The development and dissemination of information and services (virtually) is being enhance by several website developments including for example, (xxLLP web site), the College and Council, the LEAs curriculum site, and some smaller organisations such as the EBP (company and SETPoint websites), (school) Community Site, etc. Most large organisations also have highly developed sites but are not necessarily designed for wider public viewing.

Several other local website developments are also occurring but not drawn upon or linked in with the above sites (e.g. (company), Kidlink, many small developing school sites).

Both the College and the Council are exploring the development of more comprehensive Internet Service Provision (ISP) capabilities to a wider range of consumers.

Collective procurement has been a strategy of both the Council and the College, the advantages of which are significant. However, there are many areas where collaborative procurement could be still far more beneficial in reducing costs and enhancing accessibility or ‘inclusion’.

Instances where recycling has been established through the EBP have been very effective in co-ordinating and enhancing access to ICT facilities equitably.

There are several examples of effective collaborative funding initiatives (e.g. EAZ, VCN/Future Focus) and also where knowledge of common projects have reinforced proposals (e.g. NGfL). However, while there is still much scope for accessing funds for further initiatives and developments, the implications of joint, collaborative and matched proposals will need much closer scrutiny.

There are no common management and administration systems in place that operate across different organisations. This is perhaps due to a very limited number of negotiated, collaborative ICT strategic and policy developments. It is envisaged that this will become a priority.

There are a host of smaller ICT projects besides those mentioned above (e.g. Kiosks, IT4All, (company), etc.) but are similarly, independent and do not interact with each other. Again, this will become a priority in the future if there are to be real gains from cross-fertilisation, and from other management strategies mentioned above (e.g. procurement, common support systems, etc.).

Very few organisational developments so far take account of initiatives being promoted via ‘edutainment’ or consumer market developments. To date few organisations have considered the wider implications of the media giants as significant providers of learning materials, nor are currently investing in alternative technologies such as set-top boxes, corporate browsers, kiosks, etc.
Tracking and monitoring systems are in place for many organisations for specific aspects of contextual information. There is no common system, nor one that crosses phase or sector.

There is a clearly identified need to address ICT skills to strengthen the workforce and ensure a greater level of compatibility between employers’ needs and the skills of the workforce. Most recognise this starts from providing the best opportunities in local schools and implementing a more effective community learning networks. Currently, there is much to be done in realising aspects of this.

### 3.4 Main Issues Arising

The following tries to account of these developments based on four different aspects:

#### 3.4.1 Developing a learning culture

1. There are many views and interpretations of and practice in ‘learning’ within or at organisation level whereby the interrelationships between personal and professional learning are explicit, encouraged and enabled[PM323]. A relevant view regarding collaborative culture is aptly provided (FEILT: 1999, p10) “Embedding the learning culture in every community is a commendable goal. Achieving this in practice, against a recent backdrop of competition rather than collaboration, or conflicting rather than common goals, presents a huge challenge.”

2. Accessibility is a complex issue that will greatly influence attitudes to learning[PM324]. Attitudes of organisations as to what how and why they value different types or styles of learning will need to become more explicit[PM325], as will the technological facilities and privileges that can enable and promote learning at work or from home.

#### 3.4.2 Partnership

1. The need for partnership appears to rest in the need to co-ordinate, to collaborate and strengthen collective arrangements. Evidence of those benefits has emerged from several initiatives but these gains are not always made explicit across the partnership. These would also clarify potential opportunities or strategies for wider community developments.

2. The Partnership is becoming responsive to national agendas and opportunities through collaborative and matched proposals. The coherence not only within but also between these bids will become fundamental to future success but also the solution the Partnership hopes to offer the wider community[PM326].

3. There is great activity in addressing: to whom, when, why and how learning opportunities may be made available to staff. The logistics of widening access to those relevant aspects of training or learning to a wider audience, either within other organisations or the wider community is a much more difficult issue that has yet to be addressed by most organisations or by the partnership. Internal audits would help[PM327].
3.4.3 Telematics (ICT and communication systems)

1 ICT draws on an immense range of facilities, networks, training, materials that may be a part of open or closed systems that are not fully compatible. Strategic positioning has not been consolidated through policy, and implementation of ICT has in many cases been responsive to natural rather than organised growth[PM328]. While there is yet to be a common understanding of what constitutes 'compatibility' there is a shared view that lack of it can be detrimental and can impact user accessibility[PM329].

2 There is still the possibility that ultimately a major driver to ICT developments will be consumer led through access to what are currently recognised as 'alternative technologies'. There appears to be some reluctance to accept the consumer/media influences and benefits in enhancing or extending learning opportunities[PM330].

3 Access ratios to resources is not deemed to be too problematic in most areas thought this does not correlate to the views expressed in some cases by staff; (see ILT/BECTA reports). Access is a big issue that is far from being resolved within and across organisations[PM331].

4 On a simple level, anyone with a modem can, with the right privileges, technically access any network and the information on it. Difficulties arise from implementing a system whereby: the privileges are managed so as not to jeopardise the integrity of the network/s; it is both transparent and accessible to the user; the information is appropriate to the users’ needs; support is available[PM332].

5 Feasibility and time-scales for a (local) ‘connected society’ will be determined by the rate and scale of developing inter/intranets/extranets and other infrastructural implications, and the extent of collaboration on these issues at an cross-organisational level. (LLP web site) offers a gateway for learning opportunities and this has still to be incorporated into existing or developing websites and ICT infrastructures[PM333].

3.4.4 Training

1 Learning on demand is expected to be a significant growth area and will pressurise most organisations to seek effective solutions such that they have dividends for that organisation. Work based training (WBT) was raised by all, and while community learning opportunities will become part of a similar ICT infrastructural development, there are few organisations that have resolved the WBT issue due to various inadequacies (e.g. clear view of need, or means, be they strategic, infra-structural, financial, etc.). It is accepted that training and development (including curriculum planning) will require a radical shift in methodology and implementation but not many organisations have resolved the logistics of this issue.
ICT training within each organisation is at varying stages and major problems are staffing being stretched to capacity and making implementation of some existing and potential ICT developments difficult. Also, most organisations are developing training materials/opportunities internally: some are specific to business needs, management training, basic ICT skills. Customisation of materials/courses is deemed necessary by all organisations though few have authoring capability[PM334].

Brokerage has been established in some cases and offers an effective solution.

Changes in teaching and learning methods especially with the move to more open and distance learning will require a radical review of procedures for training trainers and associated methodologies. This has yet to be fully addressed in most cases. Tracking, administration and assessment systems will become a greater priority and few organisations have strong systems in place.

As with any enquiry, it often seems that more questions are raised than answers, and no apology for this is offered here[PM335].
4 Future Developments

There are many invaluable reasons to engage in a strategic review at any time, whether in response to institutional or organisational agendas, or to the on-going social and environmental changes also occurring. There is a host of material that reflects the changing position and developments in learning networks and partnerships, whether social or technological. Many are largely based on EC, national and regional agendas and targets, others through more local needs analysis. Other documentation offers some clarification on specific projects and developments. In addressing the impact of this highly dynamic change and how solutions may be implemented at local level, the following propositions serve to focus subsequent debate rather than being seen as conclusive recommendations, nor are they hierarchical.

There are five key areas that provide the focus for this section comprising:

1 framing: the rationalities that underpin the current and potential contexts and opportunities.

2 positioning: the strategic means by which current and potential developments may progress

3 systems: the logistics and practicalities that may empower the vision

4 opportunities: feasible targets, opportunities (projects & proposals)

5 contingencies: unpredictability and irrationality, often associated with the dynamics of change, (perhaps just a question of which glasses one happens to be wearing at the time).

1 The following points, in many respects, are not unique. While there is a wealth of ‘guidance’ material available I will draw attention in particular to ‘Creating Learning Cultures’ (Fryer: 1999), and FEILT (1999) not only to avoid duplication of strategic and infrastructural issues, but also to highlight commonalities to between the key recommendations those documents and in this report[PM336].

2 The following are not solutions in themselves, only pointers to encourage each organisation to clarify where their strengths lie and how these may become embedded within the reality of a networked learning community.

3 The process of addressing and appropriately accommodating learning needs is increasingly viewed as ‘consumer product’ where individualised programmes / learning modules will be tailored to meet personal and career needs, within personalised time frames. Home or work-based learning will place greater demands on employers and providers alike.

10 Key and Supplementary Recommendations (KR/SR) from Fryer (1998) correspond closely with issues raised in this report

11 See references
Much of this development is likely to occur with or without the intervention of the \textit{xxLLP}, either as part of the natural development occurring within each organisation or opportunities offered by consumer led developments such as those by the media giants or ‘Anytime Anywhere Learning’ schemes. What may be of importance is the focus or relevance of the learning and the extent that the Learning Partnership contributes to those opportunities[PM337].

Some changes will be highly challenging to the perception of and means by which learning will occur. For example, the proposition of parents resourcing schools, or recognising and valuing ‘recreational’ learning within academic or professional contexts.

Acceptance of the complexity and lack of control for many developments related to social inclusion means that many initiatives will also be motivated and enabled by the consumer markets, edutainment providers, as much as those with or seeking vested interest in a community learning network[PM338]. This can strengthen the outcome if it can be harnessed and promoted alongside other propositions. (See also KR4, p18)

The ICT group (and possibly the LLLP) may benefit from media representation. This also acknowledges SR10 (Fryer: 1999 p17), and FEILT

A common language or understanding has still to be established between the different sectors or organisations. An explicit expression of the principle aims/advantages for strategic ICT development is required as the motives of enriching learning experiences, improving standards and facilitating better management practices can each prompt different modes and logistics for processing and realising such aims.

Collective strategic positioning and collaboration should also become part of that process of developing a solution, notionally to strengthen individual positions but also ensure that the connected society can do so in partnership with the organisations.

Sharing information, views and collaborating on joint projects at initial stages will greatly facilitate building this shared vision and strategic position into own organisations such that the notion becomes a reality at all levels within, and subsequently outside the organisation.

Various organisations could at this stage make stronger representation of how its ICT strategy might now be developed alongside developments occurring nationally, regionally and locally. Collaborative strategic development should greatly facilitate longer-term outcomes for each organisation, its role within the partnership and what it can offer the wider community.

Enabling and promoting learning might be explored more fully by clarifying in greater detail who can offer what to whom with what, for what short/long term gains and how this might be extended. Brokerage offers one possible solution.
Some organisations have yet to make explicit how broad their view is, even of ‘work related learning’, and appear reluctant to recognise or declare the potential advantages of encouraging a learning ethic that goes beyond ‘professional’ or work related learning. This prompts a dilemma in balancing rational economies, in spite of the logical benefits. Perhaps this will begin to resolve itself through encouraging and implementing greater access to on-line, in-time, in-house training.

In response to the view that ‘there are neither time nor resources to waste on parallel and separate innovations’ (FEILTp23para143) it would suggest that there should be: compatible system and information extranets, common gateways, and agreement of common data collection and analysis frameworks within a partnership area. This is partly being addressed by (xxLLP web site) but, for this to succeed, there needs to be further negotiation on infrastructural developments.

Technical / technological developments within some organisations have yet to be fully rationalised and implemented. For example, most participating organisations do not yet have a system that can distribute information to its staff remotely or at home, and many do not or cannot distribute learning materials or courses internally. Without this implementation, the consequences of a cross-organisation, or wider community networks are perhaps, not an issue.

Feasibility of the proposition for cohesive learning opportunities by enhancing the ICT infrastructures requires more than shared vision, language, understanding of the logistics of implementation and money.

Perhaps there needs to be some acceptance of either: the need to implement a business model that consolidates the technical, business and social systems into a cohesive proposition, OR agree that this is not necessary to realising the needs, aims, intentions of the LLLP and the wider community.

The LLLP (ICT) would do well to reflect more fully on established projects (e.g. EONs, Genesism, T3, RCP, Sunderland, ADAPT, etc.). This could clarify the processes that enabled their developed, clearly identify the advantages of each to those particular communities, and how they may be adapted to the needs of the (local) community rather than speculate on replicating uncertainty.

There are several consultative bodies that have helped negotiate and develop similar projects (JISC/JANET/TLTP/T3 and community learning networks). Investment in that expertise would greatly contribute to synthesising and advancing the proposition in (the locality).

Strategic/Project Management for a community network cannot occur through goodwill and unreasonable expectations and without greater synergy and investment, and perhaps formalising some form of project management[PM339].
Scenario 4

Developing some joint projects could help clarify many issues. This might include for example, paired organisations with similar needs/interests; enhancing and optimising access to facilities, materials, courses, trainers; joined up grids (NGfLs, FE Hubs, Authority Hubs, through negotiated proposals and projects; or simply share information at more levels more quickly. This already occurs between some organisations, and the outcomes may have some relevance to others[PM340].

A means of enabling a more open declaration by an agency or organisation of its role and how it may effectively contribute to particular areas of learning should be sought. Many assumptions are being made.

Generally, there is limited knowledge and understanding of partnership project initiatives outside the organisation that traditionally applies for that funding. Section 2.1.1 and 2.1.2 represent a vast range of developments that will inevitably, eventually interconnect or be subsumed into new projects. A key recommendation is that a specific time is set to share information about a range of ICT and partnership developments (past, current and potential) in order to clarify and implement important links and opportunities between them. Future applications for funding should also then reflect greater insight/vision, collaboration and ‘investment’, and can demonstrate more clearly how the various projects will ultimately interconnect.

Further to the above proposal, there will be a greater pressure to receive collaborative, cross sector bids, with the expectation that the proposal reflects more closely, not only a higher level of collaboration in the development of those bids but also in the implementation of them.

Greater awareness of other ICT projects could greatly assist with training issues (e.g. TAP, TLTP, Trojan, ADAPT) and could tap into new but significant funding areas.

Radical changes will occur not only in learning processes but also in teaching. Networking between and amongst learners, tutors, employers could be encouraged further within and between the different sectors.

The changing role of the tutor will require training to take advantage of interactive physical and virtual systems. Training the trainers will greatly also improve the perception and implementation of subsequent learning opportunities within the organisation and its staff.

A possible avenue for enhancing collaborative opportunities may arise from, for example, education gaining from benefit from business management training, or education contributing to aspects of business training development[PM341].

EU and national projects need greater promotion in the area and could include for example, Netd@ys Europe (Netweek in November 99) or EUN (European SchoolNet), or ADAPT.
30 Access is a big very issue and without addressing this the concept of individual email, individual learning opportunities, development of core IT skills, assistance and support become less relevant. Access might entail resolving basic provision (which may be addressed simply through recycling) or privileges/firewall issues. There is evidence of good practice and further collaboration could greatly assist with progressing this[PM342].

31 Funding opportunities and match-funded proposals are perhaps not fully explored or developed. Wider and earlier consultation can assist with this, as can ensuring awareness of effective outcomes from existing projects whether on micro/macro scale that can contribute to and strengthen those bids.

32 Proposals could take more account of and incorporate propositions occurring within and across the different sectors irrespective of their current position in the LLLP (e.g. set-top box technologies/media conglomerates) are ‘potentially’ one of the largest providers of learning opportunities. However, the interrelationships between the opportunities and initiatives being sought do need greater thought. (For example, Microsoft’s ‘Anytime Anywhere Learning’ offers a significant marketing model while ICL/Fujitsu on the other hand offer an effective learning model.)

33 Perhaps we have not blown the trumpet loud enough to declare or celebrate existing local achievement and expertise. This is partly a marketing issue[PM343].

34 Prudent economic strategies that encourage collaborative procurement, shared ICT infrastructures, learning networks and support systems will not only help with increasing financial pressure but also can strengthen speculative bids for collaborative partnership developments in the future.

35 Working groups might be established to examine more closely: funding, project opportunities, training, telematics and communications infrastructures.

36 Tracking learners’ needs, provision, routes, and achievement will become more complex and more necessary. This will need to be resolved and could offer a possible focus for development funding

37 Collaborative opportunities might be quickly identified and promoted by matching an organisation’s key strength against a recognised need by another organisation such that reciprocity can also become more firmly established. e.g. Some organisations have a key strength in business or management skills that could contribute to the needs of another organisation; some organisations may be developing materials that another already has available, or could be authored/tailored to suit.
4.1 Summary

There are many issues raised in this report, and the following offer a suggestion for prioritising some that facilitate finding ‘solutions’.

A key recommendation is that a minimum of a full day should be found to focus on the central issues that underpin many of the ICT developments identified in Section 1.1. and reflect on two main issues:

a) evidence of good practice from within and outside the region that could become foundational to current and subsequent developments.

b) a clear understanding of the commonalities that exist between the current and potential initiatives and developments

There is often talk of Government’s attempt at ‘joined up thinking’. It is equally relevant to the current developments and subsequent proposals submitted by organisations from (the locality).[PM344]

To assist with the development of a networked, learning community in (the locality), the Learning Partnership would gain considerably by drawing on the experience and expertise of others who have been instrumental in developing and achieving similar initiatives in other parts of the country. Not only might some of these people or organisations enhance the collective knowledge and understanding of the Learning Partnership, it may also lead to other important strategic partnerships[PM345].

The issue of establishing greater coherence and progression through some form of project management should be a serious consideration. While this may incur considerable expense, the eventual gains should more than compensate.

The Learning Partnership may gain from widening their representation to include an organisation/s with a keen interest in consumer market developments, both from an ‘edutainment’ and associated technical perspective (e.g. hardware / software / telematics / ‘Learning Zones’, etc[PM346].).

The report illustrates there are several areas of common need within various organisations and across sectors. It is perhaps in the spirit of partnership and also economic sense to seek more effective means of addressing these collaboratively. Matching capabilities against need (where this is clearly established) may not only help resolve some particular areas of difficulty but also provide a qualified focus for further funding.

Funding is inevitably a major concern, whether for new initiatives or sustainability and growth. However, there are still areas not currently being tapped, or where either collaborative or match proposals are not fully developed.
4.2 Weaknesses in the Report

There are many developments occurring in the field of telematics, partnerships and community learning. Some are occurring, for example, within other organisations that have not contributed directly to, but have nevertheless, influenced the data [PM347], others relate to opportunities for the ‘home user’ or ‘consumer market’. The report has tried to take account of some of these other developments, of which, intentions and outcomes may or may not be any more explicit than those identified above. It has also drawn upon the wider knowledge and views of the ICT group membership and people outside that group and these contributions, while greatly appreciated and helpful to the report are unquantifiable. The report cannot escape the usual dilemmas arising from subjectivity/objectivity but hopefully it offers a balanced view [PM348]. The questions in the appendices are not those that were specifically asked. They arise from synthesising the transcripts in such a way that a ‘flavour’ of the discussion points can enable a more quantitative representation of the discourse. Similarly, the points raise in Section 2 are generalisations arising from this approach in order to give a clearer representation of the current conditions.

Finally, it is also important to note that the pace at which developments occur means that inevitably the report cannot fully account for all them all, some of which were happening at the time of writing or became apparent retrospectively. Any errors in this report, I would suggest, are entirely the fault of the technology used!

Endnote

Identifying the key issues and implementing strategic, functional and logistical components simply reveals that there is still much to be done. Many of the propositions are infrastructural within and for the individual organisations as much as in the collective, partnership sense. While the concept of a cohesive and comprehensive distributed community learning network is a commendable and achievable ideal (as demonstrated elsewhere) it is worth remembering that they have also generally evolved from the same need to consolidate and optimise resources and networks, whether physical or virtual.

Finally I wish to add a personal view that highlighting the issues above does provide a means of focusing on surmountable facets of a worthwhile proposition - worthwhile for the tremendous paybacks that it can offer the participating organisations and the wider community.
Bibliography


Meaney (1999) Rural Communities Project: Final Report


also site documentation at:

http://www.bcs.org/

http://www.dfee.gov.uk/

http://www.lifelonglearning.co.uk

http://www.euschool_net.org/
Appendices[PM349]

Initial discussion documents/models
1. Towards an ICT Learning Strategy for (the locality)
2. Developing Models, Diagrams, Vision and Involvement
3. Learning Architecture Environment: Management model
4. Initial Report to Sub-group: Assumptions; Evaluations arising from the interviews; Specific issues / concerns
5. Mapping against specific questions implicit within the interviews
6. (xxLLP web site) Information Sheets
7. (company) Meeting (15.6.99) notes
8. Anywhere Anytime Learning Meeting (30.6.99) notes
SWOT’s it all about then[PM350]

This scenario provides a lens through which insights into ‘strategy’ are provided. Strategy may be thought of in terms of either/or a process and outcome that helps to define the actions and associated trappings of ‘strategists’, or of ‘organisation’ (entity and process) and associated procedures, rationales and accountabilities. Such notions often accompany related terms, such as ‘vision’, ‘stakeholder’, leadership, policy and decision-making and a view that suggests these drive forward (rather than being driven by) other forms of procedural, operational, practical action. While the organisations and projects falling within this case study embodied and could each objectify ‘strategists’, facets of ‘strategy’ and their attributed processes and outcomes, I would suggest that such a portrayal would not then adequately reflect the more complex, distributed, covert, shared, emergent, fuzzy and interdependent nature of strategy that was more or less evident in my research and holistically encapsulated within and throughout this case study. That ‘strategy’ was ‘evident’ in terms defined and framed by action portrayed in this scenario should be considered in relation to other representations embedded within and across scenarios 1 to 5, the contextual detail outlined in ‘If Then …’ and ‘Weigh-in’, and also throughout the Research Section. That there’s a strategy ‘in there’, somewhere is also informed through reference to literature pertaining to strategy ‘out there’.

There’s a strategy in there, somewhere …

In modernist organization theory, the concept of strategy refers to top management’s planned efforts to influence organizational outcomes by managing the organization’s relationship to its environment, while in symbolic-interpretive organization theory, focus shifts to processes of enacting strategies or to the role of strategy in the social construction of organizations. (Hatch, 1997; Strati 2000) From this perspective, strategy is concerned with ‘actively managing fit in order to achieve competitive advantage which will ensure the organization’s survival, profitability, and reputation’. (Hatch, 1997). (Mintzberg, 1990) Fig 25
This idea of matching the competencies of the organization with the demands of its environment, implies that strategists are expected to be aware of the possibility of fit, and to do something about it, hence introduces self-awareness and intentionality into the discussion of organizations.

According to the rational model, strategy implementation consists of the mobilization of allocated resources to achieve desired outcomes and involves: resource allocation to support the selected alternative; the development of control systems to measure and assess performance and provide feedback to management; and creating structures and human resource policies (e.g. with respect to training and rewards) to support the chosen strategy. Hatch posits ‘the rational model of the strategy process encourages separation between the activities of strategy formulation and implementation’ (e.g. through the hierarchical division of labour, that is often top-down) and ‘often produces communication problems’ (e.g. perception and cognition of intention, feasibility, motivational issues/problems arising from not being involved in the goals relating to implementation, etc.). Participation in the planning process is commonly offered as a curative for top-down management, though this creates problems for the rational model: the rational model is built on a linear process in which ideas flow unidirectionally from the top of the organization to the bottom; Johnson and Scholes, 1993; 54) suggest that ‘real strategy processes’ are a
combination of planned, emergent and symbolic activities while Hatch points out that strategy that explicitly includes ‘bottom-up processes’ is called ‘emergent strategy’ which itself, ‘has to move beyond participation in order to consider all the ways in which organisational members throughout the organisation shape the strategy process’. (Hatch 1997; 103)

Weick (2001) takes a more radical view and claims that formulation never really occurs at all, instead, ‘a strategy is inferred from successful action that develops through experimentation or is discovered by luck’. He does see strategists having some influence on activity claiming that ‘they can use their symbolic potency to inspire confidence to act and to encourage improvisational activity’, both of which, he believes, enhance the effectiveness of organizing by promoting learning. (113)

The term ‘fit’ defines a successful strategy as ‘one that brings what the organisation can do (its competencies) into alignment with the needs and demands of its environment’. (Hatch 1997) This definition of organisational strategy is therefore concerned with actively ‘managing fit in order to achieve competitive advantage’, and that this ‘rationale’ is implicitly and explicitly embedded into organisational culture. For the LLP to engage in strategic relations where a purpose was to set aside immediate, potential and historical competition between its member organisations, could be said to be highly challenging, if not illogical and potentially dangerous. On one (micro) level it presumed that the notion of ‘partnership’ might allow the participant organisations to set aside their differences traditionally highlighted by competitive action. On another (macro) level, the notion of cohesion and unity proffered a means by which the collective represented a greater power to strategically manage fit within a wider, evolving context even where emergent change introduced or exacerbated conflict (arising from competition, intentionality, etc.) at the micro level. This dilemma was ‘manifest’ through seemingly ambiguous action where, on one hand, positive group action associated with ‘partnership’ downplayed the more typical organisational stances that sought to affirm a position of right, authority and its intentionality for capacity building, with or without ‘partner’ organisations. I referred to this important issue in the ICT Report explicitly in 3.4.1; 3.4.2; 3.4.4, and less explicitly in Section 4 – Future Developments, as represented,
for example, in points 2, 4, (partnership collaboration) point 8 (common language/intentionality), points 9-11, 20, 21 (collective, shared strategic positioning and collaboration); point 18 (reflecting on wider contexts), points 31, 34, 35 (competitive edge).

**SWOTs**

From the rational perspective, external appraisal of organisational strategy starts out looking like an environmental analysis. What distinguishes external appraisal from environmental analysis is that once has been collected information about the environment, it must be translated into a set of threats and opportunities as seen from the perspective of the organisation. Analysis through SWOT (strengths, weaknesses, opportunities and threats) is widespread and a typical example of rational analysis of organisational processes. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective. The purpose of such a focus would be to provide a sense of how the organisation stands in relation to its competitors and other key players in the inter-organisational network (such as partners, customers and suppliers). This modernist view is based on the belief that there is an objective, physical reality in question and thus, any perspective is but a different view of the same thing. In contrast, many symbolic-interpretivists and postmodernists assert that knowledge cannot be tested against the real world because the real world is constructed from our experiences, ideas, and statements - that is, subjectively defined, therefore different views construct different realities and these realities may be complementary, conflicting, or contradictory. (Reed & Hughes, 1992; Schutz, 1962; Clegg, 1998)

According to postmodern theory, distinctions such as strategist and strategy, organisation and environment, are ‘narrative constructions. They are the result of actors attempting to make sense of themselves and their experiences by concocting notions like strategy and organisation.’ (Weick, 2001) This view implies that strategists and organisations do not exist as objective realities, but rather, are objectivised by our subjective orientations toward them. (Hence, a number of postmodern metaphors for organisation include: Organisation as Culture, Virtual,
Collage, Texture, Hypertext, etc. (Strati 2000; Morgan 1998; Gergen 1994). From this perspective, ‘sense-making emerges as a retrospective activity that is sensitive to conditions of choice, irrevocability and visibility’.

One further comment regarding SWOT pertains to purpose, that being ‘If SWOT analysis does not start with defining a desired end state or objective, it runs the risk of being useless.’ (wikipedia.org/wiki/SWOT_analysis). This and other determinisms that may be situated in bureaucratic, institutional rationality (Reed, 1992), in corporatism and covert forms of administration (Winkler, 1974; 20), in accountability (O’Neill, 2002; Carter, 1998; Wenger 1999), in ‘framing’ (Cilliers 1998), and in ethics (2002). Each can cast doubt on the integrity, purposefulness and potential values from any such (self-fulfilling) analyses.

Perhaps the potential of SWOT analyses does lie in the balance between what it represents and its subsequent interpretation.

… from a rational perspective, goals give organisations the direction they need to perform effectively. From the emergent perspective, they help the organisation to adapt to changing circumstances, and in the symbolic view, goals give organisations the appearance that they know what they are doing. (Hatch, 1997; 120)

This also leads to the view expressed by on LLP Board member (B3/1) that goals lead to distortion in that ‘they deliver what you measure’. This view related to the belief that it is irrational to set goals that are not achievable, in the same way that ‘one should only identify those weaknesses (in a SWOT analysis) that can be overcome’. (Managing Director, EC1/1)

Gergen’s (1994) statement provides yet another perspective about further action and ‘sensemaking’:

... managers themselves are never rational; their sayings are never wise or realistic. Their rationality, wisdom or objectivity is dependent on their colleagues, for it is their colleagues who supply the interpretations of the sayings. Rationality is pre-eminently a product of social collaboration. (220)
On completion of the Final Report

When I completed writing the ICT Report, I circulated this in electronic (pdf) and printed forms to members of the ICT Sub-group prior to distributing this to the LLP Board. I restated that it represented ‘an overview of the current position of ICT/Learning infrastructures within the local area’ and a ‘discussion document’ that reflected the views of member organisations. The ICT Sub-group mainly asked for brief explanations about some points and recommended that the document be submitted to the LLP Board for wider discussion. My presentation to the LLP Board meeting was a week after the distribution of the Report to its members and included a verbal presentation by me. Initially I provided a brief outline of my research approach for this Report, the document’s structure and key points. The Board members spent the remainder of the meeting discussing three specific points relating to the document.

First, some members used the Report to emphasise the purpose and value of partnership activity as a means to disclose, share information, allow ‘joined up thinking’ through collaboration, and move towards a more cohesive, unified approach that could consolidate the position of the Partnership and its member organisations.

A particular outcome from this discussion was an invitation from the Board for me to illustrate, at a later meeting, some of the issues and key findings that were emerging from my wider research study. The Board members were partly aware of this due to my clear and explicit statements about being engaged in a wider research study, their involvement in the interviews for the ICT Report, and particularly, due to me tabling some of my concept maps and diagrams in meetings following the interviews. Hence, my later Board presentation covered matters relating to ‘language’ and ‘voice’ in partnership transactions; finding representational form for particular terms of interests (including ‘(non)participant’, ‘involvement’, ‘partnership’ (as partially indicated further in ‘One in the Eye’ and other Scenarios); and emergent issues arising through partnership transactions (as illustrated in Scenario 5). This presentation gave me further opportunity to triangulate some forms of data/experience through examples at that particular meeting and also further affirm findings through participant action.
Second, Section 4, points 18-19 in the Report stated that the LLP ‘would do well to reflect more fully on established projects’ and that by drawing upon expertise would greatly contribute to synthesising and advancing the proposition in (the locality), particularly where ‘the development of some joint projects could help clarify many issues (point 21).

A key recommendation is that a specific time is set to share information about a range of ICT and partnership developments (past, current and potential) in order to clarify and implement important links and opportunities between them. Future applications for funding should also then reflect greater insight/vision, collaboration and ‘investment’, and can demonstrate more clearly how the various projects will ultimately interconnect. (ICT Report; point 23)

These points were widely agreed and formally minuted as ‘sensible’ and represented ‘a positive strategy for future partnership action’. However, as a collective, summative presentation, this never occurred; likewise, few cross references were ever made within and between individual organisation’s project groups to other projects prior to, or following the Report.

Third, the Report stated that

*Strategic/Project Management for a community network cannot occur through goodwill and unreasonable expectations and without greater synergy and investment, and perhaps formalising some form of project management.* (Section 4, point 20)

This topic was discussed at some length within and outside the formal Partnership meetings. While this proposition represented a rational, though costly alternative to the volunteer base prevailing at that time, the solution took three years to resolve (as indicated in the annotations in the ICT Report). Thus, it was difficult to relate this eventual solution to rational, emergent strategic process rather than those conveyed above by Weick (2001; 115)

*Cutting the groove*[PM351]

To a large extent it was a matter for the LLP Board to decide upon action points in response to the ICT Report and its ‘recommendations’. This was partly due to other reports being submitted by other Sub-groups that would then help the Board define an overall Partnership strategy and serve to bring the components together in
various forms. Subsequent action took various forms: for example, comments about the report that were made on and/or 'off the record'. These ranged from positive views that the Report was 'fine', 'balanced', affirmed recommendations for partnership action (sharing/collaboration, etc.), to others that challenged the need (but not the basis) for so much 'detail', that it didn’t provide 'solutions', nor was it indicative of ways and means for achieving otherwise, aspirational notions of partnership, through collaborative practice. Other forms of action that were also indicative of participants’ views for the notions highlighted by the ICT Report and it's associated transactions as represented by this Scenario, are illustrated through the other Scenarios.

The decision-making process within an organisation may not necessarily be what it seems. For example, a company may claim to have a 'flat management system', where 'views and insights of employees are valued' as they are indicative of crucial operational aspects that should ‘inform strategy’, and where the ‘successes of collaborative enterprise reflect the negotiative capacities of its staff’. Thus, to engage staff in discussion about strategic and operational issues explicitly suggests that those views contribute to the decision-making process. While this may be true in one sense, matters that are perhaps more crucial may well be taken by ‘the Board’, whose membership may be divorced from the company views as represented by employees, and may be, perhaps, largely 'informed' by one or more intermediary (senior manager). Reporting back to the employees the ‘decision of the board’ then (theoretically) divorces that senior manager from assumptions made by staff about the ‘real’ decision making process. Such strategies for handling the process of decision making have the potential to make outcomes ‘anonymous’ or ‘depersonalised’, as outcome then appears to be determined by some obscure corporate / organisational process. Some organisational representatives may use corporate anonymity as a way of separating themselves from the decision-making process and associated forms of accountability when it suits them, even when the implicit understanding about such tactics is shared by others who subscribe to similar practices themselves. (Refer: Reed & Hughes 1992; 26; also Blackler, 1994; Wardell, 1994; Handy, 1986)
The strategy of sharing

There was a clear notion within the participant group that they considered themselves largely responsible for strategic action per se, within the immediate context of the Partnership groups. As ‘strategists’ for their own respective organisations, it was perhaps, inevitable, that some would view a newly forming strategic partnership group as a means of affirming status, even if individual roles were never manifest through tangible action or ‘outcomes’ – in so doing, ‘practice’ would have, in any case, shifted from ‘strategic’ to ‘operational’ status, a role generally assigned to other ‘practitioners’ within their various organisations. However, there was not much evidence that notions of partnership discussed and/or agreed within the LLP context were then conveyed or adopted within many of the individual partner organisations. Few middle managers of the partnership organisations claimed to have been informed about the nature of developments occurring within or through the LLP [PM352]. Moreover, the tacit ‘constraints’ imposed within or by the context of the Partnership or its’ Sub-groups, were not necessarily being applied outside that group context within their own respective organisations. In one respect, this fits with modernist notions of strategy and power within organisations, as indicated in earlier texts. Likewise, it does not easily reconcile with the postmodern view that ‘strategy’ happens at many different ‘levels’ and arises, not solely from policy but from subsequent action as practitioners make sense of and find form for strategic directives (Hatch, 1997; 119); nor does it fit well with associated evidence and findings within and across other Scenarios. In another respect, this relates to other notions of, for example, boundary spanning (Frye & Webb, 2002; 8), brokering (Wenger; 1999; 109; Warner, 2003; 8), and particularly, the possibility that as partnership practice was in its formative stages for participants and their respective organisations, they had not yet established the values, capacity or means to adopt and adapt the principles of partnership being advocated at that time. Wenger points out that ‘isolated representatives cannot fully act and function as they do when engaged in actual practice’ (Wenger, ibid, 111). In one sense, this stresses the interrelationships between participation and reification, that is to say, embodiment of reification in practice, potentially, has the capacity to reinforce, consolidate and emphasize the meaningfulness of that (collective) practice. In another sense, Wenger believes that it also emphasizes:

the potentials of brokering where a broker’s ‘knowledge’ or practice is essentially reiterative, connectionist, vicarious, and peripheral;
Scenario 4

- the potentials associated with legitimising (inherent) ambiguities, the processes of decontextualising, of highlighting and building on differences, rather than upholding an assumption that, on balance, they somehow represent weakness, fallibility or vulnerability
- in more concrete terms, it delineates assumed relationships between practitioner and theorist, strategist and operationalist, member and broker, designer and maker, doer and thinker, stakeholder and beneficiary, not only that they allegedly represent two sides of a coin but also, that they can, somehow, be discrete (111)

Power to the people

An additional perspective, and not easily explored within the context of this and other participant group, derives from notions of power within organisations (for example, from a sociological or political approach). Power in organisations\textsuperscript{[PM353]} represents a vast body of literature and research and was not the principle focus of this study. Nevertheless, it is worth reflecting on Bacharach and Baratz (1962) in ‘The Two Faces of Power’ who highlighted an aspect of power whereby, some issues never get raised because power is used to suppress them. In defining one face of power, it is suggested that the exercise of power is to bring about desired outcomes in a direct and visible manner. The second face however ‘draws attention to conscious or unconscious attempts to create or maintain barriers to the political process itself’ and therefore this face is less easily observed because it is only revealed by what is not discussed openly, or is only revealed in an indirect way. (Hatch, 1997; 290)

There are (potentially) numerous examples of such strategies within the research study, though in one sense these may only be framed on the basis of, for example, tacit understanding or verisimilitude. However, I would suggest that a third face could make a further clarification about the second face. The distinction can be made for those processes of engagement where certain issues are undeclared. Some of these may in fact be ‘obvious’ if the means or purpose of concealment were made explicit. There are also instances where concealment is not contested at all until a point is reached whereby, retrospectively, doubt is cast on the possibility of prior concealment, and thus, to what end that concealment served. For example, two managers from competing organisations may be brought together through a formal partnership arrangement on behalf of a third party. While the nature of this new
partnership may demand that traditional boundaries are overcome, it may be
foolhardy (irrational) for either manager to be lured into giving away 'incidental
information' about other transactions outside that immediate partnership
arrangement and on which 'normal competitive strategies' would occur. Hence, a
sense of mutual compromise is, in such a case, just sufficient to meet the needs of
the new arrangement. Each 'knows' that the other is withholding certain, perhaps key
information and as such constitutes both a mutual distrust and respect - they are
both complying with the same 'rules of the game'. One may ask of the other, but not
expect an answer that could do any more than endorse their doubts and suspicions.
However, in the case where a strong, committed relationship between the two
managers is in place, with high degrees of trust between them, and where there is,
perhaps, an explicit declaration of 'no hidden agendas', where explicit actions appear
to endorse mutuality, a more deep rooted bluff may actually be occurring but which, if
suspected, could be countered by touching on the (alleged) trust that exists between
the two partners. A specific example might be: two managers have applied for a joint
contract but which is lost to another, seemingly independent competitor.
Disappointment expressed by both parties would be expected, rational, and reinforce
the notional bond between them. What would be the point of one of those parties
jeopardising the contract when both managers put in the effort to win the contract
and both would 'lose out' by its failure? Furthermore, why would one of those
managers covertly influence the decision that lost them the contract when such
action would be construed as irrational? One answer lies, perhaps, in the expression,
'there are several ways to skin a cat', or simply that people have different (ethical)
codes of practice. It is why the skeptical person questions concepts of altruism,
charity, free, and have in some cases, suggested a redefinition 'in business terms', of
things such as 'market-share', stakeholder, sponsorship or initiative. This concept of
multiple faces is rather like the strategy of bluff, counter bluff or double bluff ...

The juxtaposition or interdependencies between strategy and power, as embedded
within what Weick calls 'sensemaking' (2001) is inextricably interwoven with ethics
(e.g. teleological, deontological[PM354]; Vardy & Grosch, 1999; casuistic[PM355],
Toulmin 1982; or 'consequential'[PM356]; LaFollette, 2002). Some of the ethical
dimensions and positions (judgemental, and conduct) as situated in, and advocated
by particular communities of practice, plus the matter of how this affected my own
judgement/practices and also those participants who claimed to be making positive contributions, are discussed more fully in ‘Terms and Conditions’) and throughout other narratives in this study.

**Reasons for writing the report in the way that I did …**

The ICT Report was intended as a discussion document. Partially it was expected that this would be incorporated along with other Sub-Group’s Reports into something that represented the LLP’s policy and practice. Although I was one of the participant members entitled to have a voice, the Report had to be seen as something representing, not just a summary of the ‘views’ of the participant members of the ICT Sub-group and likeminded colleagues, but an objective synthesis of the conditions, position and issues prevalent at that time.

It is important to point out that my research for and writing of this specific ICT Report was completed within a comparatively short timescale (around twelve weeks) in relation to the longer-term research for this thesis (6 years). Furthermore, my other professional commitments required that this research and the writing of the Report had to be fitted around these and the other commitments of all contributors.

While the ICT Report was not intended as a representation of my own personal, subjective views, it did include and reflect on issues about which I had gained some insight and considered important to the purpose of the Report and Group’s intentions. To minimise this potential bias, I consulted with two particular co-participants who understood and were sensitive to those issues and who also had the experience to situate these within the context of the LLP at that time. These sensitivities might include political, experiential and capacity issues, as framed by their greater insights into local organisational remits, strategies, practices occurring at that time and how these might be prioritised to the current and future contexts. I respected and trusted their independent opinions. They did not tell me what and how to write the Report but rather, scrutinised it for expressions (rather than issues) that might be too contentious or might be expressed better. I have indicated examples of this within the annotated text provided for this thesis (such as those in section 2.1).
They largely agreed with my view that, whatever was to be included, however it was written, participants would always be able to choose to scrutinise and interpret it in any number of ways, and then have reasonable opportunity to take issue with or discuss the points raised within an agreed forum. More importantly, as part of the consultation process, any participant would have the chance to identify, negotiate and agree priorities within the context of the Group’s future strategic activities. Finally, other issues relating to authorship beyond the limited context of the Report and this Scenario are presented within ‘In Search of the Lost Chord’.

The ethical dimensions and positions (viz. judgement, and conduct) as situated and advocated by the beliefs of two communities of practice (how this affected my own judgement/practices and also those participants who claimed to be making positive contributions), is discussed more fully in ‘Terms and Conditions’

**Micro/macro/meta … research of research …**

At the time I began the research of behalf of the ICT Sub-group, I had already begun to explore a range of research approaches that might help with my wider research into other forms of participant action. This included, for example, study of literature regarding organisation theory, social research practice, policy documentation and examples of other practices relating to the participant groups as framed by my research study. These, in part, influenced my approach as researcher when developing my relationships with co-participants. Further influences that affected my writing of the Report included my own insider knowledge of that participant group, plus my interest in relating information and issues arising from the interviews to other forms of participant action. The interpretative Report therefore, represented a synthesis or reification of emergent action and of those wider influences. It also provided a significant building block for further action in various ways.
First, it led me towards further adaptations of my various methodological processes, particularly those that provided me with a more commensurate means of handling and finding representational form for complex, emergent action. This includes the adaptation of processes that helped me with visualisation, realisation and representation, particularly of the interrelationships between context and action, and of the conceptual foundations or schema that underpinned the study. These are conveyed more comprehensively in ‘Terms and Conditions’, ‘reading the small print’ and ‘One in the Eye’.

Second, as illustrated above, the Report influenced further action, including that of bringing together issues arising from within and beyond the Report, to those relating to my research findings from other areas of the study. In my presentation to the Board I highlighted key relationships in terms that were thought provoking way and might enrich our knowledge and understanding base around those issues. That process also provided a means for me to affirm, consolidate and warrant my emerging views and indicate future directions for my research studies.

The research that led to the ICT Report was not a ‘pilot’ or ‘test’ in relation to my entire research study. It was one component within a larger scale study that allowed me to reflect on the suitability of certain research techniques for acquiring information and understanding experience in comparison to alternatives I was applying or developing elsewhere within that study. Likewise, the process of finding representational form through documenting this particular research and the writing of the Report within the context of the thesis, as a Scenario, provided additional means for reflection. Hence, conveying some of the events, experiences, beliefs and issues within another narrative has resulted in a narrative that moves between different forms or layers of analysis and interpretation, shifted focus from detail to issues and shifted the action contexts from those initially framed by the participant group to something far more extensive. This fluid intransient form or process recurred in many where the process of codifying and interpreting experience was reified and reiterative, such that action defined context-in-action, something aptly conveyed in Wenger’s illustration (1999; 63):
Some form of reiteration for the above statements occur within ‘Look in but look out!’ and throughout the thesis as the narratives provide an interweaving texture of action.

The above provides a strand that interweaves with other narratives and helps form the texture of the overall research study. This narrative symbolises a synthesis of practice that was largely unique to the strategic Partnership Groups of the LLP at a particular point in time of its development.

Scenario 4 therefore, represents a narrative of participant action, at a particular point in time of its development, as enacted by participants claiming to hold responsibility for strategic action within organisational, multi-organisational and partnership configurations. Of course, strategic decision-making occurred within, across and throughout the project groups and organisations framed by this research study, as indicated in the other Scenarios.
Scenarios

Scenario 5  Off the Beaten Track?

‘Off the beaten track’ offers a different way of reflecting on and embellishing the observed events, actions and issues that were embedded within and across the other scenarios. In particular, it provides a synthesis of those transactions by extrapolating the key themes, issues and models that emerged within and across the scenarios. These not only encapsulated contextualised action but also served as a means for me to share and discuss my findings with other participants to challenge, inform, affirm and validate. Many of the issues are represented and discussed from the perspective of co-participant, insider and colleague within the research study group context.

Room for a view

In each of the Scenarios, I was a participant, a member of a particular community of practice who engaged in professional matters as a manager, stakeholder, tutor, researcher, auditor, technician, partner, colleague, broker, observer, evaluator, recipient, and so on. In these roles, my ‘participation’ was ‘real-world’ in the sense that it occurred through day-to-day negotiations, in face-to-face discourse, phone calls, emails, and other forms of communication. Thus the routine practices of monitoring and reporting, corresponding, scrutinising and/or writing associated literature, policy documentation, consultation documents, meeting agendas and minutes, sponsorship and development proposals, and so on, each represented events and experiences that consolidated my position with other holding similar roles and positions. These participant roles were not the result of me being ‘an outsider’ with an agenda determined by a research proposition. I was frequently acting on behalf of one or more organisational configuration and also within a number of ICT and partnership sub-groups within and across the partner organisations, within and across different sectors. As a co-participant in action at all levels, throughout the study, I regularly engaged with people working on strategic and/or operational developments, with sponsors, promoters, stakeholders, providers, enablers, delivers and beneficiaries.[PM357].
The diversity and changing permutations of the participant roles and settings defied the proposition of relating the above attributes to each participant within the research study group. Nonetheless, there were different forms of emphasis according to whether a participant was predominantly situated and operated within one particular sector and engaging in partnership configurations comprising participants from within their specific sector. Thus, it was not customary (in the sense of being a part of day-to-day routine), for such participants to be involved in regular negotiations concerning strategic and operational matters with people from a different sector. Nevertheless, membership of the strategic, multi-sector partnership groups generally comprised such participants. By way of contrast, approximately 5% of the overall participants in this study regularly worked within multi-sector partnerships as part of their day-to-day professional role.

**Hats and umbrellas**

These various, collective forms of professional membership provided each member with direct access to information, and provided insights into the various forms of partnership action. With regards to my own position as a broker and member of multiple groups, if information came to my attention about something in which I had, or not been directly involved, and that information had particular relevance to my work or research, I was in a position where I could generally secure further information about that from a variety of sources. Also, I occasionally benefited from a general flow of information to which, through my professional position, I might not have otherwise normally expected access. Thus, in my professional capacities, I was party to information that would have not been so easily available to ‘an independent’, experimental researcher, or ‘outsider’. As pointed out in the Research Section, this meant that my rich evidence base was personal, professional, direct and ongoing, and in the case where it was not first-hand, could be verified in different ways. It also meant that I was acting within a ‘known’ community of practice, where basic inter-organisational protocols, procedures and practices for partnership negotiation were known to me already and shared on a professional level. My analysis of technical aspects regarding ICT was informed throughout the study by negotiating with senior ICT managers and educationalists from, for example, the business sector, BECTa, tertiary education, and schools.
Cloaks and daggers

My professional working relationships with colleagues, partners, friends, and/or associates generally conformed to implicit and explicit forms of ‘routine’ practice, viz. tacit standards and codes of conduct. Within and across the various partnerships, there were some differences of opinion regarding those standards, beliefs and conduct, and those were largely due to the various specific needs and interests of participants and organisations finding different forms of expression\[PM362\]. There was also a general sense amongst the participants that within a multi-cultural, complex, heterogeneous society, differences of opinion about belief and conduct were inevitable and were generally claimed to fall within ‘accepted boundaries’ of ‘reasonable practice’\[PM363\].

I was explicit about my role as a researcher and my areas of interest. I generally reminded colleagues from time to time about my ‘other role’ as researcher, and ensure that this facet of my extended role was brought to the attention of new acquaintances, irrespective of whether I could, at that stage, establish if they would somehow, become part of the overall research profile. Generally, the responses from co-participants regarding my research interests shed light on their wider interests. For example, many of the participants, as members of that community of practice, declared that they shared the same general interests. Most participants recognised the evolving conditions in which we were operating and that this was a driving force behind trends within organisational change - that is to say, in the emphases regarding learning, partnership, and ICT. Therefore, each organisation, each participant was in more than one sense, dependent on the transactions of the other and through the various partnership configurations sought to enrich their understanding of and place within this complex heterogeneous action. For my part, I was therefore, involved as participant, co-participant and researcher, as one. As a part of that transactional process I was not only taking ideas from, but also, ‘back’ to these people, to ‘us’, as illustrated later in this narrative (Scenario 4 explains this differently and also provides a further example of how my research was shared with colleagues through the publication of an ICT Report and through further presentations and meetings).
Most participants recognised the potential, emergent challenges to their otherwise, historically determined roles and responsibilities, and that uncertain futures and uncertain processes were gradually having greater influences on their transactions. While hypotheses with varying degrees of authority were put forward by the co-participants, the general, ‘informed view’ was that the variables, condition, potentialities were too complex and uncertain to treat as anything more than conjecture. The ethos that underpinned day-to-day negotiated practice (whether this was constituted through formal and/or informal socio-political organisational determinisms), meant that shared insights and perspectives from any source, type or number not only could enrich the partnerships but also reinforced their *raison-d’être*. The co-participants with whom I was working were predominantly professional, academically trained people. Many considered that much of their own work shared the same underlying research principles - that is to say, conforming to basic ethical, legitimate and legal accountabilities and standards in the ways and means by which they determined an appropriate approach, acquired information, analysed, theorised, and reported their interpretations. Furthermore, to my knowledge, all the participating organisations had policies for data protection, disclosure, equal opportunities, and codes of practice concerning working relationships and expectations of practice, and so on.[PM364].

**Changing rooms**

The Scenarios are self-representational insomuch that, in keeping with case study approach, they each provide a description of the events and actions that occurred within specific settings. Embedded within those descriptions is evidence of the circumstances and different ways of thinking in and about action from the perspectives of the participants. There were common strands that emerged within and between the various Scenarios and which collectively convey a sense of the overall texture.
The warp and the weft

As outlined in ‘Weigh-in’ and further illustrated in Scenarios 1, 2 and 4, the EBLO had brought together a number of disparate ideas and realised their potential through various Project developments. A stated aim of these community ICT Projects was to enhance the provision and access to ICT for young people outside of formal learning environments. By positioning these resources in schools, it then offered the added value of providing a means to support schools in the hope that they could then build on this as an opportunity for various forms of curriculum enrichment. The only agreed proviso was that the EBLO should have access to the ICT equipment outside of the normal school hours for supporting their community Project. From 1998 through to 2002, the Community ICT Project provided 10% of the local primary schools with new ICT resources to the value of approximately £30,000 [PM365] each. Additionally, in response to the requests of the local schools, the Computer Redistribution Scheme provided the local schools with approximately 1200 computers [PM366].

Despite this level and quality of provision, the overall outcome was that, for a variety of reasons, the EBLO formally chose to discontinue this form of support for local schools: First, from a business perspective, the overall returns were insufficient to justify further investment. The view taken by the EBLO was that if the pupils in the Project schools were significantly restricted or denied access to the resources, then this dismissed the relative value and potential of that provision and thereby, increased the relative value of placing the resources in community centres. Second, 75% of the Project schools [PM367] were critical of the technical support available despite the fact that, on one hand, the new equipment more than exceeded the greater demands of the evening sessions. On the other hand, the teachers in the Project schools did not demonstrate that they were conversant with the basic functions, capacities and potential of the supplied resources [PM368]. Third, despite the offer of free teacher training and technical support, only 25% of the Project schools took advantage of the training. Staff training within each school was instead, largely provided by the ICT co-ordinator at the behest of the Headteacher [PM369]. Fourth, 40% of the Project schools generally appeared to be reluctant to take on the responsibility associated with ‘opportunity’ and potential afforded by those ICT
resources in their respective schools. That is to say, the overall level of curriculum integration and benefit for the pupils was considered by the EBLO to be incommensurate with the nature and level of provision. Fifth, the increase in the level of discontent expressed by schools coincided with the escalating authority assumed and exercised by the new LEA. The LEA was explicit in expressing ‘doubt’ about the privilege and role of the EBLO working in ‘their schools’ [PM370]. Generally, the EBLO interpreted these organisational differences as, for example, rivalry, reluctance to accept the fact that the EBLO was an independent business in its own right that had negotiated and agreed contracts with local schools, or perhaps attributable to ‘historical baggage’ [PM371]. The loss of support to those local schools that had been previously generated through the efforts of the EBLO to secure private funding from business and other sponsors equates in numerical terms to marginally less than each school received per school per annum through the NGfL funding streams.

Over the duration of the study, the negotiations with the teacher participants highlighted a lack of teachers’ confidence, competence, and technical expertise with the ICT at that time [PM372]. Those teachers’ views of their own competence with the ICT equipment was reflected was manifested through their teaching approaches, through the freedoms offered to the pupils in formal learning environments [PM373]. Other issues that influenced the teachers' beliefs and practices were the numerous other pressures and demands they believed to be imposing on and influencing their practice. These included the changing school curriculum, increasing pressures on their time, overt political statements such as those reported in the media, external influences such as the relatively new Ofsted inspections, and so on [PM374]). Scenario 3 further highlighted the different beliefs and understanding regarding the adequacy of the ICT equipment in relation to its perceived functionality and suitability to meeting educational needs and interests of schools. This also became evident over the duration of the research study in the schools as perceived ‘redundancy’ of the supplied ICT equipment was based on age. Scenarios 2 & 4 further highlighted the teachers’ perceived inadequacies of the ICT equipment that was portrayed by them as a form of ‘functional inadequacy’ in relation to educational practice. Over the duration of the study, it became evident that other external factors were influencing this belief. This is in part attributed to the promise of new funding streams, new national Projects, each bringing the possibility of increased provision of new ICT
equipment. Rapidly changing computer technologies that were increasingly permeating Western society further encouraged a form of aspirational thinking that contrasted with the realities of the situation being faced by these schools. Scenario 1 also indicated that the new ICT equipment was deemed by the teachers to be ‘obsolete’ once it had ‘aged’ by three years.

Common to all of the scenarios was the overriding belief that ICT had the potential to enhance learning strategies and outcomes. This view was made explicit by the business sponsors, stakeholders within the strategy groups, the project managers and tutors, and also by the beneficiaries, through the initial and ongoing partnership negotiations at all levels of negotiation. There was also a common belief that the provision and subsequent integration of ICT was not simply a technical matter and that it had other interdependencies (such as, for example, the ways in which those processes were linked with the curriculum, funding, access, purpose and motivations). Drawing on the above narrative and those detailed within the Scenarios, I developed a model (Building blocks 1) to represent an abstract of the participants’ views, concerns and issues regarding the integration of ICT into a learning environment. I believe there is a difference between seeing and handling these issues as stepping-stones and building blocks.

To explain this model further, the above issues that emerged within and across the Scenarios provide further abstractions that are represented in three sets of diagrams below.

**Stepping stones and building blocks**

**Building blocks 1**

Each component in my diagram below (Building blocks 1) represents a ‘known term’ that was understood to some extent in its own right, by the participants. Participants prioritised each term, in different ways, according to perceived urgency, purpose, involvement, value and so on.
However, I believe the relationships between the concepts were primarily perceived in two ways by the participants:

First, like ‘stepping stones’, as a number of components that could be addressed as individual items.

Second, as part of a complex, more dynamic system where the meaning of the term is conceptualised by its relationship(s) to another concept(s). As with other diagrams in this study, each concept illustrates the potential for establishing different forms of emphasis or ‘weight’ as its relationship shift. Each component had the capacity to serve as a driver or ‘building block’ for the system. but, when seen as part of a system, each component cannot be divorced from the system and thereby, the dynamic potential is retained by the system. These processes of ‘framing’ and ‘recurrency’ (Cilliers, 1998; 4) as characteristics of complex systems also emphasise further matters of interaction with, or within the system whereby our descriptions of the components or relationships are determined by our location with regards to that system.
Another dimension may be construed by shifting the central focus, and this can be carried out in one of two ways - either swapping the central term with any of the other terms, or reconsidering the further complexities of each term. For example, by reflecting on the importance of ‘resources’ at the centre of the diagram, the term then can be considered in relation to just the outer terms (‘of what?’, ‘by whom?’ and ‘for whom?’), or working with other sets (such as ‘provision’, ‘support’ and ‘access’). Alternatively, ‘resources’ could be replaced by other terms that are represented within the following set of diagrams and which I used to focus on the relationships between integral facets of ICT resources (such as functionality, capacity, adequacy and potential). Through my sets of models, the relationships between function, capacity, potential and adequacy emerged as a critical factor within and across all of the Scenarios.

**Building blocks 2**

Functionality is defined as an action or use for which something is designed or ascribed, that is, of having a practical application. The ability to do or experience something, perhaps in terms that may be quantified in some way, is represented by the term ‘Capacity’. Adequacy can be thought of as a sufficiency in quality or quantity to meet a need and/or interest. In one sense, this term can encompass the notion or description of ‘specification’. These three interdependent concepts are key determinants to potential in that potential represents the possibility or likelihood of something occurring, of doing something, or becoming something. These factors will be considered dynamically, for example, when a person selects or uses a tool to meet their particular needs and the processes of shifting the emphases occurs as other determinants for each come into play. These four terms are symbolised in my model FCA-P (Fig 28):
Some sense of emphasis can be suggested by positioning a specific concept at the centre of the relationship. In this model the implication is that potential has some dependence on the interrelationships between functionality, capacity and adequacy (as suggested in Scenario 4 by those looking at outcomes derived from strategic process – the other nodes in that case being technical demands that if met should contribute to the realisation of potential). Alternatively, ‘adequacy’ was a focus for example, for exploring the distinctions in beliefs as expressed by the teacher participants in Scenarios 1 and 4, wherein they expressed a main concern regarding ICT (in)adequacy of the computers depended more on the relationships between claimed potential in relation to actual functionality and capacity.

The overall judgement of adequacy seemed to be predominantly based on their estimation of relating functionality (for example, in terms of what a computer could do within a specific environment) with capacity (i.e. a measure of ‘how well the function could be realised’). This however, does not seem to take account of a (potential) product outcome of the applied functionality and/or how this was derived.

ICT managers from the business sector that were sponsoring the Projects expressed a different view. Their overriding perspective focused on the potential of the ICT equipment and was founded on their perception and understanding of the known technological functionality and capacity. In this, it was therefore deemed by them to be adequate to meet basic educational needs of the learner.

Their perception of ‘adequacy’ seemed to be determined by their perception of how a user might apply the functionality to a particular process or product. Underpinning this was a further condition of ‘expectation’. As ‘outsiders’ to the education sector,
they nevertheless had recognised a difference, not only in the capability and expectations of young people and teachers in their use of ICT, but also by teacher’s expectations of how they thought young people might use ICT.

The model FCA-P (Fig 28), in which potential is implicitly emphasised in relation to the other factors, was also explicitly advocated as a fundamental reason for integrating ICT in formal and informal learning environments by the strategic partnership groups. Scenario 4 reflects this in various ways such as in the ‘mission statement’ of the Lifelong Learning Partnership, and its related ICT sub-group.

The young people in Scenario 2 responded to the technology in such a way that there were two overriding, interdependent factors. One of the factors was that young people had access to equipment that they could use. In this respect, the specification was not an overriding factor despite the fact that many of these users were conversant with the technical jargon and associated issues. Hence, function was important insomuch that it was available to them in the form of general accessibility to ICT. This access then offered the young people the opportunity to explore the potential of the ICT resources, with the added benefit of providing them with an important means for social interaction. (See Swings & balances, allies and butterflies, Fig 21.)

Thus, in relation to the two facets of functionality and adequacy, three explicit perspectives regarding a specific ICT specification (such as a Pentium computer) indicated that, at that time, it was both adequate and inadequate. Some teachers and ICT managers thought a Pentium had sufficient capacity and potential for their needs, while others did not. Furthermore, young people were keen on multimedia and real-time media, the worldwide web and games software – each of which challenged the ‘sufficiency’ of the technical specification of hardware and connectivity. Conversely, teachers general expectations of young people (within a formal teaching/learning setting) seemed to be largely limited to asking them to enter previously prepared texts into a word processor for re-formating and occasional use of the worldwide web as an alternative reference library.
**Building blocks 3**

Underpinning many forms of action is the process of building relationships between the reasoning principle that underlies or explains a particular course of action, which is in turn, based on the perceived advantages or potential. In realising opportunity (as both historical or potential) through action, this endorses or adapts the reasoning principle. This process is represented in the model OAR-I below:

![OAR-I Diagram](image)

**Fig. 29** OAR-I

*Opportunity = potential emerging from change that signifies some kind of advantage and/or set of circumstances. Rationale = the mindset prevailing within that community of practice, particularly where this relates to strategy (and implicitly, power, ethics, etc.). Action = outcome (albeit tacit, strategic, covert, etc.). Impetus = how the corresponding rationales, opportunities and actions may be energised.*

This OAR-I model can serve as ‘an overlay’ to the model FCA-P (Fig 28). This new combination then provides a more complex, though meaningful representation of the ways in which the interdependent relationships of function, capacity, adequacy and potential can be conceptualised and realised through action. As with the FCA-P relationships, the terms are interdependent and foundational qualities for action however defined or measured. I found no reliable or consistent means to ‘measure’ the complexities of interrelationships within and/or between OAR-I, or FCA-P. Nevertheless, I believed that fuller consideration of these interdependencies were fundamental to my overall theorising and decision making processes insomuch that they were considerations within the recursive ‘improvisatory’ cycle of inquiry and irrespective of the dimensional properties of the contexts to which were applied.[PM385] [PM386].
Referring to terms such as 'functionality, capacity, adequacy and potential' to a specific facet of ICT is complex [PM387]. It is also potentially contentious in the sense that, like OAR-I it draws attention to differences in personal and socio-cultural beliefs, standards and values. This is for example evidenced in the Scenarios through the various forms of action that were taken by participants to handle those different perceptions, aspirations, values and so on. Scenario 3 exemplifies this by referring to the number of schools that requested and collected computers of a 'known specification' for purposes it was assumed the teachers understood [PM388]. This contrasted with the values that emerged over time as other influences were brought to bear [PM389], and by the eventual response of the sponsors providing and distributing the resources [PM390].

Further dimensions may also be added to my FCA-P model by applying it to the contextual bases from which it was derived. These are shown in another of my holistic models [PM391] ‘Technological perspectives’:

![Technological perspectives](image)
I believe that this model holds importance for conceptualising the principles that emerged through my research studies because it can be applied to those issues described in Building blocks 1, 2 and 3, which have so far, been applied to ICT resources. This model can also be applied to Building blocks 4 wherein the emphasis of the terms shift to represent partnership interactions.[PM392]

**Building blocks 4**

The concepts of function, capacity, potential and adequacy represented by the Model FCA-P (Fig 28) can also be applied to the notions underpinning participation, partnership practice and the organisational and contextual systems within which they occur. For example, the ‘Participation Concept Map 1’ (Fig 72) identified some of the dynamic characteristics of the participants within the research study. These were then redefined according the different contexts within which the participants resided[PM393] or operated.

The ‘Participation Concept Map 1’ also contributed to the ‘Partnership Concept Map’ (Fig 79). Also implicit within those diagrams representing participation and partnership activity was the fundamental processes of OAR-I. Hence, I visualised the collective in the following model K-OSorKnot[PM394]:

![K-OSorKnot](image-url)
A crucial quality that is implicit within the process of theorising and meaning-making evoked by the above model is that it represents a culmination of the different approaches outlined above. It also has an evocative quality in that it embodies potential according to the experiences and meanings that are implicit and explicit and the energy generated through further processes of visualisation. In particular, it also underscores the potential for different forms and textures and thereby embodies difference, ambiguity, uncertainty and potential providing there is latitude for creativity.

This narrative has provided a different perspective to the various partnership actions described within and across the other narratives in this thesis. In a similar vein to the other Scenarios, it serves to embellish the descriptions that gave an impression of the actions of the participants, the conditions and practices that brought those practices together, and some sense of outcome. At the time of writing this thesis, nearly 90% of the participants who had played a central role in the developments described in this thesis had moved on to other jobs and/or retired. As time has moved on the dynamics of those situations have become embedded or lost within the complexities of context and subsequent action. The details of the described events have now become part of the complex uncertain fabric of personal experience and organisational life.
Research Section

Fig. 32   Research Action
Prelude

The ‘Research Section’ provides a schema that serves to clarify the interrelationships between salient facets of the research process delineated in this thesis. It represents a personal reflection on the key terms of reference, and on the main assumptions and expectations of two discrete, yet not mutually exclusive abstract communities of practice, namely, the research ‘Study Group’ and the ‘research community’ - as they ‘came together’ under the umbrella of a ‘research opportunity’[PM95]. What makes these ‘communities’ abstract is that these notional dynamic representations of entities are both personal and social constructs that are an approximation, something ‘virtual’, ephemeral and with potential to become more concrete through further processes of theorising. (Refer: Wilkes, 1997, 4; Witkin, 1976, 177; Arnheim, 1970 and 1974). For example, in Wenger’s discussion (1999) where he frames his concept of ‘community of practice’ against that of ‘company’ or ‘organisation’, he points out that

\[
\text{a ‘company’ will be formed by many different configurations or communities of practice which, as an aggregation would be misleading if it then ‘overlooked the multiplicity and substantial disconnectedness of the perspectives involve’.} \quad (124)
\]

Wenger uses the term ‘community of practice’ to integrate the components, community, identity, practice and meaning, while referring to a ‘familiar experience’ (6). ‘Familiar experience’ is later defined as: mutual engagement, joint enterprise and shared repertoire. (72).

Reed & Hughes (1994), and Strati (2000), on the other hand, reflect on other traditions of organisation theory that explores the complexities of ‘organisation’ as both entity and process. Recent interpretations have stretched earlier definitions by employing metaphors such as Organisation as: Communities, Cultures, Systems, Negotiated Order, Machine, Virtual, Textures, Hypertext, etc., each taking different emphases on the dynamics of and interdependencies between power, structure, order, ambiguity, organism, social systems, performances, symbolic, narratives, etc.

Furlong (2005) on the other hand references ‘communities of practice’ differently:
Traditionally it has been assumed that there is a clear distinction between the worlds of research and the worlds of policy and practice – that there are ‘two communities’. On the one hand there is the world of research, based on explicit, systematic work aimed at the growth of theoretical knowledge. Practice and policy on the other hand are seen as taking place in the ‘real world’, a world based on different forms of knowledge – for example on tacit knowledge and on practical wisdom.

Quite why each the practice in either is distinct is not clear. He also admits that

Further complexity is brought into the picture once we start to unpick the differences between research which is academic-led and research which is practitioner-led or practice-based. In these models, research and practice are no longer conceived as isolated but as integrated activities that borrow from each other, inform each other and support each other.

I use the terms (‘Study Group’ and ‘Research Community’) to represent two distinct, yet heterogeneous groups of ‘familiar experience’. It is based on a wider concept of ‘practice’ than that on which Wenger draws (Alinsu). In a sense, each has the potential to subsume the practices of the other, as in the case of this research, their distinctiveness perhaps, being determined by ‘authorisation’ and mediation. Further clarification for these two communities of practice and their interdependencies transpires throughout the thesis, and more particularly in Navigation, ‘Terms and Conditions’, and reading the small print.

The thesis provides an account, or intrinsic case study, of participant action within a unique context wherein, there are a number of interweaving strands or layers of meaning-making in action. Key to this evolving texture are the interrelationships between ‘the story’ as enacted by the participants, the ‘research’ as framed by my emergent approach, and my roles within and between two broad communities of practice, the research ‘study group’, and the ‘research community’.

An introductory definition of my emergent research approach can be thought of as: the practice of handling and coming to terms with the purpose of the study by drawing on and developing appropriate tools, techniques, methods and perspectives in order to nurture an informed representation of those processes of engagement. This reflective process of negotiation therefore, served to clarify important relationships between assumptions, expectations, terms of reference, and the
realisation that embodied a certain consciousness, a sense of emphasis, and the potential to inform. Within the framework of this thesis this included those of the participant groups and mine, independently and collaboratively.

The research process in which I engaged affirmed, for me, the need to clarify sets of relationships, between the nomothetic and ideographic, between perspective and approach, between the observable and ephemeral or transcendental, to establish the foundations for reflecting on different modes of engagement, and to develop a ‘narrative’ that celebrates the diversity and dynamics of differences. My use of the term ‘narrative’ as ‘an art or process of giving an account’ draws on Lyotard (1984; 18-23) who, in discussing the differences between ‘scientific knowledge’ and ‘narrative knowledge’, suggests that:

- ... the criteria for narrative knowledge are flexible and are dynamically defined by the society in which the narrative functions.
- No specific linguistic form is privileged in these narratives. They lend themselves to a variety of language games
- In the transmission of these narratives, sender, receiver and the subjects discussed are all considered in a way that strengthens the social bond
- Narratives have a strange temporal nature. Their function is not primarily to remember the past, but to re-enact past events as present events. The meaning of the narrative lies not in the fact that it is supported by some important piece of history, but in the metre and rhythm of its present telling
- no special procedure is necessary to ‘authorise’ the narratives process. The narrator is not isolated, but performs the function of integrator, and all those who participate can find themselves in any of the available roles (narrator, narratee, hero, etc.).

(See also, de Laine, 2000; 185; Hatch, 1997; 119; Scott, 2000; 89; Richardson & St Pierre, 2005; 968; Cilliers, 1998; 116)

The research process also affirmed that there are different ways of seeing, ways of doing, and ways of thinking about and (re)establishing some sense of meaning. Obviously, each of the two communities engaged in processes such as the above, and in a sense, my research process served as a way of (de)contextualising the actions of one community of practice as some kind of relationship formed with the other.
The different ways of seeing, ways of doing, ways of thinking about and establishing some sense of meaning were determined by the context and conditions within which those processes occurred. It is argued that the processes of theorising, abstracting, redefining, re-presenting and essentially de-contextualising the ‘Study Group’s’ actions was akin to a process of also re-contextualising some of the ideological notions asserted by the ‘research community’. That is to say, the relationships between the research perspective and the approach that underpins this thesis was largely, a ‘synthesis’ of those perspectives and approaches of which each community of practice comprised, as mediated (partially) by me. In another sense, handling the relationships between the two communities of practice clarified the wider implications of handling an ‘opportunity’ in relation to its counterparts, ‘action’ and ‘rationale’, insomuch that the ‘impetus’ for each community of practice was, (potentially) different, (re)shaped and (re)presented through my own actions. (See Fig 8, ‘Action in Action’.)

I am saying here that my research was not ‘opportunistic’ in the sense of ‘taking advantage of all opportunities or situations in a devious, unscrupulous or unprincipled way. Instead, ‘opportunity’ implicitly and explicitly represented dynamic, on-going, interdependent processes, each inherent component reframing potential and meaning according to the emergent circumstances of the research study (as referenced in Fig 8, ‘Action in Action’). The actions in which participants were engaging, and to which they were aspiring, were uncertain, or ‘potential’), and thus represented a complex Scenario worthy of further inquiry. Hence, this reference to ‘opportunity’ also refers to the emergent processes of engagement and to the emergent synthesis that occurred as I developed an approach that was commensurate with the uncertainties of the research study’s dynamic contexts.

Therefore, an important aspect of my approach has been, via processes of exploration, the search for some form of commensurability, cohesion, compatibility and accountability, through informed reflection, and a further re-presentation of a set of experiences that have the capacity to inform. This occurred through various means, in order to illustrate an emergent ideology and practice that closely reflected these essentials. While the reconciliation of circumstantial idiosyncrasies lay at the
heart of the research process, it would be misleading, and potentially antithetical (at this stage), to suggest that reconciliation amounts to anything more than a ‘synthesis’. In Hegelian terms, ‘synthesis’ seeks to resolve conflicts between the initial proposition (thesis) and its negation (antithesis) - the tension that exists between two conflicting or interacting forces finds some resolution by establishing truths on both sides rather than disproving one. In postmodern terms, this synthesis essentially represents

… a reaction against discrepancies between pristine theory and messy practice, against the use of science to legitimate privilege and power, against declarations of ‘proof’ for what is merely preference. It is anti-generalisation, an insistence we attend to the underrepresented - the non-replicable, the outliers, the marginal, the neglected, the private rather than the public, the elusive, the misunderstood, the unquestioned and unexplained. It is anti-empirical, an insistence we attend to the non-concrete - the aesthetic, expressive, irrational, emotional, spiritual, romantic, metaphysical, and mystical dimensions of life. It is anti-reductionist, an insistence we attend to diversity and situationality - to divergence, individuality and idiosyncrasy, personal values and commitments, the unique and even bizarre, complexity and relativism and contextuality.’ (Mabry 1997; 4)

**Negotiating terms**

The structure of this section is represented in a number of schematics, each of which presents different perspectives on the emergent principles and insights underpinning the nature of this research. It is important to point out that these representations are abstractions that serve to highlight the key concepts or focus, and that relationships exist between them. Furthermore, these manifestations for experiences, processes, products, ideologies, data, visualisations, theorising and meaning evolved throughout the entire research study, as explained in more detail in ‘One in the Eye’ and ‘reading the small print’. They transpired through reflective, interdependent practice, as both ‘co-participant’ (as represented by the Activities Section) and ‘researcher’. For the sake of clarity at this point, the important quality of the representations here, is the dynamics in the potential relationships as these evoke, situate or help establish meaning to the network of concepts, events, actions and experiences. The diagrams also help indicate the ‘patchwork’ quality of the characteristics on which the thesis is based - a problem for me was transferring this conceptual model into a more traditional, linear, textual, or ‘narrative’ form.
The Research Section comprises three key interdependent parts that collectively form a texture that embodies the essential nature of my research approach and its core perspective, both of which interlink with the Activity Section:

**Terms and Conditions** - This narrative focuses on key issues that shed light on the ‘Research/Researcher/Study Group’ relationships. This reflective analysis encompasses the notions of ‘context’, participant action, ethics, and the basic terms of reference that framed the research opportunity. It outlines the conditions that underpinned the subsequent, emergent research practice and the processes of nurturing an approach commensurate with emergence.

**reading the small print** brings into focus the stages of development of the approach and the platform of the researcher, how this was informed by traditions, assumptions and expectations of both communities of practice (as framed by the ‘research study group’ and the ‘research community’), and where the potential (in)compatibilities might lie. This narrative is intended to provide a sense of boundary or frame for the transactional processes as they emerged and how these related to the refinement of the ways and means by which I engaged in and negotiated some form of resolution for the inquiry. It presents an outline of ‘how things were’ and ‘what they became’ as realisation about the true, complex, dynamic and evasive, even chaotic nature of the research became more apparent.

**One in the Eye** forms an abstract of the processes of making sense of the transactions central to the research study and its cognate dynamics and ambiguities. This narrative outlines the rationale and stages of development for the use of different forms to portray the actions of the subject group being studied and the respective processes of illumination. The narrative also draws together the core approaches that informed my research strategy for thinking ‘differently’. The processes of finding form through and in theorising, knowing and improvisation provided an important means for me to handle the notions of emergence, dynamics, uncertainty, ambiguity and potential. Those (in)determinate qualities are expressed from the ‘view of the artist’ such that the representational form that symbolises ‘the case’ retains a commensurate, evocative potential.
‘Fat Patches’ looks across and synthesizes the narratives within and across the Research Section to reflect on how research action was informed by and interdependent to participant action such that the study eventually became defined as a holistic, intrinsic, complex case study. In combination with ‘Prelude’ they provide a first and second reading, a before and after, an extended embellishment of a distributed narrative that is circumfluous to that by which the case became defined. It serves to make a bridge between the practices and issues referenced to above and the narrative ‘In Search of the Lost Chord?’. These allude to the idiosyncrasies, and inevitable human fallibilities that might otherwise be ascribed to what superficially appears as a postmodern narrative that could lay claim, with respect to C. P. Snow’s (1959) ‘Two Cultures’, of being (un)scientific or artistic.

If one is to recognise it’s prior claims of objectivity, knowledge based on ‘reality’, ‘truth’, then asking ‘science’ to explain issues of belief, morality, spirituality, aesthetics, meaning, should be treated with some scepticism. Science can be, it would seem, an effective way to explain science or certain facets of knowledge, just as art or ethics can be effective ways of explaining aspects that have for years fallen outside the sciences. That science has (allegedly) recently come to recognise its limitations and is seeking to be better informed by reflecting on other practices and associated philosophical foundations, sets a huge challenge that is not in keeping with the political precedents already set historically - potentially, it is purely another gambit to maintain its illusion of power.

‘Positivism works out well for scientists and mathematicians, since it allows only them to speak. Everyone else utters “meaningless” statements about the world and life and morals and beauty. Problems of God and metaphysics and goodness and value reduce to mere “pseudo-problems”, questions asked by those whom language has misled, those who do not know what counts as answers.’ (Kosko 1994; 7)

The thesis thus, represents a synthesis that not only thrives on its relationships with art, postmodernism, connectionism, constructivism and facets of complexity theory, but also on its basic tenets for deconstruction as much those of reconstruction. As such, ‘art’ it is not an ‘opposite’ of science anymore than ‘unscientific’ is …
Fat Patches provides yet another bridge between those fundamental yet interdependent processes we call ‘context’, ‘action’, ‘theorising’ and ‘meaning making’. These lie between the different modes of action, (and as circumscribed within the research process), the experiences and actions of the Study Group and myself, and wider socio-cultural traditions and practices that provide a ‘matrix’ that imbues the actions and forms with the possibilities for shared meaning.

The thesis is predicated on its different representational forms to show its self-sufficiency and to facilitate, portray, convey, express, evoke, engage and inform. Postmodernists claim there are two modes of thought, the argument and the well-formed story, each of which provides distinctive ways of constructing reality and ordering research. Although complementary, the argument and the story are irreducible to one and the other. ... A good story and a well-formed argument are different modes of thought requiring criteria of assessment that are drawn from different sources. Arguments convince one of their truths, story the likeness to reality; verification of the stories is not by appeal to procedures for establishing formal empirical truth, but with establishing verisimilitude (Denzin, 1997; 10) in de Laine 2000; 189)

As ambiguity forms a foundational axis of the thesis, in addition to those within the texts, the use of various graphic illustrations are used to convey the narratives by means of different forms. They encapsulate raw data, methodological process or visualisation, transcription, transformation, representation and realisation, of process/product, of potential and a means to theorising and meaning making in terms that are consistent with connectionism and constructivism (Cilliers, 1998; 68; Albarn & Maill-Smith 1977; 14; Witkin, 1976; 27; Arnheim, 1974; 116 and Wenger, 1999; 58). The readers are not bound by the same inadequacies or constraints in drawing meaning about the subject from discursive language in text form alone. In many cases, the illustrations provide a flexibility that overcomes some of the dimensional limitations and consequential structural limitations of the thesis. It further emphasises its connectionist and aesthetic undertones. We should take it then, that interaction between the ‘medium’ and the artist, and the identity that is established as a result of this relationship, are essential for aesthetic creation. This affinity is further developed through what Reimer (1970; 45) calls ‘working out rather than working off’.
As an artist 'works out' the expressive possibilities of his medium he is at once embodying his understanding about the nature of feeling and exploring new possibilities of feeling. The thing he creates contains his insights into subjectivity, capturing both what he brought as a person to the act of creation and what he discovered during that particular act of creation. (49)

While the nature of these illustrations as forms of meaning are discussed more fully 'One in the Eye', they are generally 'straightforward', open representations that should convey the essence, if not the substance of the meaning of the texts they support. The thesis 'content' is therefore, shown both textually and graphically. The links between components and subtleties and nuanced meanings emphasises the interdependencies in terms that transcend the singular representational form of discursive language as mentioned above. Although Williams’ (1988; 92) comments that ‘the complexity … is not finally in the word but in the problems which its variations of use significantly indicate' was referring to 'culture'[PM397] it serves to illustrate the fundamental ‘problem’ and beauty of ‘language’, and other representational forms per se in ways of representing our worlds.

‘Form goes beyond the practical function of things by finding in their shape the visual qualities of roundness or sharpness, strength or frailty, harmony or discord. It thereby reads them symbolically as images of the human condition. (Arnheim 1974; 97)

The matter of form, structure, narrative as a unified representation or case is also explored in ‘Navigation’.
Terms and Conditions

This narrative draws together a number of interrelated components that were fundamental to the nature of the research study. In particular, it constructs an image of: how the research opportunity emerged, through on-going practice, within which I was engaged as a practitioner; how I learned to act as agent between the two obscure and ephemeral, yet compelling communities of practice, each of which influenced and moulded the actual conditions for the framing of the research as well as its conduct. The latter afforded insights into the organisational contexts in which I was a participating member (refer If Then Why Not Later), how this informed practice, provided and strengthened opportunities, and inevitably highlighted a number of key concepts and strategies that progressively assume a number of representational forms over the course of the thesis. This is further personalised by encompassing in the following illustrations, reflections on:

- traditions, change and potential; how this influenced practical and ethical considerations, and how these related to the evolving conceptual framework for research practice as a summative term for perspective, approach and opportunity.

- the issue of participation and involvement with a complex, distributed, self-organisational setting within which emergence, pluralism, holism and dynamics were provisional qualifiers of intentionality, truth, rationale, standards, norms and difference.

Each of these parts contributed collectively to a conceptual framework that synthesises the relationships between my perspective and my adopted approach to this research. They complement cognate contextual narratives that provide an overview of events, conditions and interpretations of opportunities that provide a way of circumscribing the circumstances for the conduct of the study.
Conditions

The conditions that led to the research were based on two key factors. First, I was engaged in partnership practices with, and amongst a diverse and complex community of people (practitioners) drawn from different organisational sectors - education, business, government and community (EBGC). Second, towards the end of the 1990s, significant change that was occurring across all those sectors was being underlined by new policy directions and attendant documentation, through the media, and through more general discourse that related to the fabric of knowledge at that time [PM398]. The influences on that community of practice were complex but some factors appeared to have a particular bearing on the potential of those relationships and practices. This narrative captured insights into the external and personal factors or terms of reference that contextualised action, and which underpinned the research opportunity.

The working milieux - setting the precedents

The unique opportunity that gave rise to this research study rested on a number of important factors.

a) The activities that became the focus for the research study were naturally occurring in any case. They did not arise as a sole function of some independently derived empirical [PM399] research process [PM400].

b) This activity can be holistically defined or framed by, and as a ‘community of practice’ [PM401]. Clearly, all of the participants within that community of practice that were engaged in linked activities in some capacity or other [PM402], reflected upon,
and shared insights about those activities in some way or another[PM403]. Each participant would have had, and developed a unique perspective through their engagements according to their position within that community of practitioners and the interrelationships that emerged through their actions, reactions, and the actions of their colleagues. As a collective, those experiences, beliefs and practices represented the community of practice that are for the purpose of this thesis entitled the ‘research study group’[PM404].

c) Access to the activities shared by that community of practice on which the study was based, was ‘restricted’ on several counts[PM405]. This was due in part, to: the innate complexities of the actions and interactions occurring between the participants; how they individually and collectively interacted with their own and between other ‘organisations’; the timescales involved; the strategic and complex nature of many of activities; how practices were defined by each organisation or by the various alliances; where key actions were not simply those that occurred within formal conditions, as membership of that community gained their insights in many (other) ways.

d) Due to the close relationships that occurred within such conditions, the people and organisations with whom one worked was not straightforward such that the basis of ‘participant’, ‘involvement’ and ‘influence’ could shift and take on very different meanings or emphases. Therefore, to be a member of that community of practice, as ‘an insider’, had benefits that technically, outweighed its disadvantages when getting a holistic view or informed perspective on the dynamics of participation in a learning partnership.

e) I was a member of that community of practice on account of working within at least one of the key organisations involved in this study. My roles and responsibilities required that I engaged, in various ways, with many of the other organisations that were similarly regarded as members of that community of practice. This was to fulfil the principle role(s) of my host organisation and the activities in which it was engaged with alongside those of other organisations contributing to the partnerships. This level of immersion would not otherwise have been afforded to ‘an independent researcher’ and who would have therefore been denied the opportunities to gain such insights. (Had an independent researcher gained ‘access’, it is unlikely that they
would have engaged as comprehensively as participant, or for such a long time period.\textsuperscript{[PM406]}

f) The early processes of re-socialisation, enculturation, and the formation of group norms inevitably included the relationship I held with that organisation, namely: that on one hand, it gave access to information, and influences that would not have occurred otherwise. This perhaps, constitutes one source of bias, and which in any case would have been unavoidable.\textsuperscript{[PM407]} However, I believe that facets of my involvement, on account of the basic constitution and remit of the organisation for which I worked, had an important bearing on my capacity to deal with the complexities of the circumstances that formed the focus of my research study.\textsuperscript{[PM408]}

Underpinning these complex conditions portrayed are two main issues. One relates to the matter of focus and process, which is taken up in the development of the research process (\textit{reading the small print}), and considers the means of dealing with emergence,\textsuperscript{[PM409]} visualisation, and representation as a research proposition.\textsuperscript{[PM410]} The second was more to do with processes of evaluation in the sense that judgements, values, priorities, or significance that can emerge, through selection, categorical statements, by implication, through some implicit or explicit suggestion, through an evocative process, and which may (or not) hold implications for the people who were originally (potentially) engaged as (non)participants.\textsuperscript{[PM411]} This is seemingly as much an ethical issue, as a way of dealing with notions of uncertainty,\textsuperscript{[PM412]} and is based on precedents and models of various kinds. This contention is explored further in the illustrations below and reflects in action on the interrelationships occurring between research practice, the research study \textit{per se} and myself in one of many different roles involving disciplined inquiry, and how this related in some way to the codes and principles of ethics.

\textbf{Building relationships}

The simple diagram ‘Genesis of a research opportunity’, Fig 34) indicates my position as the ‘intermediary’ between two communities of practice - the research community and the research study group:
The overlaps between research/me/study shown in this diagram emphasises: that the formalisation of the research approach grew out of on-going, experiential practice; that I was providing emic and etic (i.e. insider and outsider) perspectives on the dynamics of the research study group. As I tried to reconcile the pressures of being informed and informant, as researcher, colleague/participant and ‘independent, my position enabled me to recognise and appreciate that the activity would have occurred irrespective of the research.

The boundaries between each of the terms are broken and overlap to indicate that in practice, they are notional. For example, participants within the Study Group not only engaged in disciplined inquiry (in one form or another) but also, considered by members of that group to be fundamental to their work. Important processes of ‘theorising’ were ongoing, fundamental, idiosyncratic, and may (or not) have been formalised in various ways. Therefore, the ‘need’ to draw together and affirm the interdependencies of those two different communities of practice as something central to the development of the research agenda largely rested on me in my pivotal role(s) acting as, for example, researcher, ‘integrator’, participant and/or ‘broker’.

The diagram (Fig 34) encapsulates and combines the role and responsibilities of a ‘researcher’, that is to say, in one sense, a person operating within a socio-cultural
group, wherein rationale, rules and procedures, assumptions and expectations are influenced by that group, to ‘investigate something’ in order to ‘discover’, ‘establish or revise a theory’ or to ‘develop a plan of action’. This practice holds its own traditions, processes and emphases for example, certain traditions refer *inter alia* to a researcher, as being: researcher, scientist, theorist, explorer, spy, statistician, technician, fieldworker, (co)participant, politician, quack, impostor, negotiator, interpreter, broker, artist, bricoleur, interpreter, and even as me, I, and possibly … but seldom, apparently according to the literature, as ‘learner’ [PM417]. That the ‘Study Group’ became identified as such was an outcome of my response to a learning opportunity and ‘seeking potential’ by drawing on different ways of thinking in order to extend my perception or perspective about what was occurring and why [PM418]. Hence, the research emerged from the circumstantial opportunity rather than the obverse.

The transactions of the participants that in the collective, framed the research entity which was the Study Group, provided some specific terms of reference that can be succinctly represented in a number of models. These also provide further clarification emerging from other texts appearing in this thesis:

![Diagram of Terms of Reference](image_url)
The schematic ‘Terms of Reference’ shows in two-dimensional form, the key concepts and their relationships under the rubric provided by the ‘terms of reference’. For reasons explained in the latter part of the Research Section, and given concrete form in the Scenarios, each of the above terms retain a dynamic that represents the conditions to which they are applied in the thesis. For example: ‘practices’ represents what Wenger (1999) refers to as ‘a way of talking about the share historical and social resources, frameworks, and perspectives that can sustain mutual engagement in action’ (5). Williams (1988) enlarges on this, albeit from a different perspective, and thereby provides an overlay of the two models presented under ‘Genesis of a research opportunity’ (Fig 32) and ‘Terms of Reference’ (Fig 35).

in the sense of a repeated or customary action in which the theory / practice relation is often a contrast between one way of doing a thing and another, the theoretical being that which is proposed and the practical that which is now usually done. ... It also needs to be noted that the very strength of theory, its (systematic) explanation of practice, with which it is in regular an active relation, can be made prejudicial. Practice, which has become conventional or habitual, can be traced to a base in theory, and theory is then used derogatorily just because it explains and challenges some customary action. (p317)

Practices have collective, though complex representational or organisational form and hence construed as an entity or process - in either case[PM419] embodying some ‘focus’. The key organisations that contributed to the activities were predominantly from and generally identifiable with one of the business, education and government sectors.

Needless to say, some participants engaged in processes that, while being construed as ‘educational’, also relied on business or governance transactions.
A particularly complex concept is in the above relationship is that of ‘community’. (Fig 36), shows that the ‘practices’ sit ‘within’ a group of other concepts indicating that each practice represents a community that embodied experience and actions that somehow bond that practice. As Williams asserts:

The complexity of community (thus) relates to the difficult interaction between the tendencies originally distinguished in the historical development: on the one hand the sense of direct common concern; on the other hand the materialization of various forms of common organization, which may or may not adequately express this. Community can be the warmly persuasive word to describe an existing set of relationships, or the warmly persuasive word to describe an alternative set of relationships. What is most important, perhaps, is that unlike all other terms of social organization (state, nation, society, etc.) it seems never to be used unfavourably, and never to be given any positive opposing or distinguishing term. (76)

The Projects in the Scenarios liberally refer to ‘providing learning opportunities’ for the ‘community’ as if there was some tangible sense to this, either in terms of ‘who’, or endorsing the ‘warmth’ to which Williams refers. I have not used ‘community’ in subsequent models except in the sense of referring to a ‘community of practice’ - a concept that gains greater definition later in this Section, and through the ‘Scenarios’ or ‘snapshots’ of activity that embodies the ‘communities, experiences and actions’ and portrays an image of ‘practice’.

The ‘Themes’ serve to focus the activities in which the participants engaged and can be represented through three models that provide greater depth to the ideological aspirations of the participants and are explicitly conveyed through the Scenarios. Essentially, the aims of the Projects focused on ‘engaging in partnership practice to promote and develop learning opportunities (for the wider community), and to incorporate ICT as a catalyst and a means to promote and bring about learning’.

![Organisational models](image-url)
With reference to the figures, each clearly relates to the attendant key attributional, relational and ideological concepts and processes provided here. These formed a fundamental part of the rhetoric as ‘common terms’ as these were defined in, or by practice, and indicated the heterogeneity of the participants and their expectations, assumptions and traditions with which they were associated through their organisational practices. The analysis that follows in the latter part of this Section and descriptions in the Scenarios, illustrate, as in the example below, that by (re)contextualising each of those maps within another, the ways in which the terms evoke new meanings shifts their significance.

The Research model LOP/ICT (Fig 38) embodies the ‘focus’ for the research study. It is saturated in uncertainty or instability as the terms appear to be ‘interchangeable’ and/or determined by contextual circumstances, and thus, radically alters the meanings of any of the contingent concepts. Each notion represents in itself a ‘complex system’ and is, by its nature, inherently ambiguous. Nevertheless, collectively the model realises the basic premise on which the thesis is based. While the remainder of the thesis illuminates some of the more salient interrelationships evidenced as constituent communities of practice engaged in partnerships, it would
be antithetical to work towards anything more than a synthesis. By ‘changing hats’, asking questions, exploring detail, action and experience, by redefining the dimensions and notions of context, action, theorising and meaning-making, by thinking big and looking out, thinking holistically, thinking ‘virtual’,[PM422] thinking fuzzy, thinking about complexity and ‘thinking differently’,[PM423] some semblance of a coherent and communicable representational form emerges. As Arnheim (1974) says: ‘Form goes beyond the practical function of things by finding in their shape the visual qualities of roundness or sharpness, strength or frailty, harmony or discord. It thereby reads them symbolically as images of the human condition. (97)

Red herrings and blind alleys?

Someone has to be right ...

The issue surrounding difference, plurality, ambiguity, strategic acumen, subjectivity and objectivity will inevitably raise questions concerning who is right, or not right, and on what basis this might be judged or authorised. These are fundamental questions that may be applied to all of the aforementioned practices – by and to the research community, ‘the participants’ and my own practice, irrespective of my role. Such matters are an integral part of any individual, practice, culture, to the daily routine that challenges which brand to take off the shelf, how one gets to work, and even whether we have ‘the right to ask’, to challenge the decisions or beliefs, conduct and standards of another. While such matters are integral to principles or codes of ethics, that is not to suggest that anything that challenges a standard, a belief or conduct is therefore, potentially, an ethical issue … or is it? Perhaps it is a matter of degree, or custom, or expectation, or justice, or belief … or maybe it is rather a matter of trust, integrity and truth. Or it might be that these notions are valid, reliable, consistent, somehow ‘dependable’ just so that ‘we know where we stand’ and can be assured that under the circumstances, things are just, fair and reasonable, and that they can be applied, taking account of harm, detriment, irrespective of race, creed, gender, height, colour, eating habits, cultural style, dress, political status or bent, or any other potential impediment? So, perhaps the real question is whether this is a sound premise and one to which, criteria, rules, principles can be applied.
Ethical Principles

Ethics embodies a system of moral principles that is situated in and established by a community of practice. The system itself is contained within by the interplay between standards, morality and conduct and how these concepts are in turn, are ascribed with meaning and become defined by the system. Behind these are notions are important sociological drivers that are intended to separate right from wrong, good from bad, what is fair and just - the dilemma of ‘if’, ‘then’ and ‘ought’.

Fig. 39 Ethical principles

As such these ideological systems containing principles, may be, for example, historically, socio-culturally, and spiritually derived, and from which the idiosyncrasies of each community fuels the rationale that defines, incorporates and legitimises (ethical) practice for what it is. Hence, this richness and diversity leads to the situation where ethics and its related practice, can mean different things to different people within and across different communities. Those differences acquire different profiles or levels of ‘noticeability’ according to the events that occur, the socio-cultural mix and the (dis)advantages arising from attention to those differences.

Ethics in research

Given the nature of education endeavour, ethics forms an integral part of research practice, such that the attending accountabilities of the researcher are responsibly met by the research community. This is not solely an essential methodological or technical parameter. The principle of ethics permeated all of the aspects of this research: not only was it framed by social context, but also it held very close
associations with the ways that participants planned, engaged and accounted for the activities that comprised the collective experiences that are given tangible expression and form the nub of the thesis [PM428].

The model ‘Ethical relationships’ (Fig 40) distinguishes between two aspects of the research reported here. One aspect of it incorporates the principles of ethics as part of the research endeavour (red lines); the other relating more to the interpersonal dimension as practitioners interacted personally with each other and the ways that they encountered and addressed ethical issues and dilemmas within that personal dimension and/or within the context of the organisation.

![Fig. 40 Ethical relationships](PM429)

There is, in this last point however, a presumption that all practitioners held and expressed a consciousness about the relationships between activity, ethics and moral action. This was not that simple. Similarly, it would be erroneous to claim that a focus of the study was about ethical practice. Over the course of the study, events occurred that (at least) implied, or (on occasions) made explicit, ideological principles that might be linked and shared with those of ethics, partly on account of what might be considered (un)reasonable practice, and partly through the various forms of careful reflection that underpinned the research process. Such ‘cases’ not only helped with my understanding, interpretation and ‘sense making’ of those experiences but also helped situate and contextualise the basic principles, practice and complexities of ethics within this particular research study. Underpinning ‘ethical practice’ was a host of complex ideological interrelationships that influenced the nature and essential quality of the practices that featured throughout the study reported here.
A more elaborate representation that encapsulates many of the concepts and processes are illustrated below in the diagram ‘Ethical uncertainties’, central to which were the notions of uncertainty and difference. This underpinned and informed the research process throughout:

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**Fig. 41** Ethical action in practice[PM430]

**Fig. 42** Ethical uncertainties[PM431]
The preceding text and theorising that went into the construction of the associated diagrams leads on to three particular strands. The first considers some perspectives and principles as framed by research literature; the second strand provides a further description about my specific research practice in relation to those ethical principles and associated codes and guidelines of the research community. The third considers the implications of these ethics principles and practices within and between the two distinct communities of practice, the research study group and the research community.

**Research Literature**

Research literature generally indicates the matter of ethics within the context of research practice. Some of that is general, and relatively obscure with much being underpinned by objective technicalities and an accompanying rationale. For example, from the relativist’s point of view no method of sociological research is considered intrinsically any more ethical than any other. On the other hand the ‘absolutist perspective’ of the traditional model or system of ethics assumes ‘participants will be informed prior to fieldwork of role and purpose, and that consent will be free and informed’. Further, that individuals ‘qualifying for inclusion’ do so in accordance with impersonal criteria established by the some universalistic precedent, with all participants thought to having ‘equal rights to privacy and protection from harm’. In this sense, de Laine (2000) avers that

‘… the impersonal, absolutist ethical model mirrors the positivist paradigmatic view of the world and ways of being in it and interacting with others, and the use of research methods.’ (24)

The proposition above thus challenges those viewpoints that engage in ‘scientific protocols’, and which include looking at participants rather than being with them. Ethical relativism therefore fundamentally propounds an alternative set of ideas to the traditional absolutism regarding ethics, the world and research methods embedded in the interpretive and critical paradigms of the social sciences. In the ‘Puzzle of ethics’ (1999) Vardy & Grosch assert that codes, to be effective, need to account for contextual idiosyncrasies, or ‘situational ethics’ that for scholars, reside in six fundamental propositions and four working principles. By way of example, they cite Fletcher’s (1966) working principles as:
i) **Pragmatism** (to be right, it is necessary that a proposed course of action should work)

ii) **Relativism** (based on the belief that circumstances can throw up exceptions)

iii) **Positivism** (Fletcher claims two ways of understanding ... knowledge or belief: naturalism - in which reason leads to faith or the propositions of faith from human experience; positivism - in which faith is accepted on a voluntary basis)

iv) **Personalism** (situation ethics puts people in first place ... such that the situation asks 'what is the best decision to help human beings') (125-129)

As already mentioned, that which constitutes (un)ethical practice, how, or by what criteria it is to be evaluated and judged, and that it might subsequently be deemed to be (un)reasonable or unacceptable is highly problematic - recognising that ‘one can only do one’s best in the circumstances’ is insufficient in itself without recourse to some explicit or accepted form of accountability. This may be particularly so when immersed in practice wherein the strategic advantage from deliberately pushing boundaries, meanings and values forms a key part of this research study. That a practice may be deemed ‘unethical’ on one hand, advances a presumption regarding the authority or capacity to make such a claim, while on the other hand, elevates by default alternative practice as presumably ‘ethical’. Either supposition verges on prejudice and bias and can further confound semantic notions underpinning truth and reason that may result either in anomie or at least, social inertia, or otherwise, serve to intensify the issue.

Other sections of this thesis explore the notion that action enlivens and forms the basis of certain experience which helps situate and contextualise practice, whether or not this is ethical, that it can never fully explain or otherwise explained, or be justified in absolute terms. Here the onus shifts between the enquirer and the respondent.

**Ethics in context**

The thesis encapsulates a range of principles and issues that can be associated with judgements, conduct, belief, though that does not suggest that these, or the thesis is about ethics *per se*. Furthermore, while there are other instances where ethical values judgements and conduct is brought to the fore, there is some question as to whether these were perceived as ethical issues, and if so by whom and why.
Essential to that opening text was that, whilst being associated with a broad community of practice, these could be, and were enriched, or complicated by being associated with different (group) practices, personalities, roles, responsibilities, for example: by broad groups (such as education, business, govt, community); by organisational entities and practices (such as the pharmaceutical company, church, partnership, primary school, LSC, slaughterhouse); by conditions (technicalities, rules, codes of conduct, principles); by issues (such as love, life, media, values, green); by participants with ‘discrete roles’ (such as accountant, researcher, surveillance officer, student, priest, social worker, undertaker); who might wear multiple ‘hats’ (as mum, teacher, auditor, student, manager, criminal, non-participant); all claiming to work within a (generally) cohesive, cooperative, partnership environment.

**Locating ethics in practice**

A key point is that ‘generalisations’ will be defined and encapsulated within a system of principles and/or by a community of practice. Within the context of this research study, that broad community of practice was multi-faceted, included representation from the education, business, government and community sectors, each of which would have synthesised its own systems and principles. While there would be overlaps between these, there could be different ways of understanding those by applying different weights, emphases, and values, particularly as these become ‘personalised’ and/or explicit through numerous forms and actions. Key to the subsequent generalisation then is that one voice (be it that of education, teacher, belief, science, mine) is not unduly privileged over another. Yet, the issue of ‘voice’ inevitably gained and shifted emphasis as emergent issues became encapsulated within and across one or more communities of practice. The voice of the politician, policy maker, educationalist, businessman, partnership manager, technician, researcher, institution, each pervading and evading the potential values and behaviours of the other. These emphases may pertain to a host of associated issues such as ownership, truth, tacit, theoretical and experiential forms of ‘knowing’, approved and complementary to situated ethics.


**Ethics within a homogeneous setting**

Thus there are the philosophical principles (e.g. morality, truth, goodness, conduct), how these become manifest, applied, judged according to how or where these are situated within (multiple) communities of practice (e.g. academia, business, theology, medicine, law, different cultures) and shaped by time, geography, faith, gender, and so on. There will always be the potential issues or dilemmas that arise as people build relationships between their own ethical principles within and between the communities of practice to which they belong and despite the systems within which they operate and perhaps held to account. (Ref – the ‘greater good’ … where principles are set for example, by God, by man, and/or by some underlying notions of wholesome self-knowledge virtue and happiness.

There are further issues arising from when, why and how the fundamental principles (e.g. morality, conduct) are established, systematised, objectified and practiced by or within a community of practice; and ii) how these are '(de)personalised' by individuals, (and/or the system) within and across those communities of practice. For example, upon who should one draw to qualify: Fletcher, J. (1966) Situation Ethics – the new morality[PM437]; or what Dewey (1934) argued to be about ‘the right, the virtuous and the good’? Others argue that ethics may be founded for example, on spirituality or aesthetics, a discussion that has since been explored further for example, Lyotard (1984[PM438]) and by Levinson (2001[PM439]). Others, to whom I refer throughout the thesis, draw on ethics within the context of research. These include for example, Vardy & Grosch (1999), de Laine (2000), La Follette (2002), Punch (1994), Christians (2005) and the University’s Student Research Handbook (2001) and its ethical Code of Practice for research.

**Institutional policy**

According to the literature, within these practices and systems the respective ideologies are implicitly and explicitly imbued (shaped with or by) policies rules/dependencies, guidelines and committees that authorise and deploy. The communities of practice within which I was a part (that is to say, the research study group, and the research community) each incorporated sets of basic rules/principles (often termed as guidelines) that informed, influenced those communities of practice.
These each have a number of reference points including harm, detriment disclosure. Likewise, those were established and authorised by committees and further technical systems and procedures. I can give unequivocal assurances that where possible and appropriate I complied with the guiding principles and rules where possible/necessary and that it wasn’t just about the ‘rules’ but also about personal values and shared values according to the community within which I was operating.

I have stressed several times throughout the thesis that my research was not ‘about’ (meta) ethics[PM440] – it was not seeking to make judgements about judgements, but rather, sought to portray the circumstances the issues and the outcomes of participant action (e.g. each scenario highlights differences in participant action, different ideologies, find/present some possible explanations and point to subsequence actions arising from those. It did not make any explicit judgement about practice being good/bad, right/wrong – merely different, and in that case, difficult though reconcilable).

That aside, the following recognised the more technical issues pertaining to research practice. I have indicated that despite the difficulties of always/generally implementing/following the guidelines (e.g. some of participants refusing to sign ethics forms) the key emergent (ethical or technical/administrative) issues were as follows:

a) Participants were fully informed and not only exercised their right to not sign but also chose to continue to cooperate with the research, to allow me access to various forms of participant action, to sensitive information and so on. I also followed all the rules defined by the University’s policies and through my research supervisor, negotiated the associated issues with the ethics committee.

b) I complied with the underlying principles above and beyond ‘the rules’ / guidance set by the research community; whilst remaining aware of discrepancies highlighted within and by the research community about the ‘rules’ and the ‘principles’ (as cited by de Laine, 2000, such as: informed consent; generalisation; ethical relativism; and how these correspond to
theoretical, applied, methodological, pragmatic, and situational ethics, and so on).

c) I also complied with the underlying principles and ‘rules’ generally adopted and applied by the research study group in terms that are explained more fully later in this document.

d) I also adhered to the underlying principles and ‘rules’ for my own personal ethical practice which I believe to be above and beyond those advocated within the University’s ethical guidelines and those generally advocated shared and adopted by and with co-participants within the research study group[

PM441].

e) As a tentative explanation for the apparent contradiction between some participants agreeing to go on with the research but not signing the forms, the ‘rules’ to which some of the participants would have been signing were for conditions that, in some respects, lay outside their own community of practice – this is particularly important issue. While they recognised the essential principles and rules, within their day-to-day practice, there would be very few occasions when they would be asked to sign a form to make a formal declaration that they would comply with such rules (exceptions might be, for example, legal and financial contracts). Otherwise, key to co-participants’ notions of ‘trust’ in day-to-day (ethical) practice were a complex set of variables and qualifiers. (E.g. within an organisational or social hierarchy, action contexts, status, position, politics, institutional rationality, power, personal experience, fear, risk, potential and/or personal judgements and values were likely to have played a part in establishing behaviour, conduct; whether they felt it ‘right’ and ‘proper’ to disclose or withhold information, and to/or from whom). This could be offered as a tentative explanation of the apparent contradiction between agreeing to go on, yet not agreeing to sign the forms. Without exception, the people that chose to not sign ethical forms were all from the same participant group – they were the directors (Chief Executives, Managing Directors, and Principals of the partner organisations).

f) These people were the first group of co-participants within my research study with whom I tried to follow and apply the University’s ethical research guidelines. That not one single co-participant would sign was not, for them, a
matter pertaining to my personal relationship with them. These were people with whom I had established a trusting relationship over previous years such that there were, according to whom one was sharing certain ideas, an implicit and shared understanding about truth, trust and respect. That is not to say that the levels or trust and respect were common to all. Recognising and handling those differences was my ethical problem.

g) These people highlighted two key ethical dilemmas for me. First, it seemed to me that they clearly understood ‘ethical principles’ and how these were formalised through ‘ethical guidelines’ in much the same way that these people were also ‘responsible’ for setting and being accountable to similar organisational policies and guidelines. That accountability was in any case known to be partial and contestable such that the resultant ambiguity or fluidity provided a dynamic that would permit rather than stifle choice and action. Was I to assume therefore, that not ‘signing’ was to challenge the ethical dimension or our relationship or the bureaucratic principle? Second, these people had, by not signing, highlighted a further ethical dimension of parity between the this participant group and other participant groups who were also contributing to or influencing the research study (e.g. teachers, tutors, other managers from the business and government sectors, clergymen, parents, students and children. Was I to have and apply different rules and conditions, different values and judgements, accept or dismiss their roles and contributions according to who had ‘signed’ as they knew about, fully understood, agreed to, and upheld their personal right to ‘participate’ and contribute to my study? Besides, they also had the ‘right’ to not be involved or included in co-participant emergent action? Alternatively, by saying that I complied with the guidelines, that I was conscious of and complied with and stayed within the bounds of ‘correct’ and ‘appropriate’ ethical practice, avoided harm, detriment and disclosure of personal information, provided a truthful, accurate and realistic representation of reality, in terms that can be validated, and essentially provided a narrative that conveys issues rather than judgements about participant action, am I to presume that this represents or overcomes an ethical proposition?
Re-situated ethical issues

With regards to my position within the EBLO, that this highlights distinct or overlapping political, ethical, methodological issues in one sense problematises if, how or where the associated discussion occurs within the thesis.

I was trusted and authorised by my employer, the EBLO, to engage in this research study, in terms that could provide me with a creative outlet for personal and professional enrichment, while also providing a means to inform co-participant action and practice. As a result of that trust, I was given a significant amount of autonomy and freedom to participate in and be informed about co-participant action. I was not paid to do the research any more than I was ‘accountable’ to the EBLO for my research outcomes – it was understood by them as ‘my’ research. I was sufficiently independent to establish for myself that an interesting action-context was evolving that warranted further investigation and thus, prompted me to explore the processes by which this could be informed and supported by ‘outsiders’ (the research community).

While I did not require ‘permission’ from my employer to pursue further learning or study, I recognised that it was ‘right’ and ‘good’ that I should inform them of my views and intentions. ‘We’ also recognised the potential mutual benefits arising from my research investigation as we were highly attuned to the need to extend personal and professional experience and knowledge bases about current action, in addition to being aware of the practical considerations pertaining to ‘rights of access’, validation of (ethical) practice, analyses and other forms of support. My employer did not seek at any time to control or influence my research but rather provided the support that enabled increased levels of access through engagement in evolving partnership activities. This was in stark contrast to the university which highlighted ‘controls’ or ‘issues’ that determined how the subsequent research practice might be ‘framed’ – in the name of ‘science’.
Due to the constitution and organisational composition of the EBP and its role and position within other multi-organisational partnership configurations (such as the LLP, other ICT Projects and day-to-day practices that extended well beyond the boundaries of this study), it is accurate to state that many other people with whom the EBLO worked were informed about my research study irrespective of whether they were ‘involved’ in it. They were also aware that due to the emergent nature of the action-context in which people found themselves, the focus of the study was loose and dynamic, such that the boundaries of my enquiry and interest in participant action was similarly uncertain. Throughout the course of my research study, co-participants often asked general questions of me about my research approach, processes, strategies and findings. I was never made aware by anyone, directly or indirectly, about any expression of concern or fear about what I might report, other than that which is explicitly conveyed in Scenario 4. These mainly pertain to the practice of making an audio recording during some of the interviews and for which, I respected their concerns and complied with their requests to turn off the tape recorder. It was evident at any meeting within which my research findings contributed that I never divulged sources, raw data analyses or findings that could be attributed to associated with specific organisations or people.

My findings were inevitably of general value to the EBLO and to other participant organisations either through my explicit, formal presentations at Board meetings or through my general insights and increasing levels of understanding through participant action and/or research practice (e.g. through reading the relevant research literature and policy documentation). As others were aware of my interest in extensive reading of policy documentation, the request from others to summarise this at formal meetings was not uncommon. There was no compulsion or pressure for me to present my findings - I was generally ‘invited’ and given the freedom to choose my topic and timing for the presentations.

There were some research findings that were not disclosed to any other organisations, for example, those gained from insight into day-to-day practice within a specific school in the Communities ICT Projects. Nevertheless, these insights may have influenced but were not the sole basis of decisions by the EBLO to no longer
invest their time and funding in community ICT projects, with or through schools, but to explore alternative locations. Clearly, the eventual decision was that of the EBLO and this was made public through a formal explanation provided by the EBLO. That statement was not in any way associated with the raw data or findings arising from my personal research study. Likewise, this negotiation was not construed by the EBLO as an ‘ethical’ issue but rather, one that was based on operational pragmatism – that is to say, ‘a practical consequence or effect as a vital component of both meaning and truth’.

The potential political effect arising from researchers’ relationships with organisations and co-participants have been highlighted in the research literature (e.g. Punch, 1994, Hammersley, 1995). In my case, the EBLO along with all other participants, were provided with numerous opportunities to contest my findings and personal views. I took these into account when writing my thesis and provided various colleagues with opportunities to read my evolving summaries and narratives. None of my colleagues / co-participants ever considered themselves to be ‘co-researchers’, or hold any claim over or seriously contested my research findings, even during the events portrayed in Scenario 4 where co-participants helped frame the nature of the research brief for the subsequent ICT Report. Furthermore, ‘we’ did not make the distinction between ‘insider’ and ‘outsider’ research as frequently presented within the research literature. Likewise, ‘we’ did not see this as a ‘dual’ role – anymore than many people who have dual or multiple roles do not seem to see themselves as having ‘split personalities’ or a ‘dissociative identity disorder’.

From the perspective of the research community the term ‘insider research’ (such as mine) is generally used to describe projects where ‘the researcher’ (‘I’) has a direct involvement or connection with the research setting (Robson, 1993). This contrasts with traditional notions of ‘scientifically sound research’ in which the researcher is ‘an objective outsider’ studying ‘subjects’ ‘external’ to his/herself (Denzin & Lincoln, 2005). The former description can lead to different categorisations such as ‘practitioner research’ (Robson; Kemmis & McTaggart in Denzin & Lincoln 2005) where researchers are, or become an a member of a community they are studying; collaborative research (Jarvis 1999; Richardson & St Pierre, 2005) where researcher
and subject/s both actively carry out the research; or those cases where the researcher is partisan to the emotional, political or sexual affiliations of the ‘subjects’ (Markham, Holman Jones, Denzin in Denzin & Lincoln 2005). The associated notion that such practice is ‘ethical’, ‘valid’, or ‘justifiable’ in the sense that it is ‘conscious of its socially situated character’ (Hammersley, 2000) is discussed further in the text below re validity.

In summary, I was acutely aware of and addressed ethical dimensions such that my thesis represents a truthful, fair and reliable account of participant action-in-context. The thesis is not intended as a meta-ethical narrative. While it does not intend to be judgemental about the (ethical) practices of participants, subsequent judgements by readers about possible ethical dimensions are unavoidable. Finally, I hold to the view that ethics extends far beyond the policies, rules and technical systems that prevail within and across communities of practice.

**Into the blender**

This narrative has reflected on fundamental conditions that contextualised the nature of the research study, how the research opportunity manifested itself, and an indication of my position as participant, researchers, and broker. In indicating how the latter subsequently framed the key terms of reference for the study, it embellishes the detail in other sections of the thesis and addresses salient of the key principles that framed the perspective and approach adopted for the conduct of this research.

It is of some significance at this stage to reiterate that the above sets the main context for the research, which focused on the enhancement of learning opportunities, particularly where these incorporated ICT in some capacity, and depended on partnership practice between different organisational constituencies. Much of the above text draws attention to facets of social interaction, and reflects upon key concepts such as: ethical practice, brokering, participation and partnership. However, the concept of what an ‘organisational entity’ might be, how it relates to partnership, and precisely what its boundaries might be, is difficult for the human
mind to grasp, particularly if its elusive constructs need (or defies) some form of stability or ideation to become tangible. The narratives take the research models (delineated above) and embeds them into the model ‘Towards a synthesis’ (Fig 43) in order to relocate these questions and provide a lens through which the associated processes then leads toward a synthesis[PM442].

Fig. 43  Towards a synthesis?
reading the small print

Finding a line of sight

This narrative describes some of the issues pertaining to ‘emergence’. ‘Seeing is believing’ indicates how this interpretative inquiry into ‘emergent processes’ was informed by traditions, assumptions and expectations of both communities of practice and by me. A framework is provided for visualising the transactional processes as my research strategies emerged and developed, and how these corresponded to ongoing practices, engagement in, and the negotiation of, some form of resolution. Through description a perspective illustrates ‘how things were’ and ‘what they became’ as realisation about the (true), complex, dynamic and evasive, potentially chaotic nature of the research was synthesised by me, in and through contextualised action.

As explained in the Prelude to the Research Section, and in ‘One in the Eye’, diagrams serve to convey my key processes of theorising as I (re)constructed meanings about action. In this sense, the diagrams in ‘Different ways of seeing’ constitute the kernel of the idea being portrayed, and implicitly represent a facet of my theorising through developing those ideas. This narrative strand interweaves with ‘One in the eye’. Components within each are interdependent, and indicative of the issue of finding representational form for this thesis. The ways that I perceived and conceptualised action did not readily conform to traditional methodologies and linearities of conventional text. The metaphor of texture intends to symbolise ways that I synthesised the complexities of action. This is conveyed through illustrations in various forms, such as textural descriptions and diagrams. However, to define and/or describe the diagram in detail then goes some way to refuting the beauty and purpose of the diagram as an expression of an idea, processes of theorising and making-meaning, and its representation as an idea. In this respect, ‘In Search of the Lost Chord’ further endorses this by positing that for example, on one hand, a picture does not paint words, while on the other hand, the processes of theorising is likened to improvisation wherein the importance of the outcome is the process.
As important relationships between ‘Research Practice’ and the ‘Research Study Group’ converged over time, issues pertaining to (in)determinism and bias were highlighted. To illustrate a partial reconciliation of such issues I now draw on a particular process of that development that was central to the context of the research practice.

Seeing is believing?

**Contextual assumptions**

During the initial stages of my research study, there were numerous contextual assumptions, determinisms, uncertainties and potentialities. In relation to these ‘assumptions’, some participants believed that the potential of partnership made it worthwhile to invest their time and effort in negotiating various scenarios, projects and developments. Similarly, stakeholders and beneficiaries alike who were initially involved in the ICT Projects outlined in Scenarios 1 to 4, were explicit in affirming their belief that the partnerships made potential contributions to, and provided rewards for, learners. It is important to note that, in the case of ICT for example, there was no clear reason why this belief was expressed in such positive terms. Prior experience of ICT within the schools, teachers’ use of ICT at home, lack of knowledge about ICT Projects elsewhere in the country and lack of knowledge about associated literature advocating the benefits of ICT within a school environment did not contribute to positive beliefs about ICT. Nevertheless, these assumptions were important as they may have influenced action.

Convention, rules, regulations, precedents and contractual obligations driven by funding, targets, expectations, responsibilities and accountabilities of various kinds were not only key ‘motivators’ but ‘determinants’ of organisational systems and practices. These determinisms were evident in both the research study group and within the research community. With regards to the Study Group these are evident in all of the scenarios; within the research community, for me these were most evident in for example, the methodology course that seemed at that time to emphasise scientific method – in both cases, the relationships between motivation, incentive and determinism was taut.
Many 'uncertainties' are outlined in, for example, 'If Then Why Not Later', or Scenario 4. To some participants, uncertainty energised action, to others it arose from action that was perhaps, not understood or agreed, constituted a risk, an instability that implied a lack of control or power, and which was therefore, a 'problem' that could be overcome by careful preparation, contingencies and strategies, through the development of internal legislation, systems, and so on. Interestingly, this form of planning to deal with uncertainty was seen by some organisations as 'routine'.

Each day provided its own 'potentialities' - some specifically identified in terms of long-term ICT or partnership projects. These potentialities also included the consideration of the positive opportunities arising from for example, sponsorship proposals and awards, through to the more negative or confrontations, facets that superficially, could have been beneficial to Project outcomes[PM457]. In pursuing that potential, my scrutiny of literature provided insights into organisational theory, particularly as a means to understand groups, and the nature of social interactions between participants[PM458].

Each of the above issues were encapsulated within, or energised by, the notion of 'making a difference' and manifest through action. 'Making a difference' was positively motivated for example, by aspiring to aims such as 'improving standards and prospects', widening and increasing levels of provision for, and 'widening participation' in learning. It was also driven by the potential benefits arising from bringing participants (individuals and organisations) together within various partnership configurations – the difference arising from the change in levels of understanding and/or collaborative participation. 'Difference' was also recognised as the quality of contrast between participant organisations. In this sense, the issue was whether differences within those partnership configurations constituted something that was advantageous to meeting the above aims, or rather, somehow jeopardised the perceived unity and cohesion to which the partnership also aspired. For example, a concern expressed by some organisations was that differences between the organisations strengthened the partnership, whilst others justified partnership action by seeking to bring about the normalisation of practices.
Participants who were (re)forming partnership groups and initiating Project developments were being driven by numerous intrinsic and extrinsic determinisms and beliefs. These included, for example, the belief that partnership held potential benefits. Some of these may have been driven by determinism including those politically exerted by central Government (e.g. LLPs ‘will’ be set up; Ofsted ‘will’ make judgements about the standards in schools, NGfL will bring about enforced change regarding the use of ICT within school environments, etc.), and those brought about by the manifestations of other beliefs (such as those represented through the development of ICT Projects, etc.)

The ethics and politics embedded within these complex interrelations found new forms as different organisations, sectors, groups and individuals seized and/or nurtured prospective opportunities. ‘If Then Why Not Later’ for example, indicated a link with political motivations (some of which arose from historical conflicts between two specific people ten years previously, and which then became manifest through various forms of ‘organisational’ conflict). This politically motivated challenge to Project outcomes, which thus undermined the potential opportunities for numerous stakeholders and beneficiaries who had no knowledge, interest or say in those historically entrenched issues, brings into question the ethical foundations of those actions. Evidence indicates that one particular ‘participant’ used the position of others (viz. in a position of sufficient ‘authority’ to influence outcomes, and yet (presumably) ignorant of the historical or political complexities of the situation) to not only undermine that Project, without intentionally drawing attention to him/herself, further challenges the ethical bases of those actions. (See ‘Lines of influence’ Fig 83)

**Methodological assumptions**

As a researcher, I was encouraged to find a question, identify a problem, focus, work to or from theory, find, adopt and adapt a methodological approach that, in its various forms, essentially represented a ‘scientific’ process of inquiry. These issues are variously restated with additional reference to numerous issues such as reliability, validity, and general perceptual issues pertaining to ‘data’ and its eventual
representation, particularly in more modernist writing. These notions tend to be more prevalent in positivistic research inquiry and those more formal methods that tend toward quantitative outcomes.

The positivist, post positivist, constructionist, and critical paradigms dictate, with varying degrees of freedom, the design of a qualitative research investigation. This can be looked at as a continuum, with rigorous design principles on one end and emergent, less well-structured directives on the other. (Denzin & Lincoln, 1998; xii)

This is not a criticism of positivism per se but rather, an observation that encouraged me to consider alternative patterns of inquiry that I felt were more commensurate with the conditions and contexts of the Study Group. Wellman & Berkowitz (1988) provide one such perspective in their comment:

There are many “structuralism’s” in the social sciences. All are concerned with interpreting processes in terms of patterned interrelationships rather than on the basis of individual essences. Consequently, they look at their subject matter in similar ways, pose similar questions, and construct similar analytic procedures to answer these questions. (5)

Eisner (1998) takes an alternative view from the perspective of the artist and, after making points common in descriptions of an interpretivist paradigm posits that:

5 The selection of a form through which the world is to be represented not only influences what we can say, it also influences what we are likely to experience.

6 Educational inquiry will be more complete and informative as we increase the range of ways we describe, interpret, and evaluate the educational world.

7 Which particular forms of representation become acceptable in the educational research community is as much a political matter as an epistemological one. New forms of representation, when acceptable, will require new competencies. (7)

Kushner (2002) presents yet a further pertinent challenge in his comment:

Some methodological ideas are ever-fragile; others endure. The former need persistent support and attention; to the latter we return as a default position. We return, not always because those methodological ideas serve us well, but because they speak to our need for stability and order – they offer us ways of seeing the world, which seem to put events reassuringly within our control. Those fragile ideas – the ones to which we have only wavering commitment - are the ones through which we perceive a less than predictable world and which ask us, therefore, to take a risk, to suspend our belief in order. The question is, knowing whether and when it is appropriate to confront or to contain our fears.
So for me, I was wrestling with the political pressures and determinisms and biases that were manifest in my professional work, as a researcher, by the research community, by my own doubts and uncertainties, through the processes of inquiry and formulating some representation of ‘truth’, by ‘science’ and so on (e.g. the notion of validity in itself instils a bias, just as reality is only potential, I would imagine). This irreconcilable situation became destructive to the point where nothing was any longer representational, meaningful, valuable, or purposeful.

Central to the nomothetic and ideological doctrines expounded by the associated research literature, were further determinisms regarding bias, ethics, and other foundational principles to research practice that exerted extrinsic values, which, as a researcher, I was rightly encouraged to consider in depth in the formulation of my approach. A plethora of quantitative and qualitative approaches, each advocating the ideals and virtues of a particular form of inquiry endorsed the commensurability of science and the pursuit of knowledge.
emphases to the general research practice literature. However, over the course of my studies the
paradigm shift to which Denzin & Lincoln refer (1994, and developed further in Denzin & Lincoln 2005)
and symbolised in my research model based on those writings (D&L abstraction) meant that emergent
literature with which I discovered an empathy and instrumental in my research design, was not only,
gradually becoming available, but also, symbolised that paradigm shift. This is evidenced for example
by literature such as: Strati (2000), Capra (2003), Kosko (1994), Lewis (2000), Denzin & Lincoln (2001,
2005), Reed & Hughes (1994), Senge (2000), Wenger (1999, 1998), Eisner (1998), Osberg & Biesta (2005), all of which I found to be particularly influential in assisting with my approach and
perspective.

The stated relationships advocated in those writings that abstracted the pursuit of
some form of ‘reality’ within ‘real-world’ organisational contexts and its various
realisations, as ‘knowledge, through experience’, however, did not seem to fit with
the situation in which I was a participant. This then encouraged me to seek an
approach that I felt was more suited to that environment yet informed by the
traditions expounded within the research literature. For example, from my
perspective as a participant within the research Study Group during the initial stages
of the research, there was a general sense of uncertainty. This uncertainty was
pervasive in the sense that it was applicable to numerous facets regarding on-going
and potential practice, as illustrated in various forms throughout this thesis[PM461]. To
illustrate this point, some terms that were repeatedly used by participants within the
Study Group provided some indication of cohesion, unity, sense of purpose, and
potential stability. Commonly used terms are outlined in all other components of this
thesis - these naturally focus on terms which represented the key interests of the
various participant partnership groups, viz. learning, organisation, partnership, ICT,
improvement; other groups also referenced terms such as strategic/operational,
stakeholders and beneficiaries, provision and non-participant, and so on. Those
terms served to provide a bond between ‘likeminded’ people and thus, helped to
forge new partnership coalitions of various configurations. By way of example,
(1988), Chaiklin (1996), Gergen (1994) talk about this facet of ‘participation through
identity’, and about processes of ‘being active in practices of social communities’ and
constructing identities in relation to those communities’. Here Wenger (1999) uses
the term ‘practice’ to connote ‘doing’ in a holistic, historical and social context, and
which in turn, gives ‘structure and meaning to what we do’. (47). Mabry (1997)
further points out that ‘knowledge is dependent upon the discourse of a community,
that language plays an important role in constructing reality’[PM462].
However, while there was this general sense of purpose and general sense of meaning within the partnerships, the nature, rate, and form of change occurring on a daily basis was emphasising uncertainty in terms that at times, seemed contradictory. Thus, meanings of terms became reconfigured according to the dynamics of the evolving contexts and conditions within which they were applied. For example, an innovative Community ICT Project in School 4 was successfully instigated, but on attempting to replicate those successes in School 5 proved to be very problematic, then having significant repercussions for other participant organisations. A further example is explored in Scenario 4 and One in the Eye as strategic partners were trying to find a relatively stable basis, or language, that allowed them to negotiate and handle possible differences of meaning. The seemingly contradictory or at least, uncertain practice pervaded and became a central issue to my research stance, due to alternative interpretations of terms arising from both different or changing contexts and conditions.

**Personal assumptions**

Gergen suggests that ‘what passes for knowledge within the discipline may thus rest on an immense number of un-stated assumptions and obscured conditions.’ (Gergen, 1994; 130) This point is supported by Senge (2000; 12):

> We live in a world of self-generating beliefs, which remain largely uncontested. We adopt those beliefs because they are based on conclusions, which are inferred from what we observe, plus our past experience. The ladder of inference explains why most people don’t usually remember where their deepest attitudes came from. The data is long since lost to memory, after years of inferential leaps. Our ability to achieve the results we really desire is eroded by our assumptions that:

- Our beliefs are the truth.
- The truth is obvious.
- Our beliefs are based on real data.
- The data we select are the real data.

When I began the research process, I held certain assumptions, or expectations about the nature of the action in which I was about to engage as a researcher, and these:
a) were inevitable in the sense that some assumptions were closely associated with the conditions and circumstance within which I was engaging as a participant and as a researcher. These conditions and circumstances are described in more detail in the following texts, and are embedded within the narratives throughout this thesis.

b) were formed through prior, ongoing, and reforming practices (as referred to in Terms & Conditions, and embedded throughout the Scenarios.). Holstein & Gubrium (1998) suggest that:

> ... if realities are produced 'from within' by way of members interpretive procedures, members social circumstances are self-generating. This implicates two essential properties of meaning: meanings are essentially indexical, i.e. they depend on context - objects and events have equivocal and indeterminate meanings without a visible context, and it is only though situated interaction that objects and events become concretely meaningful; the circumstances that provide the context for meaning are themselves self-generating - interpretive activities are simultaneously in and about the settings to which they orient and that they describe. Socially accomplished realities are thus reflexive; descriptive accounts of settings give shape to those settings while simultaneously being shaped by the settings they constitute. (142)

This on one hand helps to emphasise the importance of interpretative inquiry through immersion in practice or reflective inquiry from the perspective of the participant. On the other hand it has the potential to lay the qualitative researcher open to bias - this issue is explored in more depth later in this narrative.

c) enabled me to participate in, the research opportunity as defined by this document. Those assumptions symbolised belief, and as a representation of hope, energised and made meaningful, the activities in which I and other participants were engaging, and the potential to which participants aspired, contributed and nurtured. Culture involves the members of an organisation in a socially constructed reality. Organisation members share this reality in the dual senses of similarity and difference. The elements upon which cultural sharing is based include artifacts, symbols, norms, values, beliefs and assumptions (from Schein's perspective) and physical, behavioural, and linguistic symbols (from the symbolic point of view) (See Hatch, 1997). Also, Nonaka & Takeuchi (1995)

> ... knowledge, unlike information, is about beliefs and commitments. Knowledge is a function of a particular stance, perspective or intention. Second, knowledge, unlike information, is about action. It is always knowledge 'to some end'. And third, knowledge, like information, is about meaning. It is context-specific and relational. (58)
From a more ethical stance, Vardy & Grosch (1999) comment:

Beliefs are held and intentions and intelligible actions all take place within specific practices. These, in turn, develop traditions and become established in social institutions. Such practices enable the good for ourselves and the good for others to be realised. It is a symbiotic relationship: the virtues sustain the practices, and practices continue to sustain the virtues. (105)

d) evolved throughout the duration of the research as my insights into, and familiarisation with the pertinent issues that were occurring, were nurtured, refined and used to support the emergent synthesis.

e) contributed to the formulation of the research proposition and opportunity insomuch that, I was already aware of the complex conditions and uncertainties that represented the ‘thingness’ of the practices in which I and others were participating, and about which I wished to learn more.[PM464]. The proposition was founded on ‘the known’, the opportunity was founded on the unknown.

The notion of ‘thingness’ draws on Heidegger’s philosophy, which is concerned with the meaning of the nature of human Being[PM465].

This discussion so far is about ‘assumptions’ - contextual, methodological and personal. Essentially, I considered the confluent relationships between those conditions, circumstances, perspectives and cultures should be compatible with what evolved as ‘an approach’ irrespective of the alleged or declared (in)determinisms, otherwise, by default, the incommensurabilities invalidate findings. Contextual assumptions emerged from two communities of practice - one framed by the ‘research community’ (albeit through the institution at which I was enrolled as a research student and that which became institutionalised by associated research literature), the other which became framed by the unique circumstances, conditions and practices that represented the focus for the research and defined as the ‘study group’. The diagram ‘Evolving assumptions’ reflects upon Denzin & Lincoln’s ‘Historical moments’ (Fig 44) and indicates that the shifts in my own approach was symptomatic of changing methodological, contextual and personal assumptions and an attempt at reconciliation.
The matter of whether, how or why these assumptions may have been ‘an issue’ for either community of practice, for me, as expressed by them and/or me is explored in more depth in ‘Navigation’ and 'Terms & Conditions'. The subsequent implications for finding or developing ‘an approach’ is explored in more depth in ‘One in the Eye’. That narrative explores issues such as emergence, complexity, the nature and scale of ‘data’, and how this highlighted a number of issues that related to and led into means by which experience could be meaningfully ‘visualised’ and re-presented.

Problems with issues?

Hatch (1997) provides some useful indicators about how the ‘issue’ of uncertainty may be considered within organisational contexts by organisation theorists:

*In early modernist thinking, uncertainty was considered to be a property of the environment resulting from two powerful forces: complexity and rate of change. …. Today, organization theorists recognize that uncertainty lies not in the environment, but in the individuals who consider the environment when they make organizational decisions. This viewpoint has come to associated with the ‘information perspective’ in organization theory. (88)*
… and goes on to state that: ‘Modernist theories assume that uncertainty is undesirable and avoidable, and that it drives organizational action by motivating decision makers to reduce their uncertainty.’ (94), though this could be deconstructed by opposing its central assumptions - instead of being undesirable, uncertainty can ‘give a thrill’, or seen as a state to be sought as ‘invigorating’ - the ‘discomfort’ otherwise emerging from stability - which in postmodern terms is expressed as: Complex systems operate under conditions far from equilibrium.

There has to be a constant flow of energy to maintain the organisation of the system and to ensure its survival. Equilibrium is another word for death (Cilliers 1998; 4); while Aldrich (1992) frames this differently: ‘the extent to which social life is seen as indeterminate versus well structured’.

Implicit within the complexities of action as represented by the two communities of practice (Research community and the Research Study Group) I felt there were different expressions regarding the relationships between emergence and uncertainty[PM467]. Such notions influenced the foundations of my research approach and which are represented in the model ‘Uncertainty – locating the issue?’ (Fig 46).
This model illustrates basic relationships that I have drawn from the research literature and further interpretation of the ‘Study Group’. Implicit within this model are a number of foundational philosophical issues pertaining to causality, prediction, determinism, Grand Narratives and so on. Seeking some form of resolution to these lines of thought incurs further methodological peculiarities and dualisms, and which essentially advocates that coherence should be evident in the path taken by the researcher. For me, to find a specific question to something occurring that was uncertain was, in itself, as unhelpful as the similar proposition of being able to identify a problem for which there was not necessarily a solution. There is in this statement a matter of degree or extent to which this issue of question/answer, problem/solution refers to the fundamental, overriding precedent for the research per se. Inevitably, a host of questions and problems emerged throughout the research that revolved around a specific theme. Indeed, it was the process of finding patterns to these emergent questions and problems that encouraged me to investigate a diverse range of literature pertaining to organisational theory, connectionism, social network analysis (SNA), complexity theory, fuzzy logic, discourse analysis, qualitative and qualitative research approaches and so on. While this was in itself very time consuming, patterns within that literature began to emerge that seemed to me, commensurate with the evolving patterns in the Research Study Group.

I therefore adopted the view that if participants within the Research Study Group were largely uncertain about the position in which they were immersed at that time, or what the ‘future’ might hold, then the notion of emergence suited the condition of the inquiry. This was not a simple matter of ‘wait and see’, and then simply describing the outcome, but of being sensitive to the dynamics in the conditions and circumstances that fostered those notions of uncertainty.

I considered that other conventional approaches were not allowing me to ‘see’ the overall picture in an informed way such that the evolving, complex relationships were: ‘evident’; ‘made meaningful’ by ‘some process or other’; coherent and cohesive; abstracted and synthesised into a texture that was representative of what had, or was continuing to emerge; and further, articulated in such a way that this had significance to people other than myself.
For example, the model ‘Spying Games?’ (Fig 47) represents a generic interpretation pertaining to facets of ethnographic inquiry. This model can be considered in terms of an outsider looking in, and an insider looking around.

![Spying Games?](image)

**Fig. 47**  
Spying Games?

I was fortunate in the sense that my naturalistic research inquiry emerged from my own day-to-day practice as ‘co-participant’ and thus, ‘naturally’ had access to colleagues as participants and other forms of information - an insider looking around. Key to this illustration is that ‘observations’ were contextualised by day-today, participant action. (Refer: Terms & Conditions). Conversely, the EBLO periodically welcomed outside researchers to engage in its community of practice to provide that researcher with a ‘data-rich environment’ supposedly suited to their particular research interests. Reasonably, these ethnographic researchers, as outsiders looking in, invariably adopted a formal approach whereby they accumulated field-data via observation and questionnaires (verbal and/or written), a process that generally lasted no more than a matter of weeks. While their research focus may have had some correspondence to my own interests, I was aware of a significant difference in they type of ‘data’ being sought. An essential part of my data included the dynamics of the conditions within which ‘other’ data types were generated. As discussed in ‘One in the Eye’, the dynamics of contextual data shifted the meaning/s of other field data.
Adler & Adler (1994) comment that, in making a distinction between ‘everyday actors’ and ‘social scientists’ systematic and purposive approach is that it overlooks two important factors: first, that the purpose of researchers’ ‘curiosity’ is relatively short-lived and deterministic; second, it is questionable whether many social scientists (relatively speaking) have inquired into the nature of ‘everyday actors’ theorising per se ... it can be argued therefore, that the very processes of theorising from either perspective is not the same, and little distinction between the two is made (377) To this, I would add that the assumed nature or priority given to the process of theorising by either (according to the position, role, experience, responsibilities of the ‘actors’) may thus, shift according to other emphases ... e.g. when likened to the process of rationalising and validating ones position in order to proceed, co-participants in my research study both implicitly and explicitly relied on various forms of theorising as part of their own accountability.

The notion of ‘seeing the fuller picture’ corresponds in some respects to what Eisner (1998) calls ‘connoisseurship’: Connoisseurship is the art of appreciation. It can be displayed in any realm in which the character, import, or value of objects, situations and performances is distributed and variable, including educational practice. Eisner goes on to say that it is not simply a matter of ‘sensory differentiation’, but also by our understanding of the conditions that give rise to these qualities:

‘The point is that true connoisseurship includes the ability not only to experience qualities, but to experience qualities as a case or a symptom of factors that have a bearing upon the qualities of the (wines) being experienced. (63)

The model ‘Uncertainty - the issue located’ (Fig 48) illustrates how additional feedback loops and other issues occurred throughout my research inquiry.
New emphases are clearly evident: for example, bias emerged as an issue. As described in other texts such as ‘Terms & conditions’ and evident in all of the Scenarios, bias was pervasive and invasive. It was a foundational principle to many forms of action. This recognition of the scale of its influence meant that one recognised that one was working within conditions about which one feels uncomfortable, but which under the circumstances, on balance, appear to be unavoidable. Given the unavoidable nature of bias, it was then a matter of degree, and thus, both an ethical and technical consideration. It is also an issue as to whether one fundamentally believes in and is bound by (in)deterministic or voluntaristic principles. Perhaps then, the issue is not so much that ‘bias’ was to be ‘avoided’, but rather, a matter as to how its associated power could be harnessed legitimately and ethically in order to inform\cite{PM469}. Other traits that are evident in the model (‘Uncertainty – the issue located?’ Fig 48) by the addition of further lines which relate to the cycle of questioning and problems that nevertheless occur within emergent research inquiry, just as solutions and answers can then lead to further problems, questions and uncertainties. This process is variously described in ‘Trends and trajectories’ (e.g. iteration, recursion, reification) and was an essential means to handle, not only bias, but also, means of triangulation and validation.
Remodelling models

Finding a means to handling this uncertainty meant ‘coming to terms with’

a) what the implications of uncertainty were for both the study group and my self as researcher - that is to say, what accompanied this uncertainty - was other complex structural notions such as order, stability, chaos, and complexity; other associations regarding power, control, authority and legitimacy. As an example of the issues of power and complex community influence, a part of the triumph of some participant ‘politicians’ was in succeeding in matters about which their ‘constituency’ or ‘fellow politicians’ may not have been aware or understood as having significance at that time. For example, the successful acquisition of new funding through complex streams wherein the criteria was constantly changing; gaining a position on a new strategy group that had, or assumed the authority to determine the conditions by which other partners would then participate (and wherein the jostling political gaming swings between the various gate-keepers, the person writing the minutes, the chair, the treasurer, and so on, each with their own power and authority; A further example of ‘legitimacy’ for partnership was the pursuit of knowledge that gave an organisation a political edge over a competitor. Similarly, the relative ‘success’ of a partnership being a short-term manifestation as people lose interest encouraged numerous seemingly legitimate justifications to no longer participate (e.g. "other pressures no longer make my attendance possible despite my ongoing interest in the partnership" (OB1/1); "shifting funding streams and associated target have meant redirecting our interests" (OB4/2); “prove to me it works and I might reconsider whether or not I attend in the future (OB3/2).

b) whether uncertainty was ‘problematic’ which therefore needed to be ‘determined’ and/or resolved or considered another way, as ‘doubt’, which then prompted questions for which answers should be sought; or conversely, could be ‘handled’ through the approach of ‘let’s wait and see’. One of the things that I was unable to accurately ascertain was whether the problem of ‘uncertainty’ as an ‘issue’ was more problematic for the ‘organisation’ or for its representatives … However, what was clear was that the nature and level of organisational control was not simply determined by the size or assumed bureaucratic position of an organisation … (Refer Scenario 5, Scenario 1)
c) how ‘outcomes’, as ‘products’ of supposed uncertainty, emerged as participants sought to establish solutions and/or answers. The uncertainty is pervasive in the sense that, ever present ambiguities, particularly those within a complex system, means that the outcome would itself be indeterminate and therefore remain uncertain. This issue was pertinent to, not only the matter of starting and finishing the research process but also in finding a representational form for the emergent properties or qualities of the research inquiry. What remained uncertain in this respect was then, largely due to either, the ‘richness and diversity’ in the forms of expression and manifestation, and also the logistical issue of being able to identify relationships between effect and cause. This issue is explored in later texts within this narrative.

The above expression is an abstraction of what was, for me, a synthesis of fundamental attributional, relational and ideological issues. These issues emerged through scrutinising both the research literature for methodological and philosophical principles and also the conditions and actions occurring within the research Study Group. These led to two further developments of my ‘Early research model’ (Fig 65) and which are presented below, first in ‘Research Action in Action’ (Fig 49).
This illustration is called ‘Research Action in Action’ (Fig 49) to emphasise an alternative path to the Cartesian perspective (as conveyed by thinking/action). i.e. Qualities that would otherwise be regarded as ‘dualities’ are instead, embraced as a more synergetic, fuzzy, autopoietic relationship, or synthesis in which the differences in those qualities become self-representational. Hence, ‘action’ embodies context, doing, thinking and meaning making - this notion is discussed more fully and represented in my CATM/R models later in this narrative (Fig 55-61). This might be explored by considering why terms are grouped ‘above’ and ‘below’ the line implied by thinking in action/action in action – whether one set was implicit/explicit, my/their perception of qualities/issues, and so on.

The model ‘Research Action in Action’ (Fig 49) underwent further transformations as the terms were theorised and abstracted and provided a different kind of focus to my theorising and interpreting processes for the Scenarios. The terms: ICT, Organisation, Learning, and Partnership are integral to all Scenarios and refined to provide further focus in Scenario 5. The Terms visualisation and representation form the basis of the narrative ‘One in the eye’. The terms (un)certainty, difference, ambiguity and potential are also embedded within the other texts within this thesis, but are reconstructed showing different emphases to form another model called ‘Disturbance in Action’ (Fig 50).
This dynamic model seeks to emphasise the notion of disturbance, as a dynamic of action in action. Implicit within the relationships between disturbance and uncertainty are the countermeasures that intend to dispel such issues, as manifest in, for example, political determinisms of power, control, authority and so on. The matter of risk is a study in its own right, but in my theorising I developed a model that reflected some of the issues emerging from my studies and actions occurring within the Scenarios. This is illustrated in ‘Handling uncertainty and difference’, Fig 51.

None of the concepts represented in the model ‘Disturbance in Action’ (Fig 50) can occur in isolation. Each is interdependent. The representation does not intend not to give the impression that context, meaning and theorising are somehow extrinsic, any more than difference, uncertainty, potential and ambiguity are. It also serves to lead towards the relationships between the different forms of action represented within the model and which are expressed in more detail below.
Trends and trajectories

The following texts and models illustrate my particular line of theorising methodological issues, and was foundational to the development of, and permeated all facets of my research approach. Some facets raised in the following illustrations are described more fully in ‘One in the eye’ and ‘In Search of the Lost Chord’ and are integral to all of the Scenarios. For reasons described above, it was difficult for me to be precise in my initial research intention, save those broad terms of reference which are described in the ‘research model’ (Fig 9) and in ‘If Then Why Not Later?’.

As explained in ‘One in the eye’, at the start of my research inquiry, my scrutiny of the literature regarding qualitative research practice advocated the virtues of tried and tested methodologies (such as participant observation, interviews, and related forms of data analysis, interpretation) that related to my naturalistic inquiry. This coincided with the opportunity for my research that arose from the newly formed LLP/ICT subgroup, and for me to find and apply appropriate principles and techniques. In the initial stages of the research inquiry I conducted a number of semi-structured interviews in order to ascertain details regarding the contextual circumstances, conditions for and aspirations of the newly formed Lifelong Learning Partnership ICT Sub-group (LLP/ICT). Details relating to the development of this feasibility study, which I presented as an unpublished Report for the LLP/ICT Sub-Group are described in Scenario 4. This inquiry served as a foundation upon which further naturalistic investigative approaches were initially formed. The associated research literature emphasised the ideal and methodological bases for those practices that I then applied. The described methodologies were suited to that specific facet of the research inquiry insomuch that they incorporated a rational model of inquiry and these processes largely conform to the pattern illustrated in the simple interpretative model ‘Generic Research Practice’ (Fig 52).

**Fig. 52**  Generic Research Practice
The model represents a cumulative and iterative process of doubt, realisation and reconciliation through various forms of theorising or interpretation, various ‘paradigms’ or methodologies, each of which ascribes different techniques and labels to this process. The nature of the feedback loops indicated by the orange arrows can be variously described as for example, processes of reiteration and reification, or meaning-making.

Reiteration is a form of tautology of iteration, which is variously defined as: ‘If anything like a basic developmental mechanism exists, it must be an iteration. Iteration is a process that takes its output as its new input, produces new output, which it takes as input, and so on, ad infinitum. van Geert (1994; 14), and though I do not share his enthusiasm that the notion ‘came from mathematics’, he cites examples of iteration in mental and behavioural development (e.g. Piaget - adaption principle; Vygotsky - interiorization) and the distinction between developmental state (function of its predecessor) and stage/phase and goes on to advocate ‘dynamic model building. To cite Webster’s definition of reification: ‘To treat (an abstraction) as substantially existing, or as a concrete material object’ and which Wenger (1999), and drawing on Heidegger (2000), calls ‘making into a thing’ ... ‘we project our meanings into the world and then we perceive them as existing in the world, as having a reality of their own (ibid p58).

My perspective is informed by Wenger’s use the concept of reification through which he refers to ‘the process of giving form to our experience by producing objects that congeal this experience into “thingness”.’ It shapes our experience, can refer both to a process and its product, and his use of the term does not assume an inherent correspondence between a symbol and a referent, a tool and a function, or a phenomenon and an interpretation. On the contrary, the concept of reification suggests that forms can take a life of their own, beyond its context of origin. ‘Reification as a constituent of meaning is always incomplete, ongoing, potentially enriching, and potentially misleading ... it conveys ‘a sense of useful illusion’. (61-62)

Bunnell (1999) conveys something of the creative, reiterative, cyclic/spiralling nature of reflective practice through a different form in her ‘Visual Model 3.4’
Both of these perspectives informed my subsequent visualisation of this process, which is represented in my Research Model - Linked Rings. Meaning (in/of) has been variously regarded for example, from a philosophical, psychological, sociological perspectives, associated with intelligence, feeling, signs / referents / systems and practices of various kinds, as illustrated by the following: Eisner (1998) suggests, for example, that

> Meanings are construed, and the shape they take is due, in part, to the tools people know how to use. Different disciplines employ different tools. Thus, which meanings become salient is a function not only of the qualities ‘out there’, but of which tools people bring to them. (36)

Hirst, (1974) suggests that ‘each frame of reference provides a different view and a different interpretation of a state of affairs’. This frame might be, on a theoretical level where ‘meaning comprises those presuppositions and assumptions, both implicit and explicit, with which the actor constructs the more general and invariant characteristics of both his situation and his functioning within it. (Witkin, 1976; vii)
They may also be contemplated from a sociological perspective, such as that illustrated by Wenger where he plays with the relationships between:

… meaning and meaninglessness is not primarily on the technicalities of meaning (as it sits locked up in dictionaries, or on meaning as a relation between a sign and a reference, neither is it a grand question) but rather: ‘Practice is about meaning as an experience of everyday life.’ (Wenger, 1999; 52)

He suggests that meaning is located in how it is constituted:

1) meaning is located in a process I will call the negotiation of meaning

2) the negotiation of meaning involves the interaction of two constituent processes, which I will call participation and reification

3) participation and reification for a duality that is fundamental to the human experience of meaning and thus to the nature of practice.’ (ibid; 51)

Aldrich (1992) also warns that ‘Imposing meaning on historical events from knowledge of outcomes is a tempting trap, but it is wrong.’ (35) This creative process of meaning making, what Wenger calls a duality of participation and reification, is conveyed in the diagram Wenger (Duality), Fig 54:

![Diagram of duality of participation and reification](image)

Fig. 54 Wenger (Duality)

…and emphasises the dynamic ‘complementarity’ that is ‘a fundamental aspect of the constitutions of communities of practice, of their evolution over time, of the relations among practices, of the identities of participants, and of the broader organisations in which communities of practice exist.’ (Wenger, 1999; 63)
I was faced with two fundamental issues. In trying to establish foundations of truths and meanings to the declared aspirations of the participants, the organisations that they represented, and the LLP, which sought to embody those aspirations within a holistic, collaborative model of partnership, highlighted the need to reconsider the ideals represented in the research methodologies.

Regarding those interviews, I believed what was beginning to occur in the analysis was that I was being overwhelmed by the potential and uncertainty of detail. Different analytical methods (such as for example hermeneutics, Kelly’s Grid, Personal Construct Theory, symbolic interactionism, content and conceptual analysis), each draw the researcher into a form of reductionism, abstraction and hypothesising which, though interesting and informative, was in a sense, not commensurate with the emergent complexities of action that accompanied that rhetoric. That is to say, discourse and discourse analysis was becoming unhelpful as the singular means for me to develop an understanding of the overall change occurring in the partnerships and their respective projects (Refer: ‘One in the eye’). Emergent actions were occurring and more evident and seemingly less ambiguous than the associated rhetoric. Further, emergent events and action did not necessarily agree with the associated discourse. Additionally, the scale, scope and increasing complexities of action (including discourse), meant readjusting my perspective from one that looked into specifics and detail to one that represented a more holistic view. Hence, I formed a different way of conceptualising the conditions in which I was immersed and which are now described below.

**Different ways of seeing**

My research study reflected upon a community of practice engaging in activity. My naturalistic inquiries sought to ascertain the contextual circumstances underpinning the activities of the Study Group’s participants. Participant observation of the Study Group’s activities provided the ways and means to accrue further evidence pertaining to the research focus (LOP/ ICT). On-going theorising helped me to construct an understanding of those practices. As an adaptation of the ‘Generic Research Practice’ model (Fig. 52) my terms of reference to this process were otherwise succinctly defined as: Context (C), Action (A), Theorising (T), and Meaning
(M), where Research (R) symbolises the collective practice (CATM)R and thereby embodies my perspective within and through the research approach.

The activities of that community of practice forming the Research Study Group, represented within and across the Scenarios, are similarly embodied through Action (A), which was situated within a wider Context (C), about which, those participants Theorised (T), thereby signifying Meaning (M) to those actions and contexts. This collective process is symbolised in my ‘(CATM)R’ model, Fig 55:

![Fig. 55 (CATM)R model](image)

To reiterate: CATM/R thus applied to two different processes:

1. the research process of enculturation[^PM473] (C), through scrutiny of the literature and immersion in the world in which I was studying; engaging in action (A) - that is to say, accumulating evidence of action in action (such as what people said, did, thought, and so on); considering various analytical techniques (T); leading towards meaning (M) - that is to say, some realisation and understanding of a realisation through representational form

2. the application of this model to the action in which I was engaging as participant researcher, wherein: there was a setting (C) in which action was occurring (A), about which participants were theorising (T) and making meaning (M).
The above processes of interpretation proved helpful for me, in building relationships between the conventions of research methodology and practice and initial engagement in my research inquiries. However, while there are, as outlined above, a number of implicit iterations within the model I did not think these were sufficiently or explicitly encapsulated within the (mostly) linear models and methodologies found within conventional research approaches. Furthermore, my research investigation and theorising was casting doubt on the implied distinctions between the components of the CATM/R model (Fig 55). On one hand it was evident from the events occurring within my research study that action established context that motivated and led to action, and thereby, over time became context. Similarly, the iterative process of theorising and meaning was also, not sufficiently explicit or stable for me to make a clear distinction between action and context. Thus, these doubts led me re-conceptualising the model. This occurred through a number of stages as described below.

**CATM/R Modification 1**

The animated model [PM474] (CATM animation 1, Fig 56) symbolises a further dynamic that occurs as processes of for example, theorising (orange) and meaning-making (purple) shifts its relationship with the context (green) and actions (blue).
The ‘fuzzy’ relationships that occur between the notional dualities of, for example, context and action, are inherently dynamic in that the point at which one becomes the other is uncertain. By taking the view that the duality is thus inevitable, inherent, unavoidable, and can apply to any duality, then as the two lines in the CATM animation 1 shift, new, yet ephemeral dualities are established between any component within the model. I remodelled this concept into a different diagram wherein the interrelationships and interdependencies between CATM/R could be portrayed with other dynamic, multi-linear qualities.

![CATMR network](image)

*Fig. 57* CATMR network

Thinking about CATM/R in these ways helped me to handle and represent the intransient dynamic and uncertain qualities of action within a meaningful framework. This corresponds with my perspective that was evolving by observing and reinterpretting the interdependencies of action in action as a holistic - that is to say, action is thus perceive by me as representative of all forms of action however defined (context, theorising and meaning). Further, these models also embodied facets of my interpretation of anti-Cartesian ideologies and were further informed by approaches such as connectionism, constructivism, complex theory, and autopoiesis.
However, while implied multi-linearity gives the impression that there is a break from linearity in the conventional sense, it nevertheless, is linear. That is to say, for example, while greater freedoms are offered to a navigator of a hypertext network, the linearities nevertheless exist, though in a less deterministic form, depending on the complexities of, or options within the network. The navigators stepping from one location to another form their own linearities.

I should point out that recent literature refers to linearity in different ways. For example, perspectives that refer to chaos theory describes:

> When we look at the changing world that we are living in, we can categorize the types changes into a few fundamental categories: growth and recession, stagnation, cyclic behaviour and unpredictable, erratic fluctuations. All of these phenomena can be described with very well developed linear mathematical tools. Here linear means that the result of an action is always proportional to its cause: if we double our effort, the outcome will also double. (Mayer-Kress, Messy Futures & Global Brains)

Gleick (1998) further points out that:

> Linear relationships are easy to think about - the more the merrier, Linear equations are solvable, which makes them suitable for text-books. Linear systems have an important modular virtue: you can take them apart, and put them together again - the pieces add up. Nonlinear systems generally cannot be solved and cannot be added together (23)

An alternative view holds that linearity is merely a line, however formed and that despite a supposedly random sequence occurring (as on a computer hard disk or memory) that selection is nevertheless occurring within predetermined parameters - the selection cannot exceed the bounds of its system. Thus, while some latitude is offered by the system, and may seem indeterminable due to the complex or large number of permutations available, it is still, nevertheless, ‘determined’ within organisational theory.

Linearity is also used to make a distinction between modernist and post-modernist thinking. One example offered by Reed (1992) claims:

> In so far as modernity was based on ‘a belief in linear progress, absolute truths and rational planning of ideal social orders and the standardization of knowledge and production’(4), then it was grounded in an ideology that was positivistic, technocratic and rationalistic.’ (30)
This point is taken up by Senge (1990) in a different way:

\[ \text{... it is extremely awkward in normal verbal language to describe circular feedback processes. So, by and large, we give up and just say, in effect, ‘A caused B, which caused C.’ But this convenient shorthand suggests to the subconscious mind that ‘A did cause B’. Subconsciously we forget that ‘B also caused A’. If all we have is linear language, then we think in linear ways, and we perceive the world linearly - that is, as a chain of events. It is impossible for us to grasp the scope of the consequences, but we know they are sweeping. (366)} \]

Thus, linearity is variously associated with other conditions regarding (non)deterministic principles, and referred to within diverse fields of study that is trying to understand the complexities of action (such as in neural networks, connectionism, constructionism, organisational theory (perhaps as metaphor) and thus also referring to virtual worlds, cybernetics and so on. It is not necessarily a postmodern condition.

In order to find some reconciliation for the implied linearities in the previous CATM models, I reconsidered the previous model (‘CATM animation 1’) and remodelled those dynamic interactions that are not only occurring according to: ‘the fuzzy bit in between the two ends’ - symbolised by the graduated colour change; the changing pathway of each line as it moves within the space; that interaction which occurs at the intersection of those two lines. For example, briefly returning to the notion of duality, the potential of that duality is only maintained by the relationships ‘between’, and how this then signifies associated dynamic potentialities. Those dualities become more complex at the point of intersection partly due to intranscience. The duality of AB, on/off, context/action, theorising/meaning can be reconsidered when the distinctions blur, for example, where the line representing Action (blue) and Context (green) are no longer perceived as a linearity but an interdependency as illustrated by the ‘linked rings’:

\[ \text{Fig. 58} \quad \text{Linked rings 1} \]
To bring the four rings together results in a far more dynamic, interdependency where for example, the meaning of each is determined by the relationship to another, and which is in turn dynamic and uncertain. This model also serves to illustrate a different way of thinking about each of those components within different the temporal, spatial and ideological multi-dimensional frameworks. Hence, the subsequent convergence of, for example, context, action, theorising and meaning resulted in the linked rings model below:

**Fig. 59**  Animated linked rings 1[PM475]

Two further refinements were made to this model. First, by reflecting on the previously described issues of disturbance wherein the dynamics of the circumstances have the capacity to destabilise action, it seemed appropriate to build this into the model, as illustrated in Fig 60:

**Fig. 60**  Animated Linked rings 2[PM476]
The above sequence of illustrations started by considering the relationships within and between context, action, theorising and meaning. The interactions between these qualities, as they became more explicitly interdependent, is further emphasised in the following model wherein, the holes or space in the systems are subsumed within the system:

![Interdependent interlinked rings](image)

**Fig. 61** Interdependent interlinked rings (animation[PM477])

*This second refinement challenges the dimensions within which those ‘interactions’ occur and may be perceived. The linked rings abstraction is constrained by the impositions of two dimensions with a linear property.*

Creating resolving or highlighting issues?

In summary, this narrative has described how the animated model (Fig 61) emerged through my ongoing scrutiny of literature pertaining to the research practice and the evolving practices of the Study Group. In particular, the above ‘linked rings’ symbolises the interdependence of action in action with process of theorising and making sense in practice. In essence it encapsulates the holistic and dynamic nature of my research practice.

‘In practice, so-called manual activity is not thoughtless, and mental activity is not disembodied. And neither is the concrete solidly self-evident, nor the abstract transcendently general; rather, both gain their meanings within the perspectives of specific practices and can thus obtain a multiplicity of interpretations.’ (Wenger, 1999; 48)
This holistic notion of interaction and interdependence is autopoietic in the sense conveyed by Mariotti (2008) that it is at the same time the producer and the product, or ‘symbiotic’.

Symbiosis reveals one of the most remarkable aspects of the life-system that functions with an accompaniment of the ceaseless autopoietic movements. It enables the life systems to transfer themselves to the coming time and space by denying their preceding isolated systems, in one and same place.

Kitaro Nishida (1870-1945), a Japanese philosopher, terms this life's remarkable activity as "predicative logic" in "absolutely contradictory self-identity". Contradictory existences (a heterogeneous group of existences) unify themselves into a new existence by creating and sharing the same place wherein they finally self-identify themselves ("Life A is in the place C. Life B in the same place C. Through the identity of the place, therefore, A is B." This is the predicative logic wherein contradictory existences self-identify themselves.). That is, life creates the place and the place new life! Nishida sees the essence of life-itself and life-world as "absolutely contradictory self-identity" (e.g., Nishida, 1993). Something to which Oakeshott (1985) refers to as 'evidence of its own completeness'.

The model ‘interdependent linked rings’ serves as an overlay, not only for the research section, but also symbolises the unity or rather, synthesis between the two sections of the thesis. It underpins my narrative that describes my research study and thesis study as an intrinsic case study (Fat Patches). The thinking behind this model was not only motivated by the problem of understanding the dynamics, interrelationships and interdependencies between context, action, theorising and meaning. It also stemmed from theorising the details and qualities of contextualised action. Collectively, these challenged the ways and means by which one may visualise, realise and represent ideas and meaning. One in the Eye explores the processes of transforming complex action or experience into a semantic networks that, like the above process, moved on from what can be construed as ‘local’ or conceptual representations, through to the development of models that took on a more abstract and ‘distributed’ forms. The linked rings and interactive 3-dimensional network models explored in One in the Eye largely underpins the nature of narrative form for this thesis.
One in the Eye

The key purpose of this narrative is to illustrate the emergent, interdependent, abstract processes of visualising and finding representational form, not only for those highly interactive participant actions, experiences and contexts, but also of the various methodological tools and processes I adopted and developed through my research practice. It reflects upon associated issues and relevant literature (e.g. how processes of visualisation and representation relate to theories on complexity, connectionism constructivism, to organisational theory, to pluralism, voice and ambiguity/semantics). Thus, that process of visualisation and representation comprises two essential, interweaving and interdependent narratives. One focuses on the processes of visualising and finding representational form. The other provides insights into the bases for those processes. In one sense it constitutes the detail of data, or evidence, examples, rationales, reviews and further analyses. (See Figs. 45, 52 and 64). They correspond to experience, context-in-action, the associated data and analyses, and the corresponding methodological and philosophical frameworks. Each narrative strand underpins, substantiates yet distracts from the other. Collectively, One in the Eye holds important interrelationships to other narratives in the thesis.

Finding the light switch

The approach described in this narrative evolved as I sought the means to handle the emergent nature of the study and its inherent complexities. This process of enculturation and consciousness, visualisation and realisation held a resonance, or harmony, with certain forms of representation that were, for me, equally dynamic, uncertain, abstract, yet informative and embodied the essential nuances of the practices that informed those representations. Above all, in keeping with the transitory, subjective nature of the research study, it was essential to handle and represent, what seemed to me to be, the key issues in such a way that the essence of meaning emerging through those dynamic events retained their evocative qualities. Arnheim’s comment (1974) is encapsulated in this issue of evocation:
Just as a living organism cannot be described by account of its anatomy, so the nature of a visual experience cannot be described in terms of inches of size and distance, degrees of angle, or wave-lengths of hue. These static measurements define only the “stimulus”; that is, the message sent to the eye by the physical world. But, the life of a percept - its expression and meaning - derives entirely from the activity of the perceptual forces. (16)

This builds on prior assertions that (visual) things cannot be (fully or appropriately) conveyed by verbal language, and that of building conceptual models to reflect the essentials of what one wants to understand about a given phenomenon includes taking account of relevant context/s. The place and contribution of alternative forms of expression (e.g. through gesture, music, mathematics) whether singularly or in various combinations, can undoubtedly enhance representational and expressive opportunity. Particularly, the capacity to hold further dynamics can challenge certain ontological principles, satisfy artistic purposefulness and correspond to further notions of social diversity and empowerment. The comment also references constructionists’ claims, such as those expressed by Putnam, that

... since the meaning of a term cannot be defined in terms of some basic or physicalist concept that has bottomed out, there are always elements of belief involved. ... Our understanding of what an electron is, is based on a system of shared beliefs, and since we do not all have the same degree of knowledge concerning electrons, these beliefs differ. (in Cilliers, 1998; 9)

... hence, the meanings embedded within the descriptive narratives presented in various forms can only serve to evoke new meanings.

The subjective nature of the research studied was emphasised by the actions of the participants throughout the period of inquiry. By way of example, some actions were objectified in the sense that tangible events occurred as explicit manifestations of participants’ motivations and ‘shared’ action. Implicit within those events were associated actions that were founded on, or evoked, a range of assumptions, beliefs and attitudes. The nature of subjectivity recurred through the processes of theorising and making sense of action in action, in transferring and transforming ideas into action and action into ideas. It occurred as experience was conveyed through various forms of communication, whether written, enacted, spoken, implied, and so on. As Vardy & Grosch state (1999):
… whenever we give an account of something, or whenever we read something that someone else has written we are inevitably involved in ‘interpreting’ whatever it is that has happened or been written. One’s own subjective understanding will always distort, however slightly, the objective facts of the situation or the text. (267)

Without further conjecture on whether the ‘facts’ were in the first instance, ‘objective’, or that subjectification amounts to a ‘distortion’, clarification or congruence, suffice to say one can, in one sense, make each of the following ‘valid’ statements that: ‘The sky is red, the sun is orange, and the sea is purple; or ‘the sky is grey, the sun is light grey, the sea is dark grey’; or ‘The sun is yellow, the sky is blue, the sea is green’ … I know, I have seen this – as have others …

The evolving processes, means and practice of using various forms of illustration, or media, to manage, model and re-present key processes, ideas and issues, experiences and events, largely developed over the course of the study. This evolution was in part, due to the difficulties of handling certain kinds of information, processes and ideas that were emerging through the research study. Not only was this growing in scale and complexity, but also due to its abstract, symbolic nature, was evasive, dynamic, ambiguous, and uncertain. Another contributory factor relates to how one tends to visualise, manage and represent the complexities of experience, knowledge[PM478] and meaning-making (however defined or objectified as process/product, information, understanding, etc.). As illustrated later in this narrative, this development both reflected and was informed by processes of enculturation within each community of practice. My background in arts and technology meant that I was accustomed to dealing with, and drew on, different ways of visualising, different forms of representation, while remaining sensitive to some of the implications arising from the associated different modes of thought (e.g. the ways and (dis)advantages of developing and expressing ideas through text, music, art, language, action, jargon, etc.) and other cultural peculiarities associated with a given community of practice. This was heightened further though my long-term participatory role within the community of practitioners, as outlined by this study – the nature and level of jargon used by practitioners frequently left ‘newcomers’ or ‘outsiders’, bewildered.
The following narrative describes the evolution and development of my processes of visualisation, realisation and representation (in such a way that collectively, these symbolise a holistic approach). These representations (in the form of discourse, diagram and animation) are not only products of, but were also instrumental to, the ongoing processes of visualisation. The synergy and empowerment offered through this process of visualisation was fundamental to the realisation and representation of the thesis. Particularly, it enabled the characterisation and depiction of abstract, dynamic notions within a more interactive context that was not encumbered by certain traditional reductive processes wherein, contrived phases of accumulation, analysing, interpreting and representing evidence (refer ‘Participant’ Fig 63) could otherwise result in expected determinisms [PM479]. Rather, the processes of realisation occurred through immersion wherein implicit complexities required concurrent and compatible means to handle and make sense of them. This realisation revitalised my perceptual capacities that, in turn, contributed to the processes of visualisation and representation. Such iteration preserved a holistic quality that was fundamental to exemplifying principles key to the research process, helped form the basis of the approach, and assisted with the retention of essential properties within the eventual representation.

This whole process was enriched by drawing on principles and theories of complexity, connectionism [PM480] and constructivism [PM481] as incorporated in the illustrations below. ‘Complexity’ is often confused with ‘complicated’ (Cilliers, 1998), and is greeted within for example, various research approaches as something undesirable and to be avoided, or something that becomes wrapped up in holism and thus seen as ‘evasive’; something that borders on ‘chaos’ or something that borders on the ‘sublime’. Such sentiments are evidenced in writing such as Lewin (2001):

*The science of complexity has to do with structure and order. .... You can only understand complex systems using computers because they are highly non-linear and are beyond standard mathematical analysis. (11)*

Lewin outlines the principle of scientific discovery, ‘armed with the mathematics of Newton and Leibniz’ ... that the ‘clockwork’ world is ‘characterised by repetition and predictability’. An alternative view offered by Strauss (1987) suggests:
One of our deepest convictions is that social phenomena are complex phenomena. Much social research seems to be based on quite the opposite assumption; either that, or researchers working in various research traditions describe or analyse the phenomena they study in relatively uncomplex terms, having given up on the possibility of ordering the ‘buzzing’, blooming confusion’ of experience except by ignoring ‘for a time’ its complexity. (6)

Osberg (2007) provides a further insight by suggesting that:

… to appreciate the nature of “complex systems” these being systems that show an increasing level of order over time … it should be mentioned that the name “system” is misleading as it implies the existence of a discrete entity when in fact none exists. Complex “systems” have no distinct boundaries, they exist only because of the fluxes that feed them and disappear in the absence of such fluxes. (83)

… and, that the context of space of emergence is, ‘a space of radical contingency and response. In it we do not know, for sure, who we are or who we are dealing with because it is only through our responses in this space that we become who we are’. (2005; 83)

Complexity is also often found within postmodern and poststructural writing. As Mabry posits (1997):

Postmodernism has been described as “the moment at which definitions begin to crumble and the sign floats independently of the referent” (Wakefield 1990, 20) Definition and description are complicated by postmodernism’s rejection of representation, its recognition of the poverty of language in conveying complex understandings. (3)

My research practice resonated with the issue of complexity in various ways such that I found the following key criteria for complex systems as outlined by Cilliers (1998) particularly helpful in my understanding of action in action. These criteria are summarised as follows:

Distinction between complex and simple often becomes a function of our distance from the system (proximity / perceptiveness); Complex systems consist of a large number of elements

Complexity is manifested at the level of the system itself. Neither ‘source’ nor ‘meta-description’ captures the essence of a system’s complexity or function. Small elements often have formal behavioural description Large numbers of elements ceases to be descriptive of the system they represent

Complexity results from the interaction between the components of a system (not a linguistic phenomenon, or a function of a description of the system)

Interactions are rich: non-linear, short range, mutable, offer feedback (looped, double-looped - recurrent), multifaceted,
Complex systems are usually open systems – environmentally interactive (and difficult if not impossible to define boundaries)

The scope of the system is usually determined by the purpose of the description of the system and thus influenced by the position of the observer (Framing)

A complex system/organisational equilibrium is dependent on constant and renewable energy

Complex systems have a history, (evolve through time) that is jointly responsible for its current condition and behaviour; analysis of a complex system must account for the dimension of time (synchronous snapshots of a diachronic process)

Each element in the system is ignorant of the behaviour of the whole system - Elements respond to ‘local’ information

An element in a system may belong to more than one cluster and which is in turn capable of its own dynamic, adaptability and interactions with other clusters or elements

A complex system must be able to gather information about its environment and store it for future use (distributed representation)

Complex systems are self-organisational: a process whereby a system can develop a complex structure from fairly unstructured beginnings changing the relationships between the distributed elements of the system (environmentally and historically)

These characteristics of complex systems are variously emphasised by associated literature within more recent (postmodern/post-structuralist writing in, for example: organisation theory (refer the use of metaphor such as texture, virtual and distributed organisations (e.g. Strati 2000; Hatch, 1997; Muriyama; Clegg, 1990), Gergen, 1994); research practice (Hammersley, 1993; Denzin 1994; Stronach, 1997); discourse (e.g. ref Derrida, 1992; Lyotard, 1984; Saussure, Gergen 1994); ICT (e.g. virtual reality, hypertext and cybernetics (Castells, 1996); http://secondolife.com/), and so on. (Refer Getting a fix and Detail into vision)

With regards to connectionism, further enrichment occurred by drawing on principles of connectionism, particularly those found within the fields of social network analysis (Refer: Scott (2000); Freeman (1997); Waltz & Feldman (1988); Wellman & Berkowitz (1998)) other facets of connectionism are also described in this text in the further descriptions relating to maps and networks of various kinds. Some of these were informed by ‘concept maps’ of such as those expounded by Novak (1998), Buzan (2006), Krempel (1995), Fielding (2001), Freeman et al (1994). The distinction between concept maps and semantic networks as expounded by various network theories is discussed more fully through the development of my own models throughout this narrative.
With regards to constructivism:

The theory of constructivism rests on the notion that there is an innate human drive to make sense of the world. Instead of absorbing or passively receiving objective knowledge that is "out there," learners actively construct knowledge by integrating new information and experiences into what they have previously come to understand, revising and reinterpreting old knowledge in order to reconcile it with the new (Billett 1996).

Kerka (1997) provides further insight by suggesting that

The cognitive structures that learners build include "procedural" knowledge ("how"—techniques, skills, and abilities) and "propositional" knowledge ("that"—facts, concepts, propositions). Often neglected are dispositions—attitudes, values, and interests that help learners decide: Is it worth doing? Knowing "how" and "that" is not sufficient without the disposition to "do."

Constructivists believe that learning is an active process of constructing, rather than acquiring, knowledge and that the goal of instruction is to support that construction rather than trying to transmit knowledge. Constructivism focuses on the construction of new knowledge that is unique to each person and the importance of the environment in determining the meaning of reality

We cannot talk about what is learned separately from how it is learned, as if a variety of experiences all lead to the same understanding. Rather, what we understand is a function of the content, the context, the activity of the learner, and, perhaps most importantly, the goals of the learner. (Savery J.R. & Duffy, T.M. 1996; 136)

Duffy and Cunningham (1996) make a distinction between cognitive constructivist and socio-cultural constructivist.

Cognitive constructivism emphasizes the constructive activity of the individual as he or she tries to make sense of the world. In this context, learning occurs when the learner's expectations aren't met and he or she moves to resolve the discrepancy between what was expected and what was actually encountered; so learning is always driven by the learner. The instructor and peers serve as a source of perturbation in order to stimulate the learner to seek more knowledge. Socio-cultural constructivism emphasizes the socially and culturally situated context of cognition so that collective actions become the focus. Reality is viewed as a constructive process embedded in socio-cultural practices with the possibility of acting on and transforming reality within the context of those practices. Learning is a process of acculturation into an established community of practice and the focus of analysis is the individual's participation in culturally organized practices and face-to-face interactions. (171)
Lebow (1993) summarizes the constructivist framework as involving 7 values: collaboration, personal autonomy, generativity, reflectivity, active engagement, personal relevance, and pluralism, with the major tenets of constructivism being: case-base reasoning, cognitive apprenticeship, cognitive flexibility theory, constructivist learning environments, goal-based scenarios, problem based learning, scaffolding, situated learning, zone of proximal development. The various discourses and approaches pertaining to constructivism and its various derivatives are pervasive within fields as diverse as ethnography, cybernetics, psychology, the arts and network analysis. Challenges to constructivism have mainly concentrated on its lack of empirical favour - criticisms particularly directed at the Piagetian tradition (Bryant, 1976; Donaldson, 1978; Flavell, 1977)

**Lines and patterns**

Particularly, my approach holds to the notion that one’s appreciation of a picture can be enhanced by adopting different ‘lines of sight’, whether physical or mental. In a similar way, my perspectives were enriched by adopting a similar view of ‘conventional’ paradigmatic stances and by reflecting on fundamental principles of artistic visualisation and representation. The following account is therefore indicative of the issues that informed the development of my approach, particularly through the exploration of visualisation techniques. The ensuing blends between texts, graphics, and animations in various dimensions and media, provided important means of storing, retrieving, editing, shaping, theorising and generally dealing with the complexities of the experiences of the naturalistic research inquiry. This narrative provides a pathway that weaves its way through the inevitable dualities, or rather, the interdependencies of the objective/subjective, concrete/abstract, and the unstable/uncertain. It is richly interwoven in, and driven by an essence of potential. In keeping with my views presented in *reading the small print* the dualities that pervade this narrative are conceived as a whole. As expressed by Wenger (1999; 66), ‘a duality is a single conceptual unit that is formed by two inseparable and mutually constitutive elements whose inherent tension and complementarity give the concept richness and dynamism. Thus, the notions of visualisation/representation, process/product, signifier/referent, perception/cognition, are described through the ensuing narrative in its various forms as a synthesis.
**Ways of seeing**

Throughout my research inquiry, there were on-going transactional processes of transfer and transformation. A simple action, comment, or idea that indicated something historical, potential, abstract, or real, that conveyed and evoked some meaning, created and lost, implied and ignored, seen or heard, felt and sensed. Accruing, adopting and adapting those ephemeral, tacit meanings, in different forms, according to different systems, contexts and practices were part of the daily routine of experience and meaning-making. The technologist, strategist, teacher, project manager, business and education representatives, to name but a few participants, amalgamated in different partnership configurations. All claimed to share much the same terms of reference and were driven by much the same aspirations - to improve the range and quality of learning.

The cultural bond was reflected in the status and role of the participants, in their dress and manner, their language, seemingly common aspirations and energies towards enhancing learning opportunities for others. To have gained those positions of authority, each participant had a history of experience in learning within formal and informal settings. This was evidenced in one sense by the formal, institutionally accredited qualifications they had acquired over time. It was also by evidence by the nature of the work in which they were involved which required an adaptive learning approach as new developments variously imposed changing requirements, interpretations and other organisational transactional processes.

If, as Eisner points out in *The Educational Imagination*, 1994, ‘the world can be represented in as many ways as we-as-humans are capable of so doing’, and later in ‘The Enlightened Eye’ (1998) that

> Meanings are construed, and the shape they take is due, in part, to the tools people know how to use. Different disciplines employ different tools. Thus, which meanings become salient is a function not only of the qualities ‘out there’, but of which tools people bring to them. (36)

… then it was, perhaps, inevitable that some difference of opinion would occur within and across those multi-organisational, cross sector partnerships.
Research Section

Events in the world are ambiguous. We struggle to understand these events, to imbue them with meaning. The choice of a particular way of representing events gives them a particular meaning. There is often a competition over the correct appropriate, or preferred way of representing objects, events, or people. In fact, although there are many possible modes of representing the world and communicating them to people, the course of history can be envisioned as successive attempts to impose one mode of representation upon another. (Mehan, 1996; 241)

This notion is further endorsed by Wenger’s comment (1999) that:

*The repertoire of a practice combines two characteristics that allow it to become a resource for the negotiation of meaning:*

1) it reflects a history of mutual engagement
2) it remains inherently ambiguous

Histories of interpretation create shared points of reference, but they do not impose meaning. (83)

To consider this in another way, rituals and conventions of participation were situated within idiosyncratic multi-dimensional territories within which were powers that conferred identity and membership, belonging and community.

We attribute meaning to what is around us, so objects and events have ‘symbolic’ significance. Further symbols - our thoughts and words - provide order and sense to what we believe is ‘out there’ (Fineman, 1991; 245)

Though Fineman was referring to organisation, the message is still important to the ensuing text regarding making sense of action. Fineman went on to say: ‘By this analysis, organizations are fictions. They are psychological creations. But of course they are real in the their impact and consequences. Organisations therefore are to be found in peoples heads and hearts.’ (Ibid.) This also serves as a cross reference to the metaphor of organisation (expressed in ‘reading the small print’ and ‘Out of this world’) which holds to the view that organisational entities are virtual, textures, ambiguous:

*The ambiguity view - the third cultural paradigm - emphasizes the intrinsic and inescapable ambiguities in all organizational cultures. Cultural manifestations may be interpreted differently by different people - what is consistent according to one person’s view may be inconsistent according to another’s (Aldrich, 1994, p24)*

Fine (1984) called this the ‘negotiated order view’ because it is based upon the way in which actors perceive the structure in which they are embedded (in Granovetter,
1985), and assumes that change is inevitable and continuous, though often slow. Boden (1984) suggests that the main differences of ‘view’ within the ‘Institutional Approach’ are that:

... researchers using the unitary culture metaphor tend to focus on the fixed or formal genres of folklore studies, whereas ambiguity paradigm researchers focus on more ordinary behaviours and the meaning embedded in routine transactions. (85)

Further references to ambiguity can include the debate as to whether meaning is ascribed to or derived from (Bach PM; Empson, 1965; and in the critique of Saussure, Lyotard and Derrida within the context of Cilliers (1998) representation of complexity theory where arguments follow the lines of dependence on the objective, intrinsic, syntax (lexical/structural), qualities of language verses the semantic, extrinsic qualities (subjective, evocative); where ‘choice’ might be involved, and ‘put to work’, perhaps as part of de/construction. Those discussion primarily focus on discourse without drawing upon, for example, ambiguities in art, culture, business, politics, and so on. (Refer Fig 68 ‘Meaning in the Making?). Wenger (1999; 84) suggests that ‘agreement in the sense of literally shared meaning is not a precondition for mutual engagement in practice, nor is it its outcome.’ He goes on to suggest that ‘mismatched interpretations or misunderstandings need to be addressed and resolved directly only when they interfere with mutual engagement. Key to this whole issue is not only the ways means and reasons for developing the capacity to handle ambiguity, but that ‘recognition of its inherent dynamic to give life and enliven being and meaning perpetuates that very cycle of life, being and meaning’.

Finding representational form, somewhere ...

Arising from my reading and observations, I conceived a very basic formula that holds to the above notions and provided me with a means to visualise, theorise, interpret and represent experience. It is founded on two very basic principles.

```
experience = data
form
system
```

Fig. 62 Basic formula
An essential part of that the process of ‘seeing’ encapsulates a holistic process wherein ‘experience’ is dynamically encoded as ‘data’, which finds form and is made meaningful according to a ‘complex system’, and which in turn essentially embodies that experience.

**Data**

I use the term data here in its widest sense of a means for symbolising information, ideas, feelings, emotions, beliefs, values, experiences, as ‘interpretations of the meanings and functions of human actions’. Essential to this is that ‘data’ might be situated within context, and/or the context itself. (Atkinson & Hammersley, 1998; 110); ‘Data’ are not inert. They are not a fixed corpus of materials on which procedures of analysis are performed (Coffrey & Atkinson, 1996; 6), a notion on which Eisner (1998) expands with the comment:

… the data one seeks change. The interpretation that is appropriate alters. Taking various perspectives is a way of examining situations from different angles. It is not so much a matter of ultimately achieving a coherent integration among the many perspectives, as one of being intellectually versatile or theoretically eclectic. It is a matter of being able to handle several ways of seeing as a series of differing views rather than reducing all views to a single correct one. (49)

Data can refer to many different forms of annotating or representing experience, and that analytical techniques (coding, clustering, etc.) then correspond to the nature of that data and the associated practice of accumulation, sorting and representation. ‘Abstractly, qualitative data refer to essences of people, objects and situations’ (Berg, 1989). Essentially, raw experience involves ‘anticipatory data reduction’ (filtering), is converted into words (typically compiled into extended text), captured as images (perhaps involving linkage to words); it is then normally processed or transcribed into a format that enables other forms of analysis and representation. Patton (1980) suggests that:

*Analysis, interpretation, and evaluation are not simple, technical processes. There are no formal, universal rules to follow in analysing, interpreting, and evaluating qualitative data. Analysis is the process of bringing order to data, organising what is there into patterns, categories and basic descriptive units. Interpretation involves attaching meaning and significance to the analysis, explaining descriptive patterns, and looking for relationships and linkages among descriptive dimensions. Evaluation involves making judgements about and assigning value to what has been analysed and interpreted: Is it “good” or “bad”?: should something be done, and if so, what? (268)*

(287)
Senge (2000; 12) posits that:

*We live in a world of self-generating beliefs, which remain largely uncontested. We adopt those beliefs because they are based on conclusions, which are inferred from what we observe, plus our past experience. The ladder of inference explains why most people don’t usually remember where their deepest attitudes came from. The data is long since lost to memory, after years of inferential leaps. Our ability to achieve the results we really desire is eroded by our assumptions that:*

• Our beliefs are the truth.
• The truth is obvious.
• Our beliefs are based on real data.
• The data we select are the real data.

Wilkes (1997) conveys the notion of data as experience in the sense of transactions in the mind that emphasise requirements on the cognitive architecture:

1. behave flexibly as a function of the environment
2. exhibit adaptive (rational, goal oriented) behaviour
3. operate in real-time
4. operate in a rich, complex, detailed environment: a) perceive an immense amount of changing detail; b) use vast amounts of knowledge; c) control a motor system of many degrees of freedom
5. use symbols and abstractions
6. use language, both natural and artificial
7. learn from the environment and from experience
8. acquire capabilities through development
9. live autonomously within a social community
10. exhibit self-awareness and a sense of self

*(Taken from Newell, Rosenbloom and Laird, 1990)*

Wilkes (1997) suggests that the first four entries address the constraints on cognitive processes that arise from the press of events in the external world to which they must respond. The next four entries refer to the internal representations through which cognitive functions are realised and the role of experience in creating the skills for using these internal resources. The last two entries underscore the point that human cognition is situated in a social as well as a physical context. Much of our knowledge is acquired indirectly through our membership of social communities and, by benefiting vicariously from the experiences of others, we are not doomed to repeating past mistakes. (4)
One further important facet of data pertains to that which occurred through the cycle of co-participant reiteration and transactions of verification. For example, my observations generated data (interpretations) that I analysed, and through further collaborations with participants may have generated further participant action and further data. That data may have been specific to participant action (e.g. refer Scenario 4 / Micro / macro/meta) or particular to my own research action (refer Terms & Conditions).

**Experience**

*It is assumed that the mind operates by creating internal representations that have both semantic and syntactic properties. Representations can map onto reality in some meaningful way (they have a semantics) and they can combine together in lawful ways (they have a syntax) to produce new representations that also possess semantic and syntactic properties. (Wilkes, 1997, 13)*

Wilkes goes on to suggest that whatever its source, knowledge of the manner in which the properties of external events cluster together enables us to set the daily round of activity against a background of contextual information that invests it with meaning. Thus, the interconnectedness between context and action in secures the framework for meaning. Precisely how information is transferred between the perceptual and cognitive systems is not only ‘contentious’ but beyond the scope of this research study. (36). I have however, referenced both schema and complexity theory as a potential: Bartlett conception of schema (1932): a generic structure which captures the regularities that are present in a series of related experiences. Once a schema has been laid down in memory, it can be reactivated in the appropriate circumstances and, once reactivated, it makes available a framework onto which the details of an event can be mapped as part of our “search after meaning”.’ (Wilkes, ibid; 41) Also refer (Cilliers, 1998; 68)

A central problem for cognitive science is to understand how agents represent the information that enables them to behave in sophisticated ways. One long-standing concern is whether representation is localized or distributed (roughly, "spread out"). Two centuries ago Franz Josef Gall claimed that particular kinds of knowledge are
stored in specific, discrete brain regions, whereas Pierre Flourens argued that all
knowledge is spread across the entire cortex (Flourens 1824; Gall and Spurzheim
1809/1967). This debate has continued in various guises through to the present day
(e.g., Farah 1994). Meanwhile, the concept of distribution has found mathematical
elaboration in fields such as optics and psychology, and the rise of connectionist
models has generated interest in a range of related technical and philosophical
issues. (From http://cognet.met.edu/MITECS/Entry/van_gelder1)

The reference to a ‘complex system’ relates to those ideals expounded by Cilliers (1999) and outlined in
‘Finding the light switch’.

Coding

A further essential consideration to the ‘Basic formula Fig 62) is that there are
numerous ‘coding systems’ of, or for experience, as evidenced by musicians,
dancers, sculptors, linguists and so on, each overlapping with further complex
systems subsumed within further socio-cultural conditions. These systems each
represent a way of synthesising ideas and experience. For example, the following
are but a few simple representations of ‘Participant’:

| 58a | ‘PARTICIPANT’ |
| 58b | def. ‘somebody who takes part in something …’ |
| 58c | \[ p \quad p (X) \]  
   | (where \( p \)=Participant and \( (X) \) is the context or system that
determines the meaning of the term) |
| 58d |
‘Participant’ and ‘participation’ were key concepts within my research studies, particularly as participation was a term frequently used to imply a sense of social unity, cohesion, involvement and a sense of shared values. It was therefore, fundamental to the notion partnership, and to the partnership agendas. This term contrasted with that of ‘non-participant’, a term used by government to refer to their social agendas of inclusion and empowerment). The term was subsequently used within the different partnerships and which, in one sense, implied ‘an opposite’ to ‘participant’. Additionally, due to the complexity of the network of relations within and across the participant groups, the term ‘participant’ took on further meanings as it became evident that peripheral, co-incidental action was occurring which later became significant to the overall outcomes of other forms of action. The consequence of ‘peripheral’ action was not necessarily easy to establish. The term therefore had implications for participation as observable, concealed or discrete action, as process or outcome of action, irrespective as to how this was located, peripherally or otherwise.

In addition to the different symbolic representations for a term or concept, there are different epistemological and ontological stances about ‘the location’ of the (intrinsic/extrinsic) meaning – in this context, of the term ‘participant’ – whether this is located in the word in itself, or rather, how that word gains meaning from, or made meaningful by the context, or connections with other terms (Refer ‘Meaning in the making?’ Fig 68) For example, there is a suggestion that Figs 63b to 63e increasingly make the word more explicitly meaningful by referring to something beyond the word. The meaning of the term in example Fig 63a is implicit. Fig 63b
emphasises a further distinction represented differently in Figs 63c and 63d – that being a participant depends on interaction within a context and/or in relation to others. Without that context or others it is debatable whether one can be a participant at all. Illustrations in Fig 63e posit the notion of participation involving or symbolising ‘action’ that may not be explicit, common, defined by context, and so on – the extreme being the third illustration of the artist’s easel whereby the implication of the artist (invisible participant) provides a symbol of a model participant (hidden).

Expressions of experience

The participants expressed themselves variously, through action, in many different ways. As evidenced in the Scenarios, these actions were manifest, primarily through discourse (spoken and written), physical action (such as promoting opportunities, events, outcomes), and which in turn, were indicative of the thought processes that underpinned both the implicit and explicit outcomes[PM483]. Much of this action helped form the dynamic context within which subsequent action occurred. Speculation was a key driver for the various forms of engagement. Situations developed where ‘organisations’, through its representative participants, needed to deal with ‘ideas’ that over time, found some form or manifestation and thus, ‘evident’.

I sought, through participant observation, to better understand the complexities of that action-in-context, particularly where those actions indicated some correspondence to partnership transactions pertaining to the aims of the study, as outlined in ‘If Then Why Not Later?’. As described in ‘Terms & Conditions’ and reiterated throughout, I was immersed in action both as ‘co-participant’ and ‘researcher’. These roles were totally interdependent. There were three discrete but interwoven aspects of my evolving research approach, which highlight the benefits of this fundamental interrelationship.

To bring a sense of cohesion to this fluid narrative, the three aspects outlined below each focus on the concept of ‘participant’ and ‘participation’. The theme reflects on participant observation, of and with participants in formal and informal settings, on
the nature of participation in various organisational configurations, and culminating in
the realisation of these through various graphic representations.

First, ‘Getting a Fix’[PM484] pertains to the rich sources of information emerging
through discourse as participants engaged in new partnership configurations and
transactions. As summarised in ‘Facets of observation’, this rich source of research
information emerged through day-to-day negotiations within different partnership
settings. This included (in)formal meetings and conversations, correspondence and
associated documentation arising from the partnership and Project developments
which forms the body of this research study and are embedded in the Scenarios.

One specific line of inquiry described below is a ‘snapshot’ of the opportunity to
conduct a number of ‘formal’ interviews[PM486] on behalf of the newly formed Lifelong
Learning Partnership (LLP) and which then led to a formal Report. This Report
constitutes Scenario 4 (Final Report). Further descriptions of these interview
processes, analyses and interpretation are provided in Scenario 4 (Interim Report).
These interviews are defined here as ‘formal’ in that: a) they were arranged and formalised by the LLP/ICT sub-group for the specific intention of producing a formal Report; b) they contrast with the numerous informal conversations that occurred in corridors, car parks, school classrooms, kitchens, in transit, etc.; c) despite the format for these ‘unstructured interviews’ being ‘improvisatory’ (Refer ‘In Search of the Lost Chord’ and ‘reading the small print’). During that specific line of inquiry it was becoming evident to me that notions of ‘boundary’ alluded to within formal research practice literature were illusory, and not helpful or representative of the conditions in which I found myself - much of the evidence for the report was not simply drawn from those pre-arranged interviews but contextual information and experience. Similarly, the boundaries of ethical practice, bias, and determinism were in constant flux as participants’ explicit comments appeared to me to become increasingly ambiguous, or indeterministic.

Second, emergent findings from that line of inquiry outlined above (and which constitute the Scenarios), were blended with further findings arising from my scrutiny of literature pertaining to the ‘Practices’ and ‘Themes’ represented in the diagram ‘Evolving Assumptions’ (Fig 45). ‘Detail into vision’ portrays facets of the increasing complexity and ambiguity led me to an important realisation regarding processes of visualisation and representation of action. That is to say, I was using various coding methods that increasingly served as an effective means to accrue, organise, assimilate, theorise and represent action within a dynamic schema afforded by that representational form.

My coding system was evolving naturally as a means to handle the dimensional qualities of transactional processes. As explained in earlier in the Research Section, emergent research demanded a flexible, open minded approach to action in the sense that patterns, issues, priorities were expected to arise over time. Hence, I refer to ‘immersion and emersion’ and ‘improvisation’ as fundamental facets of my approach. Coding explicit organisational activity such as event, meetings, dialogue, and so on also led me towards research literature that covered graphic forms of visualisation and representation, particularly through connectionist mapping. This included set, field and graph theory, social network analysis, (e.g. Scott, 2000)
concept and mind maps (e.g. Novak, 1998) and other such facets of structuralism and connectionism, culminating in complexity theory (Cilliers, 1998). This process then also moved towards writings from the perspective of the artist (e.g. Albarn, 1977; Eisner, 1998; Reimer, 1970).

Third, this realisation is conveyed throughout in diagrams and animations and illustrates a significant means by which actions were embedded within a dynamic and meaningful form. As that form of representation is therefore used to convey the processes of visualisation, the structure simply moves through different forms of representation and applies those to appropriate examples and issues which then served to embody and convey forms in and of action.

**Getting a fix**

My meetings with participants generally occurred as part of my day-to-day work as co-participant. As part of my work, and coinciding with the early phase of my research study, I conducted a number of interviews on behalf of the local Lifelong Learning Partnership (LLP).

The research interview has been defined as a

> ‘two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information, and focused by him on content specified by research objectives of systematic description, prediction, or explanation’ (Cohen & Manion, 1989, pp. 307-308).

As Hakim (1987) reported, it is considered important to obtain the participant’s own account thus, an interviewer shouldn’t be aware only on how to address the questions to the interviewee, but moreover must learn how to listen when other people are talking. For Robson (1993, p. 228), ‘the interview is a kind of conversation; a conversation with a purpose.’ According to Cohen and Manion (1989) interviewing may serve three purposes:

> It may be the main way of gathering data for the research;
> It may be used for testing or suggesting hypotheses as well as for identifying other variables and relationships;
It may be used in conjunction with other methods for: following unexpected results, validating other methods, or for going deeper into the motivations of respondents. (Cohen and Manion, 1989, pp. 308-309)

According to Patton (1980, p197), there are three basic approaches to collect qualitative data through open-ended interviews, each one with its strengths and weaknesses, which involve different types of preparation, conceptualisation and instrumentation:

1. the informal conversational interview;
2. the general interview guide approach; and
3. the standardised open-ended interview.

Cohen and Manion (1989) suggest four kinds of interviews: Structured interviews, Unstructured interviews, Non-directive interviews, Focused interviews. Yin (1994, p. 85) adds: ‘interviews should always be considered verbal reports only and as such they are subject to the common problems of bias, poor recall and poor or inaccurate articulation.’ Borg (1981) also draws attention to a few of the problems that may occur:

Eagerness of the respondent to please the interviewer, a vague antagonism that sometimes arises between interviewer and respondent or the tendency of the interviewer to seek out the answers that support his preconceived notions are but few of the factors that may contribute to biasing of data obtained from the interview. These factors are called response effect by survey researchers. (87)

Best (1977, p. 183) argues that, ‘this technique is time consuming, however, and one of the most difficult to employ successfully. Accumulation of evidence through observation included reference to documentation. Documentary or content analysis belongs to non-reactive or unobtrusive measures and it differs from the other approaches (interviews and observation) due to its indirectness. Ontologically these documentary data could provide an important component of a social setting, whilst epistemologically they could present or be perceived as evidence within this context. According to Yin (1994),

‘documents can provide other specific details to corroborate information from other sources. If the documentary evidence is contradictory rather than corroboratory, the case study investigator has specific reason to inquire further into the topic.’ (p81)
The interviews to which I refer in One in the Eye were being conducted on behalf of the LLP - during the initial phase when the LLP was establishing and defining its role, the committee agreed that an audit of current conditions could assist with that process. It was agreed by the committee that I should conduct that audit as they knew of my interest in it. They were aware of my recent engagement in this research study - as a group representing an interest in lifelong learning many of its members were well qualified and understood the associated values and issues for me to take on the role. They also knew that, I was a representative for my organisation on that strategic group and therefore had something to both contribute, and to gain from that audit.. They shared the view that linking the two could be mutually beneficial. The committee agreed the bases of the interviews. (see Scenario 4)

I conducted the semi-structured interviews some of which were recorded onto tape, and transcribed by me. Scenario 4 (Interim Report) provides detail pertaining to the basis and number of the interviews, an outline of the questions discussed, and so on. Meetings prior to the interviews established that the Group perceived this as a ‘feasibility study’ and as an opportunity to draw together a summative Report. The Report needed to reflect the pertinent concepts of learning and partnership from the perspective of the partner organisations. This included, for example, the perceived priorities and enabling mechanisms, whether the organisation was an agency that provided/enabled learning for other organisations/people, and whether it promoted learning within its own organisation (e.g. for its own workforce, or intrinsic to the strategic development of the organisation itself); whether the organisation considered itself ‘self-sufficient’ in achieving its role in promoting learning and the ways in which might influence inter-agency operations).

These interviews helped provide a focus on the key concerns of the LLP/ICT sub-group at that time. From both a partnership and research perspective, the potential, capacity or need to integrate and optimise developing organisational ICT infrastructures within a (single) cohesive framework, with further potential for managing better those associated distributed learning systems. In accruing information about the partner organisations’ perspectives regarding those emergent
agendas in relation to the LLP, I believe that some organisations were particularly wary that this process also served as a means to gain insights into their organisation’s aspirations that would have otherwise remained undisclosed. Hence, each participant was wary of the biases of the situation, viz. my position as research for the LLP, my position as co-participant, the potential issues that could emerged pertaining to disclosure of their organisations intended activities or status, and so on.

In a sense, these interviews were an agreed ‘contrivance’ by the LLP/ICT sub-group in that these were not representative of ‘normal’, day-to-day communication processes. Nevertheless, the interviews explored a range of issues being faced by the participants. There was a prior collective agreement by the LLP/ICT sub-group, within a formal setting, regarding the nature of the interviews and the purpose of the Report. It must be pointed out that despite this explicit expression of interest in the purpose of the LLP and the Report, the responses during and outside those subsequent interviews presented a different picture. It was during this period in my research investigations that the first steps towards my research model (‘LOP/EBG, Fig 88) occurred:
This early model makes a naive distinction between ‘organisations’ (entity) and ‘partnership’ (process) as: organisations were at that time largely being represented as a formalised ‘entity’; the LLP was still an ideological notion forming in the minds of it’s representatives (process); the partnership aspired to become manifest (entity) over time and as something more than a collection of organisations that merely shared information. (My later models or diagrams showing ‘organisation’ or ‘partnership’ were metaphorical representations to symbolise organisation and partnership as indicative of both entity and process, a finding that later corresponded to my reading of literature pertaining to organisational theory – Refer Detail into vision). This early model was but one example of diagrammatic representation of ‘partnership’ and ‘purpose’ that was discussed within group meetings in its early stages when it was trying to establish its role and purpose, and on whose behalf. I have not included their alternatives due to their use of actual names.

The interviews also provided me with a means to explore, in depth, the nature and qualities of participants’ discourse for my formulation of the subsequent Report. The interviews contributed to a summary report that I presented to the LLP/ICT sub-group, the intention of which was to help refine the strategic role of that group. Specific aspects of that report are discussed in more detail in Scenario 4, and further facets of which are embedded throughout this thesis.

Chatter Boxes?

As mentioned above, the intention of the interviews was to: inquire into the nature of participants’ organisational practice (current and potential) regarding the nature of, and relationships between learning and ICT; ascertain from the participants’ points of view, how they though this might be informed and develop, and establish where commonalities and differences might lie; identify a number of steps might be taken, by the partnership membership, to ease the process of partnership. Drawing a relationship between what was said and what was meant was central to this complex process. Throughout the entire process of interviewing, analysing the responses, creating and presenting the Report, the process of ascertaining ‘meaning’ from what was said, and ‘qualifying’ the meaning from that which was meant, was, fraught with difficulties!
The nature of the dialogue within and across the different interviews varied considerably between organisations/participants. Even though the LLP/ICT sub-group agreed the nature and purpose of the interviews, on meeting the individuals, it seemed to me that their subsequent responses shed new light on views that had been previously negotiated and agreed within the formal partnership meeting.

The multifarious group was comprised of, for example, the Principal of a college of further education, a Corporate Director of a multi-national business, an Advisory Teacher for ICT, a primary school Headteacher, a Manager of a small local charity, two Corporate Directors of the local council, and so on. Each expressed their ideas regarding ICT, learning and their perceived understanding and value of the LLP in different ways. For example, the interview with one Corporate Director (GICT/1) (from the LA) was conducted with another participant from that same organisation present (GICT/3). At the request of those two interviewees, the majority of that interview was conducted with the tape recorder turned off; my questions of them represented approximately 20% of the questions being asked - much of the time, they were enquiring about very basic information about the LLP and about other ICT Projects, including those occurring within their own organisation. Analysis of the transcription indicated, from their questioning, a line of thought that suggested significant doubt about the proposition of multi-organisational strategic partnership.

Another ICT Manager (GE/4) (also from the LA) was very late for the interview, gave me less than 10 minutes, mostly responded to my questions about the LA’s ICT policies and strategies with gestures (e.g. head shaking/nodding, shrugging shoulders), and left in a hurry. I perceived that part of the issue within this interview related to the difficulty for the interviewee providing ‘the right answers’ to basic questions, such as those pertaining to the publicly declared existence of ICT policy and associated aims of that organisation. It later transpired that those policies did not exist at that time. (This was evidenced through: comments by the new LEA/CEO who was more up front in his interviews stating, ‘What strategy!’; by triangulating evidence from other participants and events (Refer Scenario 1). Another form of triangulation for these two interviews occurred when I interviewed two other (non)participants from another division from the same organisation. They were not only concerned about
the lack of policy but that it reflected a lack of technical competence – they firmly believed (on account of their own positions) that the ICT Manager did not have any significant grounding in ICT to justify his/her post, something that was again, triangulated/confirmed on other occasions. (e.g. by other technically mined people, in meetings called by that Manager to discuss developments pertaining to interpreting and implementing NGfL requirements in schools).

Despite my declared position and ethical stance as ‘researcher’ and the numerous ethical considerations I had to make pertaining to the interviews and Final Report, I was nevertheless, a co-participant in current action. To some interviewees, particularly some of those from the LA, I was simply a co-participant from a ‘competing’ organisation. Their responses were thus, perhaps inevitably, ‘evasive’.

It is possible that some participants were influenced by a number of factors such as their position within an organisation, how they perceived ICT/learning within and outside certain contexts, their view regarding the purpose of the interviews, and how the ensuing report might hold other implications for further engagement/practice within their own organisation or that of the new partnership. Gergen (1994) notes that ‘cultural conceptions of human functioning are ‘subject to vast upheavals and decay across time’ (p208) … but I didn’t expect the ‘decay’ to be ‘that quick’!

I had considered asking the same questions to all interviewees and suggested this to the LLP/ICT sub-group. They were emphatic that this was not a good idea! (They did not declare why, but rather expressed the view ‘that semi-structure, informal interviews would allow the answers to emerge more naturally’.) With hindsight, the responses to technical issues demonstrated very different meanings and understandings and if subjected to particular forms of (quantitative) analysis, would have resulted in a ‘map’ indicating the relative capacities or knowledge within the group. Discourse analysis meant increasingly relying on ‘reading between the lines’ - and thus subject to various forms of bias, misinterpretation and so on.
As the detail of the experiences expressed by the participants was evasive, extensive and dynamic, and also triangulated, where possible, to other actions into which I was also engaged, I sought various ways of handling that scope and complexity. I reflected on methodologies expounded in naturalistic inquiry wherein those essential practices encouraged focusing on detail and finding an appropriate form of analysis such that this could inform through description and/or explanation\[^{PM491}\]. That process included, for example, various forms of filtering, coding, seeking a possible topological or conceptual framework that encapsulated and was representative of observed action.

**Through the mist?**

‘Filtering’, for example, provided a device for selecting\[^{PM492}\] the essential qualities in order to convey sufficient and appropriate information, such that this could inform and enhance my knowledge and understanding of action. For example, with reference to Scenario 4, the ‘interviews’ encapsulated various evident forms of filtering\[^{PM493}\] as a means of focusing on, and prioritisation of information that (potentially) represented the key concerns, interests and needs of the sample group, at a given point in time\[^{PM494}\].

Various forms of filtering occurred when observing, removing, abstracting, refining, synthesising, recovering and presenting. Each stage of the process entailed those forms of filtering as assumptions were made, confirmed or rejected, regarding the significance of the comment or action, however articulated. Each stage represented a potential flaw, (and asset) as subjectivity, logistics, bias, focus, determinism, uncertainty, difference each pervaded and influenced associated perceptual and cognitive factors, not only of the observer but also those being observed. However, there were fundamental qualities or protocols of engagement that helped to maintain an overall balance and legitimacy to those on-going complex transactions.
First and foremost were the ethical precedents, set by myself, which were also informed by the community of practice in which I was immersed as co-participant, and by the ethical guidelines inherent within that community and also by the research community. Although there were inevitable differences within those ethical considerations as applied to or by different circumstances, I believe they fell within the bounds of ‘acceptable practice’ as deemed by myself, the research community, and co-participants. (e.g. publicly declaring my position to other participants; upholding principles of protection of participants’ rights through non-disclosure, anonymity, generalisation, etc.). (Refer Terms & Conditions)

Second, the longitudinal study in itself provided various means to ‘validate’ emergent issues and ideas that seemed peculiar to a specific event by situating those within much broader contexts. That is to say, for example, a seemingly negative comment by a respondent could be re-contextualised within, or triangulated to other settings in which that participant (or the action to which they referred) was ‘involved’ and thereby help establish (other) possible foundations and significance for that comment. In this way, it was possible to establish whether a seemingly negative comment was attributable to such things as ‘the moment’, personal dispositions, irony, deliberate linguistic ambiguities such as cynicism, pun, strategic gaming, or just for fun; or reflective of the wider contexts in which they were also immersed and which were not known to me, and so on. This was an important facet of the approach and which I believe sets my research apart from other approaches (perhaps, necessarily) adopted by other researchers. It goes some way to recognising the relative values to (evident) minutiae emerging from the sensitivities to and complexities of daily life occurring within dynamic conditions, that a broader perspective needed to be taken and maintained where possible.

Third, a fundamental issue that pervaded the research was the matter of handling ‘detail’ per se. Claiming that my approach was ‘holistic’ nevertheless required finding means to make sense of what was occurring by being able to be immersed in and stand back from the detail. This ‘yo-yo’ effect represented a further form of filtering as detail, abstraction, re-interpretation and re-presentation occurred.
As a form of natural sampling and reduction, these particular interviewees were mostly members of the LLP/ICT sub-group. Further filtering occurred as circumstances determined whether, or how the participants would engage in those interviews (such as refusing to participate, being ‘unavailable’, being late, only being prepared to discuss certain issues and, perhaps, in a way that could be defined as ‘evasive’ or ‘politically motivated’, with/out a tape recorder, and so on). A key issue that emerged from most of the formal interviews conducted on behalf of the LLP/ICT sub-group was the pervasive uncertainty of the general conditions influencing organisational change at that time. Hence, interviewees responses could be interpreted as: aspirational, idealistic, highly subjective, biased, politically motivated, sincere, ephemeral, potentially.

Further filtering through abstraction occurred in the process of analysing my associated field notes, transcripts and associated documentation in the search for those essential qualities that could inform the subsequent report. Natural filtering also occurred as the focus on and relationship to detail shifted, partly in response to the volume, relevance and significance of that data or its analyses to a more global picture that was beginning to emerge. Thus ‘filtering’ however defined, was a fundamental transactional process that occurred throughout the entire, complex, dynamic and on-going process of immersion and emersion.

Strauss & Corbin (1990), Walford (1991), Coffrey & Atkinson (1996) discuss and make distinct various filtering processes, through sampling, categorical typological analyses and so on; while more recent approaches that adopt connectionist and constructivist models and which have empathy with complex (postmodern) stances, give a different stance (refer: Gill, 2003; Gergen, 1997, Mariotti) and suggest a move towards those notions long held within the arts, as exemplified for example, through reference to aesthetics, connoisseurship, form (Arnheim, 1970, Albarn, 1977, Langer, 1953; Oakeshott, 1985), Kushner, 2002).
Specific examples of coding includes: ‘Open Coding’ (a part of the analytical process concerned with identifying, naming, categorising and describing phenomena such as that represented in the ‘data’ or ‘found in the text’); ‘Axial Coding’ refers to the process of relating codes (categories and properties) to each other, via a combination of inductive and deductive thinking. Grounded theorists for example, tend to emphasise causal relationships and fit things into a basic frame of generic relationships [PM497].

In order to handle the essential day-to-day experiences that were informing the development of the inquiry in all its forms, and explore appropriate means of analysing, coding, and generally making sense of those dialogues, I considered various applied techniques such as those expounded within the field naturalistic inquiry. These and other such methods offered a means to explore detail by finding key ‘properties’ and ‘issues’ from the data, forming topologies or classifications, and making generalisations. Many of those examples that I researched were focused towards making sense of actions manifest through discourse (such as hermeneutics, symbolic interactionism, Personal Construct Theory, content or concept analysis, grounded theory, and so on). The general approach is to analyse a textual database (such as a corpus of field notes and transcripts) and ‘discover’ or label variables (called categories, concepts, properties, and issues) and their interrelationships. The ability to perceive variables and relationships is termed ‘theoretical sensitivity’ and is affected by a number of things including one’s reading of the literature and one’s use of techniques designed to enhance sensitivity. The data may also be observations of behaviour, such as interactions and events.

Various computer programs such as Nudist™ and AtlasTi™ also contributed to my understanding of this important process. Both Nudist and AtlasTi offered technical means of finding, coding, sorting and annotating data (from the transcriptions), organising that data in various ways such that meaning might emerge through applying various analytical and interpretative techniques. I initially used Nudist to help find a coding system for the transcripts acquired through the formal interviews. However, searching for categories was not achievable using technology insomuch that it is not ‘intelligent’ enough to interpret a complex concept (such as strategy) in
that there is only the inherent function of word recognition and coding. Interpretations may be ascribed by the researcher and then coded or sorted into categories, in which case the technology merely serves as a convenient database that relies on memos and notes to substantiate or lead to further interpretative methods. For example, the LLP/ICT interviews sought to establish participant organisations’ strategic involvement in areas pertaining partnership and ICT development. One interviewee (a college principal) discussed this topic in depth without ever mentioning the word strategy/strategic, while another (a Corporate Director for IT within the new LA) used the terms repeatedly throughout the interview almost as if the repetition strengthened the meaning or value of the term.

Junctions and roundabouts

Fundamental to each of these processes of inquiry is not just the transfer of information, but, the transformation of that information from one form into, or through, several others. As I sought appropriate means to handle information, I tried various methodologies (identified above), many of which required dialogue to be transformed into text, from one form of text to another, perhaps as text into alpha-numeric data, or into hierarchies (trees) through various topological techniques, and so on.

Hierarchies occur as some form of linearity or bias is established within a network of relationships. These may be explicit (such as those which occur through grounded theory or the through the use of Nudist software, or concept maps such as those advocated by Novak. AtlasTi and Nudist both provide graphical networks drawn from the hierarchies or sets and categories. Nudist is purely hierarchical in the sense that only one root and one direction to the hierarchy is ‘allowed’. AtlasTi on the other hand, allows relationships to be non-hierarchical insomuch that multiple links between nodes may be established. Others hierarchies are rather more implicit, such as those occurring within diagrams that do not make use of arrows or prepositions, or those occurring in narrative form. Even though I maintain that my resultant diagram and maps are non-hierarchical in the sense that the relationships are more dynamic and elusive, they can be conceptualised and theorised in sets according to the emphases brought to bear on those representations.
While these processes were representative of (justifiable) techniques practiced through a number of research approaches (e.g. hermeneutics, discourse analysis, symbolic interactionism, grounded theory, etc.) and to some extent helped me with the processes of familiarisation and organisation of that information, to me, it also seemed rather like taking a picture, or a piece of music, and feeling confident that a textual transcription somehow equated to these forms of expression. Rather like catching rain in a bucket, I felt that the abstracted outcomes were only partially indicative, with no guarantees of reliability or validity, despite the routines and assurances that generally accompany such traditions.

Throughout these interdependent processes of visualisation, realisation and representation (theorising and meaning-making), I realised there was inevitably, an ongoing, though perhaps indistinct transfer and/or transformation of meaning as the information moved through various representational forms, from one person to another, from one context or dimension to another, from one community of practice to another. Abstraction was both necessary and inevitable and the subsequent partial representation could be no more than that, an abstract, with the capacity to imply and evoke. Abstraction and representational processes each demanded the significant transformation of the physical, notional, abstract, with justification for alternative forms derived from the community of practice to which these refer. A fundamental issue for me however, was my proximity, not only to the detail, but also to the subsequent abstraction. Both were, or became meaningful to me, and potentially meaningful outside that context. However, there was the danger that this meaning may not be then representative of that which had originally conceived that abstraction. A strategy I adopted was, where possible, to revisit the issues with other participants to share the evolving ideas and issues. One such example of this process was where evolving concept maps that sought to frame key ideas, such as ‘participant’ or ‘partnership’ (as represented respectively by Fig 63, Figs 72-76 and Figs 77-79), were shared, initially with individuals in various organisations, as a means to consolidate a negotiated and shared meaning for prior action and those representations. Later, as a result of these informal discussions, I was asked to share and discuss these diagrams, emergent issues and findings with the Board of
the LLP. Accepting such invitations not only meant key issues were abstracted and
de-personalise from the minutiae of day-to-day partnership experience, but also, and
more particularly, offered a means to re-situate findings within the more formal action
contexts from which they had emerged.

**Game, set and match?**

Focusing on detail in order to inform propositions, themes, categories provided me
with an effective step towards making sense of experience and action. A number of
techniques and programs that were explored each contributed to that principle in
different ways. Nudist, along with similar methodologies such as concept
mapping[PM502;] and Kelly’s Personal Construct Theory[PM503] and Straus & Corbin’s
Grounded Theory[PM504].

Examples of concept or mind mapping and the use of network diagrams are
abundant and have an extensive history in ethnography, connectionism, social
network analysis, psychology, cybernetics, and so on. Essentially, any objectification
within a network or map can signify a ‘concept’. That ‘signifier’ may be represented in
various ways (e.g. a node, number, symbol, word) and can thus reference for
example, an object, person, action, idea, or behaviour. Links between those
signifiers generally denote a ‘relationship between the concepts, and may suggest a
direction or emphasis, (such as A ‘caused’ B, A ‘equates to’ B), and may be indicated
with an arrow or preposition e.g.

![Net example 1](image)

This form of network can grow in complexity as additional concepts are added and
relationships, e.g.
Some networks take on further representational form through the use of other dimensions (e.g. 3D, 4D, animations and interactive). Examples are included in the main text below. Thus, ‘concept maps’ may represent initial coding of experience, events, ideas, and so on. They may also be used to theorise and make meaning from those relationships. My maps grew, in part from: a need to handle the scale, rate and complexity of information that I felt might have some potential significance to my research inquiry; as a form of abstraction, or filtering; as an important means to theorise; as a significant form of representation.

WebGrid III™ is an implementation for the World Wide Web of George Kelly's repertory grid technique for building conceptual models based on his Personal Construct Psychology (PCP). WebGrid asks you to define a domain of interest, a context or purpose, and some elements or entities that are part of the domain and relevant to your purpose. It then elicits constructs from you, which establish how you distinguish the elements in your domain, in ways that are relevant to your purpose. WebGrid provides a variety of methods for modelling and visualizing the relations between your constructs. It also enables you to compare your constructs with those of other people. Facilities are also included for using your conceptual model as an expert system. (WebGrid III)
Other research methods that I considered include for example, concept analysis, content analysis, concept mapping, critical theory, hermeneutics, and deconstruction. Many of these are founded on textual analysis such as finding patterns within or alluded to within the texts. According to how experience was perceived, annotated or coded, other approaches I considered other developments based more on network analysis and which have their roots in Set, Graph and Field theory. (Refer Scott 2000, Wellman & Berkowitz, 1988):

There are many “structuralism’s” in the social sciences. All are concerned with interpreting processes in terms of patterned interrelationships rather than on the basis of individual essences. Consequently, they look at their subject matter in similar ways, pose similar questions, and construct similar analytic procedures to answer these questions. (5)

However, investigating ‘key words’ concepts and categories revealed a significant and on-going problem of uncertainty – in part, linked to the matter of intentionality and/or context. For example, integral to much of the discourse and action occurring within the research study were meanings that may have remained hidden, perhaps (un)intentionally, or simply lost within the complexities of prevalent and emergent action, or for which the relationships between notions of significance or validity were themselves, untestable. Some participants clearly intended ambiguity to provide them with latitude for subsequent action. Conversely, seeing ambiguities within the discourse could have been an outcome of my own interpretations, rather than the actual intentions of a participant. A further factor that may have contributed to the perceived ambiguities was that of time in the sense that participants perhaps had forgotten what they had said previously, or between meetings, changed their mind about what they had previously said or implied. Furthermore, the nature and rate of organisational change was recognised to be an important factor for bringing participants together. To be able to recognise the ambiguities of meaning depended on ones capacity to juggle potential as meanings became re-contextualised (or de-contextualised) by changing circumstances and conditions. In trying to establish meaning to inherently ambiguous discourse became for me, irreconcilable, and in more than one sense, a distraction when triangulating other forms of action.
Initially, I engaged in the basic practice of revisiting an interviewee to perhaps, seek from them, further clarification. I believe that the logistics of participants handling heavy schedules and associated pressures contributed to a pattern that emerged, and interviewees responses were characterised by comments such as: “That’s what I said, but what I meant was …”; ‘Did I say that?’; “You might think so …”. Moreover, comments like, “That was back then - things are different now.” Even when I quoted parts of a interviewee’s transcript I was at one time greeted with, “Oh, I never thought of it that way!” and even “If you think I’m contradicting myself, who are you to believe?” Such comments particularly reflected the uncertainties of the time, of meanings, and the importance of understanding those dialogues occurred within the highly dynamic, uncertain and political contexts where meaning stabilised sufficiently to ‘make a case’, and facilitate ‘moving on’.

Similarly disconcerting (but perhaps, predictable) was for example, the ability of person ‘a’ to make a categorical statement to person ‘b’ which might seem to contradict what they told person ‘c’. (Ironically), in some cases, it might have been an ‘oversight’ for a participant to recognise that ‘b’ and ‘c’ might also speak to each other … raising the questions such as: whom does one believe (‘a’, ‘b’ and/or ‘c’); was this ‘device’ deliberate and purposeful; where or why did the alleged misunderstanding occur; in fact, is the device attributable to ‘b’ or ‘c’ rather than ‘a’? This type of dialogue, though not infrequent, could not be simply construed as ‘lying’, but rather, a representation of the truth as portrayed by a person at a particular time. To illustrate yet another facet to this: there were times when some things were deliberately ambiguous - ‘part of the fun’, the problem being, identifying those times when ambiguity existed (un)intentionally, or (not) clarified, or perhaps, having (in)significant implications for subsequent actions. At other times, I was told things ‘in confidence’ only to be told the same thing ‘in confidence’ by a different interviewee. Nevertheless, I did not break those confidences.

Over time, for several reasons, I began to question the significance of the ‘signifier’. The notion of textual objectification as the means to determine significance has been explored by various exponents and across different paradigms. Crucial to my understanding of and use of textual form as having relative and representational
significance was the matter as to whether meaning was ascribed or derived, insomuch that it might be, potential, intrinsic, extrinsic, referential, relational, objective, subjective – and where associated ‘validity’ may, in respect of representational significance, depend on ones’ epistemological and ontological stance.

This issue influenced my evolving view that multiple meanings denoted by ‘text’ pertains to ‘ambiguity’ or ‘semantics’. I suggest that, within the context of a concept map, ‘intrinsic syntax’ (lexical/structural) and the potential for form and meaning is afforded to the term through design features, such as the use of links, space, position, colour, layering, intrinsic and extrinsic relationships, implied hierarchical significance, and so on – all of which were essential qualities to the design of my own network illustrations. Further enrichment of meaning may occur through ‘choice’, which is derived through the interplay between the intrinsic characteristics of the representation. Within the context of day-to-day experience, the notion of what precisely is ‘intrinsic’ is much more difficult to establish, especially when the dynamics and complexities of that experience contributes to a shift in meaning as it
becomes re-contextualised in new forms of action. Through these processes of theorising to establishing meaning to my representations, I found that the ‘significance’ began to shift from the nodes to the links or relationships between the nodes. The notions expounded in complexity theory (as cited in ‘Finding the light switch’ in this narrative) became increasingly helpful to me as it seemed that they were commensurate with my evolving research approach.

On numerous occasions, the research was informed by direct, indirect and ‘circumstantial’ evidence. It is debatable at what stage ‘evidence’ was or became ‘circumstantial’, just as the source or detail may have been relevant. e.g. events occurring beyond the perceived boundary of a partnership group were not only inevitable, but ‘irrelevant’, at least, up to the point at which those incidental actions culminated in an outcome that made those previously ‘covert’ actions, significant to the partnership group. Likewise, many actions occurred were part of the fabric of day-to-day action and thus ‘circumstantial’ or filtered as being insignificant - at least, until such point where other responses to those were either culminated in a collective significant outcome.

What was overheard, passed on, or ‘shared’ in various ways, for various reasons, highlighted the importance of what was NOT heard or not seen. This level of obscurity was no less ‘valid’ as a basis for decision making than those that could be linked to categorical statements and actions, each of which was (potentially) indicative of ‘truth’. This proposition and its resultant predicament for me, was reinforced by the clichés, ‘actions speak louder than words’, or ‘reading between the lines’, where (assumed) notions of truth, reality, intentionality and accountability blurs. By referring to a parallel line of inquiry arising from my scrutiny of the research literature this matter is developed further. I also refer the reader to development of my CATM-R Models (Figs 55-61) in ‘reading the small print’ that I was formulating in response to some of the above issues[PM507].
Detail into vision - action into action

Identified in ‘Terms & Conditions’ and ‘Weigh in’ are four ‘Themes’, learning, organisation, partnership, and ICT (LOP/ICT). These pervasive terms, which served as a focus for my research investigation, were largely, contextually determined by the actions of the study group and by me. My scrutiny of the literature regarding those specific subject areas, also, subsequently enriched my insights of those terms and how they were, and could be, practiced. This facet of my research deepened my understanding about the traditions, approaches and implications of ‘research practice’. Establishing precisely what was ‘relevant’ and appropriate to my specific study, was however, more problematic. This ‘problem’ was in itself, part an evolutionary process of acknowledging and balancing both the deterministic and emergent properties of the research process. The view that every event (effect) has a ‘cause’ (determinants), and that, everything in the universe is governed by causal laws, is thought by libertarian and determinists, to be incompatible with free will. Determinists deny there is free will on the ground that everything is causally determined, and conversely, Libertarians deny that everything is causally determined because there is free will. Associated with this duality are notions of, for example, order and randomness, design and creativity, simplicity and complexity, predictability and emergence, certainty and uncertainty, predetermination (by natural law or ‘Gods law), and the indeterminate (not known, difficult or seemingly impossible to work out). Gill & Bohnert (2003) highlight the dilemma thus:

The belief that man’s feelings, thoughts and behaviours are all forced on him by one or more determinants leads to a very different and much more positive constructive view of human nature. If it is indeed true that total determinism is in fact the basis of all human events, physical and psychological both, then everyone is totally respect worth, without having to earn it, everyone is basically innocent, there is no basis for shame, pride, contempt, guilt, etc. and no man can be condemned as bad.

Denzin & Lincoln (1998) point out that

The positivist, post positivist, constructionist, and critical paradigms dictate, with varying degrees of freedom, the design of a qualitative research investigation. This can be looked at as a continuum, with rigorous design principles on one end and emergent, less well-structured directives on the other. (xii)
Through my review of the literature I intended to obtain further insights into the nature of the key terms of reference and how these could then be related to the different research practices pertaining to my study. My scrutiny of the literature was to deepen my understanding about the traditions, approaches and implications pertaining to my research inquiry. The two key facets to this included a review of research practice literature and also subject-related literature, some of which also referenced research practice. For example, much of the literature I read relating to organisation studies and learning referenced the socio-historical, foundational research principles underlying those subjects. Conversely, while some literature that referenced ICT indicated specific research studies (e.g. Bradshaw 1985; Chalkley & Nicholas, 1997; Hargreaves & Coomber, 1996; Lewis, 2001; Meadows & Leask, 2000; Selwyn, 1998; Watson, 1997; Wright, 1987), many of the books were ‘aspirational’ without explicit links to aspects outside the subject area (e.g. BECTa 1998; DfEE, 1997; DfEE & QCA, 2000; Evans, 1979; Robinson, 2001; Richie, 1998).

**Boxes and forms**

The literature generally indicated the fundamental concepts pertaining to each of the central research themes (LOP/ICT) and research practice. While references to learning, organisation, ICT and research practice were extensive, these themes were conceptualised differently when they were related to and/or derived from specific socio-historical perspectives or practices. To explain I shall focus on my reading of for example, ‘organisation’ as this has an extensive literature base that, for socio-historical reasons perhaps, has prevalence by studies that refers to ‘Organisation Theory’ and ‘Systems Theory’.

A ‘modernist’ concept of organisation suggests that it somehow represented ‘an entity’, or human artefact designed to achieve one or more objectives’ (Schütz, 1962):

> ‘the world of working in daily life is the archetype of our experience of reality’, and that all the other provinces of meaning or the meaning of our experiences, or the meaning of our experiences that give sense to reality and that all the other provinces of meaning, or the meaning of our experiences that give sense to reality may be considered as its modifications’. (94)
Harvey (1989) suggests that ‘modernity was based on ‘a belief in linear progress, absolute truths and rational planning of ideal social orders and the standardization of knowledge and production’ (9). Literature that extends outside the frame of organisational studies uses the term to correspond to ‘a mode of action’ that signify a difference to more recent, postmodern ways of seeing the world. (See Denzin & Lincoln, 1994; 12-17, 1047), and frequently references associated terms such as ‘classical’, ‘traditional’, ‘historical’, and various forms of ‘instrumental rationality’ and institutionalism. Organisational theorists generally associate modernism with the concept of bureaucracy which itself, serves to define modernity: In tracing the relationships between these terms, Reed (1992) provides a succinct account of the associated bases and trends:

Complex organizations provide a mechanism or instrument through which the rational control over and deployment of scarce resources - such as time, space and energy - could be realized and directed to the achievement of continuous technological advance and sustained economic growth. They constituted a social technology through which material and human resources could be effectively combined and geared toward the accumulation of capital on a regular and stable basis. (1)

Reed (1992) posits that institutionalism, has its foundations in bureaucracy

.... engenders a dynamic of its own at the level of social action and consciousness which creates a depersonalized symbolic and cultural universe inhabited by an amorphous and anonymous mass of people who have to be organized. It becomes the ‘institutional prototype for the emerging rationalized society’ (Wilson 1977, 146); that is, a mass society dominated by the drive forever more effective means for realizing disciplined control over all aspects of modern life. Within this setting, the principles of calculability, predictability and control become embedded in an organizational culture that secures compliance through socialization into collective norms which value individual conformity above all other considerations. (26)

In so far as modernity was based on ‘a belief in linear progress, absolute truths and rational planning of ideal social orders and the standardization of knowledge and production’, then it was grounded in an ideology that was positivistic, technocratic and rationalistic.’ (30). The ways in which ‘organisation’ has become conceptualised has extended beyond those modernist notions of formal structures, strategies and institutionalism. For example, Hatch (1997) offers two representations that illustrate differences between the modernist organisation theories, in which the organisational environment is conceptualised as an entity that lies outside the boundaries of the organisation (63)
Conversely, the postmodernist organisational theorists shift the emphasis of organisation *within* the network of operations and interactions to the point that (as explained later in this narrative), there is doubt about how an organisation may be configured as ‘entity’ at all but rather indicates an dynamic exchange of interactions and processes.

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**Fig. 69**  
Hatch (Org 1)

**Fig. 70**  
Hatch (Fig 3.3) Organisational networks
This symbolic representation also conveys an image of relationships between, of, and in, organisation(s), and therefore broadens the discussion regarding organisation beyond those offered by Hatch. It is important as it serves to strengthen my discussions regarding ‘distributed knowledge’ (Nonaka & Takeuchi 1995) and various forms of connectionism, such as ‘networks’, complexity, hypertext, and texture (Wellman & Berkowitz 1988; Cilliers 1998; Emery & Trist 1965).

‘Organisation’ may also be considered from a host of post-structural, socio-cultural, post-modern, symbolic and metaphorical perspectives, where the view of organization, society and environment is ‘closely interrelated and interwoven’, where ‘organisation is a socially constructed by a group of human actors who negotiate its reality and knowledge’, such that any distinction can only be an ‘interpretative act’. (Reed, 1992, 1994; Strati, 2000; Aldrich 1999; Gergen, 1994, 1998; Whitley, 1988; Castels, 1996, 1998; Nonkana & Takeuchi, 1995); and articulated by Aldrich, 1992, thus:

People do not construct institutions. Instead, they construct solutions to very specific problems, as the interpretive perspective reminds us. The accumulation of solutions - see table 2.1 - may eventually result in organizations, then populations, then communities, but the process may require tens of thousands of trials and errors, occurring within historically conditioned constraints. This sense of indeterminacy is missing in most current institutional accounts.’ (34)

I suggest that this view can be interpreted with yet more freedom if considered, not so much as an accumulation of solutions’ but rather, as: ‘an accumulation of emergent issues’ that evolve through complex, often indeterminable processes or circumstances. Multiple meanings, contingencies and new strategies may be applied in order to ‘perpetuate the myth of institutionalised norms’ (e.g. power, control, authority, intentionality, accountability.

Thus, the notions of institutional culture and associated determinisms are called into question by various, recent organisational theorists. Moves from 'static' conceptions of organisations as ‘distinctive social units that were constrained by the larger environmental settings in which they operated’ towards alternative formulations suggested that:
Organisations were reproduced and transformed through cultural and political processes that could not be caught in the analytical net provided by Systems Theory (with its isolatable dimensions of formal organizational structure and environmental context ... (Reed, 1994, 3)

Alternative perspectives (action frame of reference, negotiated order, ethnomethodology, political theories, etc.) each promoted notions of organizational reality by means of power process and symbolic interventions. Aldrich (1994) in his review of three analytical approaches to the understanding of organisational change highlights, relations between organisations (ecological approach); the ‘taken for granted nature of organisational environments’ (institutional approach); and the ‘interpretive approach’ that focuses on the meanings social actions have for participants.

In emphasising the socially constructed nature of organisational reality. Wardell (1994) describes the notions of power, control authority and change from a ‘bottom up’ perspective where the interpretations and actions of those perceived to be in a position of authority is variously reinterpreted and thus significantly contributes to organisational change. (Refer Scenario 2 and Scenario 4) Gergen (1994) considers this issue through different language systems within large organisations, while Mehan (1996) explores organisational interactions within context where cultural diversity creates a disjuncture in organisational processes. For example, Gergen (1992) expresses one trajectory of (dis)organisation in the following extract:

As local criteria of the real and the good are solidified, so do members of these divisions become insulated against the realities of the adjoining divisions. Their languages seem progressively alien, unreal, possibly erroneous or foolish. And their own reality becomes rarefied and opaque within the adjoining worlds. In effect, as each unit becomes increasingly powerful within itself, so is the organisation as a whole disenabled - with the ultimate end being the destruction of all. (p221)

Further notions of organisational process pertaining to strategy and the locus of power and decision making are presented in Scenario 4 and evident through practice within other scenarios.
**Dead reckoning**[PM514]

Rigorous search of literature and studies regarding organisation and groups, or sociology and its subsets of culture, ecology and ethnography provided scant evidence of references to ‘partnership’ *per se*. Instead, the underlying concepts of partnership were predominantly gleaned from literature regarding organisational and social theory, policy documentation based, and on my understanding of the term that had been nurtured through experience. The interpretation of partnership differed either according to how it was (initially) defined or contextualised: documented roots of social theory go back to Plato’s arguments on the nature of a republic and since, has extended into and includes contributions from such other fields as anthropology, political economy, psychology, history, etc. Socialisation theories focus on ‘the acquisition of membership within a functionalist framework, where acquiring membership is defined as internalizing the norms of a social group’ (Parsons, 1962). Partnership may then be ‘wrapped up’ in other terms (such as participation, identity, brokering, mutualism, community, enculturation, experience, responsibility, accountability, negotiation, belonging, and so on, and which serve to signify a social bond between members. These notions underpin my concept maps that were synthesised from these references and from emergent action within and across the various participant groups. (e.g. Participation concept map, Fig 72; Stakeholders & Beneficiaries, Fig 19; and Partnership concept map, Fig 79).

**Concept mapping - Routes, maps and guides …**

On-going processes of immersion, acquisition, accumulation, abstraction and realisation was distilled by a form of coding that was incorporated initially into various concept maps that later became redefined as networks or diagrams. The development and contributions of these illustrations to my research processes are described below. These are indicative of the terms, and relationships within and across different settings. When I was constructing my maps or models, I utilised a facility offered by the drawing software to construct ‘layers’ of relationships such that different categories or configurations of concepts could be more easily managed. For the purposes of the description below, some facets of that layering is highlighted by the use of colour to suggest a number of groups within one map. (See 3D Nets/Figs 71 and 85).
Some drawing software (such as Adobe Illustrator, or Macromedia Freehand) provides a facility called ‘Layers’. This device is similar to using overlays of transparent film such that different components of an illustration can be drawn on a number of layers. It is possible to view or hide different layers, rearrange the order of the layers, or move components between layers. Many different layers may be created and viewed in various combinations, thereby allowing maps to be created, analysed or theorised in different ways. There are two further advantages. First, in the illustration below, the map on the left shows a number of links between two differently coloured node sets. By creating the red nodes and links on one layer, and the blue nodes and links on another layer, they can then be abstracted or combined to suit the processes of theorising or representation. Second, a further layer can be created to build a further set of relationships or links between the other two layers. This is portrayed in the diagram ‘Layered construction of a network’ Fig 71.

The ‘Participation Concept Map 1 (Fig 72) uses colour to signify the different layers. When I designed this map, it used 14 different layers, including one for notes and aide memoirs. While this was a helpful theorising and representational tool for me, it means that the number of permutations and benefits that may be gained from each diagram defies the available space in this thesis. By using another feature of the software, it is also possible to then apply a time scale and sequence to each layer, thereby creating the illusion of a simple animation.
The first set of concept maps explores ‘participation’ as forms of ‘involvement’ in, and through action. The terms within the concept maps are a culmination of expressions, articulated by the participants themselves, when referencing themselves and others. They are also drawn from literature connected with my research inquiry. Hence, I used the ‘Participation Concept Map 1’ (Fig 72) to symbolise a single person in relation to various organisational configurations. The map was also used to represent a group of participants. Each of the different layers (represented by assorted colours) suggests a specific ‘set’ or category and may imply various hierarchies. (As described in later texts in this narrative, it is also possible to cross-reference the layers).
Participation Concept Map 1, as a local representation, is indicative of the titles, roles and responsibilities of one or more participants within the research study group and could for example, pertain to a single teacher, a project manager, a researcher and so on. Different configurations or emphases of the terms could be linked and theorised in different ways according to the person, actions or contexts in which s/he, (or they) was involved.

This map has 14 different layers comprising the links, or the nodes/concepts. It was through exploring the different combinations of concepts, both within and across layers that further interpretations evolved. Each modification symbolised a reinterpretation of the terms according to the different contexts or frameworks to which they were applied. It is possible to apply a number of conventions to this kind of map. For example, as mentioned earlier in this narrative, emphasis may be given to a specific node according to: the number of connections it has to other nodes; its proximity (location) to other nodes; other referents such as arrows or prepositions that may be used to indicate a hierarchy or causal relationship; implicit or explicit ‘values’. For reasons explained in this narrative, I generally did not use arrows or propositions, and would suggest that the ever present hierarchies are in any case, sufficiently numerous or ambiguous to classify the maps as ‘non-hierarchical’. While the objectification of roles, as concepts (or nodes) provided a tangible representation of some forms of ‘evidence’, it was through the theorising, subjectification[PM515], and abstraction that relative freedoms from deterministic and propositional nets that enabled the dynamics of context and circumstance to influence meanings come to the fore. With reference to the specific terms, Cilliers (1998) illustrates:

… ‘the nodes of the network stand for specific concepts and the weights for the relationships between them.’ ..... This kind of network is quite well known from traditional AI and is called a semantic network. Nodes and connections have specific interpretations, and since they ‘stand for’ something, the traditional theory of local representation is used. (68)

To explore this proposition further, specific facets can be filtered or abstracted from this concept map and applied to alternative settings, thereby reforming the potential of, and relationships between, those terms. ‘Participation Concept Map 2’ below highlights one such set of ambiguous relationships that arose between participant and non-participant[PM516].
The concept of non-participant varied according to how this was framed by, for example, government documentation, or perceived within a set of participant relations (e.g. the extent to which a person or organisation was ‘perceived’ or appeared to be ‘involved’. The term was used by stakeholders when referencing ‘young people’ who were not involved in the projects for whom they were devised. However, as described in Scenario 2, the young people may have been participant but not in the ways that the stakeholders ‘wished’. Another problem with the ‘non-participant’ as a term of reference was especially highlighted in various scenarios where people who were not previously known to be ‘involved’ in related activity became central to new forms of action. Such action was, at some point, contextual (or peripheral) in the historical (temporal) and peripheral (spatial) dimensions.

By considering the emerging relationships between participant organisations in this way, some were viewed variously as stakeholders and beneficiaries. Fig 19 (Stakeholders and Beneficiaries) therefore, not only re-contextualises ‘participant’ but also indicates a number of relationships that suggests that the ‘stakeholders’ were, in one sense, ‘beneficiaries’, insomuch that some organisations served to gain from their efforts on behalf of beneficiaries. Similarly, the illustration also highlights the notion that some organisations saw themselves purely as a beneficiary, rather than a stakeholder in the further development of the opportunities that had been offered to them [PM517].
Fig. 74  Stakeholders and Beneficiaries

Fig 74 was partially drawn from the dialogue and policy documentation of the LLP as it increasingly viewed itself as an umbrella organisation. In this case the partner organisations were viewed as the stakeholders who declared the partnership served to consolidate opportunity designed for the benefit of ‘learners’ and ‘the local community’[PM518].

A further abstraction of terms can be used to indicate further relationships and generalisations existing between the participants. The map ‘Provider & Recipient (Fig 75) is similar to the diagram ‘Stakeholders and beneficiaries’ (Fig 74) inasmuch that the loop from provider through recipient and back to provider references the nature of negotiations occurring in Scenario 2 and Scenario 4.
As an example, Projects aims and objectives such as those described in ‘Weigh in’ generally declared that these were intended to support the individual needs and interests of young people or learners. However, the organisational controls and systems tended to conceive needs and interests of learners on their behalf, often without consultation. Scenario 2 describes some of the emergent problems as the stakeholders resorted to various organisational control measures … hence my question raised in those texts ‘for whom does the provider provide?’

A further abstraction from the ‘Participation Concept Map 1 (Fig 72) emerged as I considered a number of potentially ‘contentious’ issues that appeared to be emerging in relation to organisational power and authority. Fig 76 was used to reference ‘power’ and ‘authority’, not only in relation to stakeholders and beneficiaries, but also to ‘non-participants. This was, in one sense, due to further relationships with other terms of reference such as ‘self-sufficiency’ and ‘accountability’.

Fig. 76 Participation Concept Map 3
For instance, many participants perceived technology (ICT) as a resource that could empower people. In one sense, individuals who were (significantly or sufficiently) empowered due to their knowledge pertaining to, and use of ICT, then held some (assumed) authority and/or power for self-determination, deemed (themselves) to be ‘self-sufficient’, and thus chose (not) to participate in specific activities. This ambiguous interpretation of the above map can in fact be applied to most participants irrespective of their actual knowledge and use of ICT. The issue here then relates to the capacity to judge the implied qualities, principles or practices to which it potentially refers. (Refer to all Scenarios).

In Scenario 1: the ICT co-ordinators in three of the four schools had received little or no ICT training; did not deem themselves to be ‘experienced’, ‘confident’ or ‘technically competent’ with ICT (and substantiated by other observers such as the Project Manager and tutors and some particularly ICT literate young people); nevertheless deemed themselves to be relatively ‘self-sufficient’ (in part this was ascribed or endorsed by the comments of their respective Headteachers, even though the Headteachers also declared they relied on their ICT co-ordinators due to their own lack of knowledge; Conversely, some young people referenced in Scenario 2 were highly proficient in technical matters relating to ICT, and yet classified by their respective schools as ‘disaffected, and ‘non-participant’ in the sense that these young people were disenchanted and were classified as underachievers by the formal education system in which they were situated.

The participant concept map (Fig 72) was also used to theorise specific issues that emerged when a particular ‘non-participant’ assumed sufficient authority and power to significantly challenge and undermine the efforts of other participants who were responsible for the legitimate developments of the Project. This issue was re-mapped in a number of different ways (e.g. Refer ‘Lines of influence’ Fig 83).

**Lines of influence**

A common characteristic of the maps described so far, is that the ‘value’ or meaning of the individual ‘terms’ (or node) may not be inherent (local) per se, but rather, established according to the connections brought to those terms in various ways (distributed). For instance, the meaning for a term may be an inherent quality within the network of terms or referenced to the reader’s experience or referencing
systems. In this sense, meaning and value is established irrespective of the number of explicit connections to other terms or nodes. (An example of a network with no ‘visible’ links is shown below in ‘Partnership Concept Map (terms)’ Fig 77)

The following set of maps overlap with the above set and reconsiders many of the concepts associated with participation within a context of ‘partnership’. Essentially, these emerged, not only the issues extrapolated from the interviews illustrated above, but also from analysis of other forms of on-going action and associated literature. For example:

‘Partnership’ is a term that, rather like William’s interpretation of ‘community’

‘Community’ can be the warmly persuasive word to describe an existing set of relationships, or the warmly persuasive word to describe an alternative set of relationships. What is most important, perhaps, is that unlike all other terms of social organization (state, nation, society, etc.) it seems never to be used unfavourably, and never to be given any positive opposing or distinguishing term. (1988; 76)

As mentioned in ‘Terms & Conditions’, the terms relating to partnership and represented in the map (Fig 77), were gleaned from more scrutiny of recent and relevant policy documentation, participant discourse (e.g. the LLP/ICT interviews)
and literature relating to social and organisation theories. Many of the terms also serve to indicate possible actions of participants. By reframing these concepts within sets or wider contextual framework - for example, by changing the central theme from participant to partnership, I established a number of further patterns for the terms. These are represented in the following map:

![Partnership Concept Map (sets)](image)

I then considered the above sets of concepts as a ‘sub-set of further terms such as those described in other narratives in the Research Section: for example, one set - perceptions, conduct, standards, values, beliefs, which have an ethical flavour; additionally these were applied to another set - convergence, open/closed systems, self-organisation, dynamics, change, opportunity, and distributed knowledge - in which case, the emphasis can shift towards notions of organisational systems, complexity and change. The complete dynamic model may be represented thus:
The outer terms not only refer to the potential qualities of a partnership configuration but also to various facets of the research literature that informed my emerging perspective relating to my research study. In much the same way that ‘participant’ was initially interpreted in detail, related to various lines of influence, and over time became symbolised in more abstract ways, the above model was similarly re-modelled. The collective detail embedded within the participant and partnership maps were subsumed into a single node which could take meaning from contextual references such as ‘education’ or ‘organisation’ as illustrated in the map, ‘Lines of Influence’.
A third group of concept maps represent a further distillation of processes of theorising described above. In these, the nuances and subtleties, the dynamics and evocative relationships that are implicit and explicit within the terms of reference are given more freedom. The sets are interchangeable in relation to possible hierarchies insomuch that switching the relationship between the ‘inner’ and ‘outer’ terms shifts the possible subsets and thereby creates new meanings. These concept maps have been incorporated into most of the narratives throughout this thesis. They are relatively simple representations insomuch that they embody the terms of reference that were part of the on-going dialogue of participants.
Participant’s membership within a specific community of practice was in part determined by their capacity to engage in appropriate, conventional terminology. (Refer ‘If Then Why Not Later’ and ‘Terms and Conditions’). The terms referenced in ‘Local learning agendas’ (Fig 81) were much like other terms of reference such as ‘learning’, ‘organisation’, ‘ICT’ - ‘everybody knows’.

Out of this world?

As mentioned in the above texts, when I was constructing my diagrams, I utilised facilities offered by computer software to build layers of relationships such that different categories or configurations of concepts could be more easily managed. More importantly, this process allowed me to re-conceptualise and symbolise action and its inherent dynamics and uncertainties. There were a number of limitations to the software such as, some maps were being designed and portrayed on a two-dimensional plane but conceived in a multi-dimensional way. The following text is an attempt to express my other ways of visualising and representing action, first by emphasising facets of the 3-dimensional plane; second by referring to the temporal dimension within a two-dimensional model; and third, by moving towards four-dimensional representations.

To return briefly to earlier descriptions of a network, a node can be used to objectify things such as a person, organisation, event or idea. The links serve to represent or evoke meanings to those nodes according to the nature of those links. My early models tended to use relatively simple terms of reference, which gained further meanings according to the applied contexts or relationships. For example, i) relations between three people (A/B/C) occurs; ii) from which, further actions or issues emerge:
I re-conceptualised such complexities of action in various ways as illustrated below.

**Fig. 82**  A/B/C relationships

's node script or referents?  

Fig 83 ‘Lines of Influence’ gains further dynamics from the links between the nodes. This is emphasised by changing the nature of the text such that most of the nodes are no longer words, having been replaced by more abstract symbols that refer, in this case, to specific participants[PM521]. The lines are ‘directional’ insomuch that the arrows indicate ‘influence’ whereby, the nodes principally become a conduit for the ‘energy’ that frames the nature of the relationships. As the lines energise the node(s), then the network becomes more dynamic, ambiguous and uncertain despite the additional meanings that can be attributed to the nodes according to the nodal relations.

The network evolved by tracing a series of influences and related outcomes associated with a single, relatively simple facet occurring within a part of the Rural Community Project’s development[PM522].
I also used Fig 83 to consider the notion of technological empowerment in relation to self-sufficiency, capacities of 'non-participants' engaging on the 'periphery' of formal organisational systems. This was in contrast for example, to those with (assumed) authority, working centrally within organisational entities, comprising stakeholders, seeking to provide technologically (ICT) based learning opportunities for those same (non)participants, thereby disregarding their capabilities and self-sufficiencies. Fig 83 was abstracted from sequences of events arising from day-to-day action.
Essential to this form of diagram is the potential from the relationships as that provides the key to the meaning of the nodal representations. This is evident from the way that these dynamics were harnessed within those relationships, or conveyed more explicitly through animations of such networks. (Refer ‘Network animation’).

As can be seen from the progression in the diagrams, my networks have moved from concept (objective/local) representations as in those suggested by Novak (1994; 1998). In his view of semantic concept maps the required conditions include: descriptive (local) representations (concepts), placed within a hierarchical network, with links indicating direction (flow), through a ‘proposition’ to a consequence. Mind Maps are similar to semantic networks or concept maps, though the intuitive arrangement of concepts do not ‘require’ or pay regard to hierarchical organisations within the system. This difference became a key to some of my networks insomuch that weights (as suggest by priorities, hierarchies, schema) that could otherwise determine (or be determined by) location within a network, or the number of links, would have required multiple representations of the same model. My designs moved further towards those principles expounded within complexity theory as I began to understand nodes gained significance from their place and interactions within the network to the extent that, without relating to that context or the interactions within it, the purpose of the node is doubtful, some would claim, ‘meaningless’.

In a distributed network ... ‘neither the nodes nor the weights have specific interpretations. The encoded information is not representations of coherent concepts. The representation is often referred to as being ‘sub-symbolic’ or as encoding ‘micro-features’ ... No weight has any meaning on its own. Furthermore, all the weights participate each time the network is presented with a pattern. This process of encoding is called ‘distributed representation’. (Cilliers, 1998; 68)

This is expressed by Krempel (1995) differently in his comment:

Typical network data describe one or two sets of nodes and the relations among, respectively between the nodes. The data do not necessarily contain, however, any information about the nodes themselves. A typical problem, which is solved by many network techniques is to classify the nodes on the basis on their direct or indirect links or even more complex information such as similarities or distances. (4)
This crisis of representation has been recognised from two different perspectives – one leading to an interplay between local and distributed modelling[^525], the other relating to the problem of conveying the meanings from networks to an audience. Part of that resolution is, if networks are to be retained as an essential representation of data, theorising and meaning-making, either taking to models back towards semantic networks or providing explanations for the networks themselves. This is in some cases akin to painting a picture in words.

Another way of working with network illustrations was to abstract yet harness implicit complexities to the point where these were symbolised as a single dynamic entity, where the node holds a history. This history may be embedded in such a way that the detail is hidden, or lost within the complexities of other action. The illustration below symbolises the inner and outer worlds, the current and contextual, the overt and covert, the obvious and less obvious.

Being able to interact with those details while also being able to stand back from them was fundamental to how I conceptualised action. The use of computer software that not only allows the design of 3-dimensional forms but, permits the user to interact within that model was a powerful way for me to reconsider my location within the network of complex human interactions. For example, the above figure shows an outer face and the inner world of a node. As the viewer adopts new positions in relation to that node, the notion of proximity distorts as new relationships become evident. Rather like walking around a room full of people, one attends to new and
different relationships according to the path one takes, how closely one looks, and so on. Moving away from the world of the node detail, it can become evident that it resides within a further world of relationships. This is conveyed by a further set of ‘snap-shots’ below:

![Fig. 85a](image1.png) ![Fig. 85b](image2.png) ![Fig. 85c](image3.png) ![Fig. 85d](image4.png)

**Fig. 85 Worlds apart?**

This sequence of snap-shots is taken from ‘Multiball worlds.3dmf’ (Refer computer disk), which is a ‘Quickdraw™’ interactive 3-dimensional environment wherein the reader can move around within and amongst the nodes. Within that representation the relative locations of the nodes are fixed. However, the sequence illustrates that according to one’s proximity or action within the network, it is possible to gain different perspectives. Simply relocating oneself then privileges or denies meaning, highlights of conceals relationships, even the notion of being. This highlighted various irresolvable issues, such as wrestling with the matter of detail when aspiring to a holistic framework. It also drew attention to the issue of representation insomuch that as ‘an outcome’ it can only ever be partially indicative of the processes.

**In the frame?**

One further interactive model that I developed was an attempt to capture the dynamic interactions occurring within a network of relations. The above illustration of the ‘Multiball worlds.3dmf’ (Refer computer disk) symbolises a dynamic, as do most of the other diagrams throughout this thesis. ‘Three Bees.projector’ (computer disk) provided a means to indicate other important findings from the research inquiry. These relate to the complex relationships between illusory and ephemeral
organisational constructs. (The illustration below does not convey the action within the animated model on the Computer disk). In the animation the movement of the three bees is determined by the position of the screen pointer. Each bee has particular properties that signify a capacity to adapt to external conditions in different ways. The largest bee initially responds to the pointer movement at the same rate as the other bees. However, it is the slowest to move and adapt to the evolving conditions (indicated by the moving pointer).

![3 Bees (snapshot)](image)

This representation reflected on the nature of organisational change occurring within the Projects and developments investigated in this study. This issue can be recognised within the diagram ‘Project timelines’ (Fig 15) where the graduated bars representing changes occurring within the different organisations are also indicative of the respective organisations’ capacities to respond quickly - the small or less bureaucratic organisations both needing and able to adapt to new opportunities, speculate, and implement change relatively quickly. The 3 Bees interactive animation and ‘Worlds apart’ model are also informed by the view expressed by postmodern theorists of organisational studies which, through the metaphor of ‘hypertext’ and ‘texture’, challenges the notion of organisational ‘reality’:

*The advantage of the hypertext metaphor is that it presupposes a relation between individual and organization which is by its very nature interactive, so that neither the individual nor the organization is fixed or motionless. (Strati, 2000; 69)*
A ‘metaphor’ is a figure of speech in which two thoughts about different things are simultaneously active and embodied in a single word or phrase, the meaning of which results from their interaction (Richards, 1936, 93). This ‘interaction view’ emphasizes that the ‘principle subject is “seen through” the metaphorical expression - or, if we prefer, that the principal subject is “projected upon” the field of the subsidiary subject’ (Black, 1962, 41). Starting from the premise that organizational thought is partial and limited with respect to the complexity and sophistication of organizational phenomena, Morgan (1996) proposed eight differing conceptualisations of organizations: Machine metaphor: Organic metaphor: Brain metaphor: Culture metaphor: Political metaphor: Psychic prison metaphor: Flux and transformation metaphor: Domination metaphor (though numerous other metaphors for organisation abound (Refer Aldrich, (1999); Reed, 1994; Strati, 2000; Gergen, 1997; Hughes, 1994; Handy, 1986) Morgan points out that metaphors encourage us to see the world of organization and management from a variety of perspectives, to think and act in new ways, extend horizons of insight, highlight the coexistence of diverse, paradoxical and even conflicting features of organizational life - each metaphor emphasizing some of them while simultaneously blurring and concealing others. Hatch (1997, 55) suggests postmodernists prefer ‘collage metaphor’ for it ‘reintroduces interest in contradiction, ambiguity and paradox, and redefines issues of power and change - that is, a ‘new’ artefact which exists ‘in its own right’, as happens with collage in the arts.

Defining metaphors as ‘viable alternatives for rethinking organizational theories’, Putnam, Phillips & Chapman (1996; 397) employ three further metaphors of ‘conduit’ (organizations as containers or channels for information flow), ‘lens’ (which assigns perceptive faculties to organizations - ‘eyes’, ‘to see’, ‘gate-keep’), and ‘linkage’ (where organizations are treated as ‘networks’ or ‘organizational webs with permeable boundaries and relationships that interconnect individuals’). Other organizational communication as ‘voicing’ and discursive practices’ stressed by critical and post-modern views of organizational life include: the metaphor of voice (communication is both the expression and suppression of the voices of organizational participants), and the metaphor of discourse (which considers communication as ‘conversation and text’).
Such metaphors suggest that there is a dynamic interplay between organization as ‘entity’ and ‘virtual’, where there is an interdependence between the entity and its function, of those within and without the organization, of how it can (never) be contained beyond a distributed, borderless, dynamic system of ideas and actions. Strati (2000) questions whether an organization really exists or whether it is only an infinite series of organizations constructed and reconstructed ad infinitum by subjects in the specific dynamics of their relationship with the organization’ (p71), and thereby corresponding to the notion of complexity as described in the above texts. Within the special environment of cyberspace, ‘the real, the virtual and the hyper-real have often ambiguous and indistinct boundaries’ and that within simulated space ‘there is no reason why the point of view of the person who makes the image and the person who looks at it should coincide.’ This suggests that simulation ‘excludes’ the existence of a ‘truth’ because ‘it is based on the emancipation of the sign from the real’ on the basis that only analogic representation (rather than digital simulation) ‘maintains a distinction between image and reality, false and true, virtual organization and real organization. Strati (2000; 73) picks up on Baudrillard, (1978, 1999) and suggests that, through hypertext,

‘We enter the age of simulation, with the liquidation of all referentiality; or rather, the artificial resurrection of referentiality in the signs system, ... where signs of the real substitute for the real itself.’ A subject constructs his or her ‘hypertext of the organization’, which is fashioned by artifice as well as by art. ‘It is the outcome of ways in which people view the organization, think it, feel it, appreciate it aesthetically, hate it, want to change it according to principles of civility or efficiency, or exploit it.’

Thus, the very concept of simulation stresses that the subject is not seated ‘in front of’ the computer, but is instead ‘positioned inside’ the model. Both the subject and the organization emerge altered from this situation, because the process of social construction involves both of them. This brings the discussion back to the problem of representation as identified for example in ‘Participation’ (Fig 63), indicated through the discussion pertaining to the development of nodal networks and 3D or interactive network representations (Figs 82, 84 and 85) and especially the potential to understand through the use of metaphor (as illustrated in ‘In Search of the Lost Chord’. Each provide an alternative form of representation but each still requires some sense of understanding that one can take to it, rather than assume, one may automatically gain from it.
It is important to stress that the processes described above and those encapsulated in the dynamics of the ‘Linked rings’ (CD animation) permeate the narratives in various forms throughout this thesis. Text does not easily offer the privileges or advantages of, for example, looking at a picture while discussing it with another, rather, its more like interrupting a piece of music in order to discuss it rather than talking over the music. This is explored more fully in ‘In Search of the Lost Chord’.
Fat Patches

The idea behind FAT patches (Fig 87) relates, in ‘scientific terms’ to a facet of fuzzy logic - the grey bit in between, the not-yest and not-no, something that is not on or off, where no hard line can be drawn between the ‘opposites’ as we live in a world of mixtures - and also indicating that fuzzy sets are ‘real’ (122). Fuzzy logic, according to Kosko (1994) refers to ‘multi-valued or vague logic’ and to ‘reasoning with fuzzy sets or with fuzzy sets of rules’ (292); ‘Fuzzy Approximation Theorem’ (or ‘FAT thinking’) says:

\[
\text{You can always cover a curve with a finite number of fuzzy, possibly overlapping patches - sloppy rules give big patches, fine rules five small patches. 'The less you know about a problem, the sloppier your rules. You tend to use fewer fuzzy sets and they stand for more things and cases.' The drawback of using finer sets is that this can ultimately lead to the situation where they lose their fuzziness, and subsequently, they 'lose their common-sense meaning'. (Ibid., p158)}
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This is represented differently in my version 'Fat Patches Applied' (Fig 1) and in other diagrams throughout the thesis. The notion of ‘trajectory’ within the setting of this thesis pertains to the path of emergence for the research study, the patches representing contextualised actions of the research study group and/or mine as researcher. This finds form throughout the thesis through the ‘Activity’ and ‘Research’ sections, with particular reference to this representation being more fully discussed in this narrative.

A distinction between 'Fat Patches' (Fig 87) and Fat Patches Applied' (Fig 1) may arise from the question regarding the trajectory or pathway, or rather, its absence. In one sense my path was one that emerged over time such that it became defined as the interrelationships between the specifics, the progress of time, and by the range and scope of the patches themselves – therefore, the path is represented by the breadth of the patches and encompasses numerous 'strands'. In another sense, the path may be formed by the reader’s process of engaging with the various narratives and the thesis as a whole.
This narrative provides a number of fat patches to construct a ‘collage’ as a means to consider general relationships between the interweaving narratives of the Research Section. ‘Starters Orders’ summarises my formulations of the emergent research opportunity while ‘Bound to bind’ describes the collective of my research study and thesis as an ‘intrinsic case study’. ‘Into the Thick of it’ explores notions of description and how ‘intrinsic’ and ‘complex’ might find some reconciliation. ‘Patching the Whole’ provides signposting to the interweaving narratives in the Research Section such that the interdependencies bring some cohesion to the relationships between visualisation, representation and experience, for ‘insiders’ and ‘outsiders’.

**Starters orders**

When I began this research study, there were three fundamental, known qualities that provided the focus for the inquiry, and which, over time, lay the foundations for my approach.

First, the context within which I was a co-participant provided me with a natural setting for the inquiry. It is framed as a collective that is best described as ‘a complex community of practice’. Although these organisational settings, the focus for the associated transactions and the ways in which they negotiated, responded to and influenced their environment was complex, the overall context was nevertheless, ‘definable’. Though this relationship between complex open systems and something that ‘definable’ is essentially a contradiction, Cilliers (1998) provides a means of dealing with this:

> Complex systems are usually open systems, i.e. they interact with their environment. As a matter of fact, it is often difficult to define the border of a complex system. Instead of being a characteristic of the system itself, the scope of the system is usually determined by the purpose of the description of the system, and is thus often influenced by the position of the observer. This process is called framing. (4)

The key terms of reference were: people from the education, business, government and community sectors, who formed partnership groups, for the purpose of negotiating means to provide and enrich learning opportunities within formal and
informal environments. This natural, unique sample was further framed by other key factors such as the research study period (1998-2004), geography (a small rural area within the South East region of England), and that information and communications technologies (ICT) were considered by the various partnership groups as offering an appropriate and effective means of providing further focus to their local learning agendas.

Second, it was clear that there was considerable uncertainty for the participants and their respective organisations regarding the future of their transactions. This case was in part, defined by specific participants and their respective participant groups within a particular, though complex socio-cultural context. This participant context was highly dynamic in the sense that its membership continued to evolve throughout the duration of the study. New agendas, projects and developments arose, changed and faded within different perceptual frames of reference. These variables, in turn, influenced and were influenced by the evolving groups as their respective identities were formed, negotiated and adapted to the emergent conditions. Key terms of reference at that time were the forming and reforming of partnership groups to negotiate 'potential opportunities' and 'developments' in highly dynamic, unpredictable conditions, and likened (by them) to 'treading on quicksand' or 'sticking jelly on the wall'. Their practice was by definition, pluralist[PM529], emergent, uncertain, distributed and dynamic. (Refer 'If Then ...', 'Weigh-in', Terms & Conditions).

Third, that this collective could be reasonably represented by my research model LOP/EBG (Fig 88), and that this would provide the research focus as these participant groups handled these dynamic conditions and established meaning to those potential transactions.
The outer ring conveyed two further uncertainties, one of which concerned the notion of environment and context as a means of framing or setting a notional boundary for action. The other, as represented by the terms influence and significance, highlights other important challenges I initially faced concerning the multi-dimensional qualities and scale of the study. That is to say, on one hand there were huge deterministic pressures, which, despite holding various ‘naturalistic’ guises, seemed to me to be incommensurate with the fundamental conditions for the study. These included, for example, matters of objectivism, bias, priorities, scale, and metaphysical claims (Mainzer, 1994; Chaiklin & Lave, 1996; de Laine 2000; Levinson, 2001; Nagel, 1974; Guba & Lincoln, 2005). On the other hand, other dimensional issues, about which I was unsure at that time, were later confirmed as being important to the foundational principles of the research, viz. the relationships between context, action, theorising and meaning, and which, as a collective of action, have the potential to hold different dimensional qualities and thus, hold major implications for the process of attribution and meaning. (Refer ‘Terms and Conditions’, reading the small print, In Search of the Lost Chord)

Thus, my starting point shaped my interpretation of ‘emergent research’. This, to me, meant finding and/or developing strategies and practices commensurate with emergent action, rather than simply applying predetermined means and conventions in order to handle practice. As indicated in ‘Fat Patches’ (Fig 87) the trajectory was

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Fig. 88 Research Model (LOP/EBGP[PM530])
indicative of the direction of the patches over time, rather than a deterministic approach that found form and validated by patches. Throughout the enquiry I had adopted a number of approaches that seemingly offered effective and efficient means to establishing, not only the nature and meaning of action, but also, how this might be visualised and represented. My investigation had to adapt to the changing circumstances of the research ‘Study Group’, to my day-to-day practice as co-participant, and in so doing, also moved around within and between different research approaches[PM531].

However, essential characteristics evident within the specific contexts-in-action and upon which my research opportunity was based were the very terms and conditions that were not fully reconcilable with some research approaches. Initially I had tried to apply approaches to the study resulting in a lack of conviction that these were in keeping with my research study. A key turning point was my realisation that commensurability between my approaches and study depended on my sensitivity towards the complexities of emergent action-in-context and my conviction that appropriate methodological tools could be found and applied. The uncertainties, the potential, the dynamics and differences associated with and essential to the life of open systems meant that I eventually discounted or adapted many otherwise seemingly appropriate, plausible, robust methodologies – yet these nevertheless informed my subsequent approach and were at times, invaluable methodological tools.

To briefly explain, this last statement about the emergent nature and eventual definition of the case was a key issue for my research study. First, when I began my study, the research methodology course in which I participated (1998) strongly emphasized scientific method, objectivity, empiricism, etc., and while there were sessions based on other methods relating to for example, ethnography, or constructivism, these were also underpinned by naturalism, objectivity, by virtue of the methodological steps (e.g. in symbolic interactionism or Kelly’s Personal Construct Theory where human interaction / experience is mediated by the use of symbols and signification within sets in order to indicate meaning/s). Second, I wished to focus on the ‘real-world’ contexts in ways that seemed to relate more
closely to experiences in the field, as participant, not in the sense of a researcher from a different community of practice intruding, as an outsider, but rather from the perspective of insider, colleague, connoisseur, bricoleur, co-participant (as illustrated in Terms & Conditions). Third, my background in the arts influenced my view that most things could be objectified[PM532], and that this process and product of objectification could be a fruitful means of enhancing and extending understanding. Illustrators, throughout history, have sought ways to represent or objectify abstract ideas such as God, unicorns, magnetism, electrons and madness – while the scientist Sagan explores possibilities for geometric constructs such as tesseracts and 4D hyperprisms, Hawkins’ (2001) ‘Universe in a Nutshell’ offers the suggestion in diagrammatic form for ‘multiple’ (that is, fourteen or more), ‘dimensions’. Such constructs are visualised or theorised differently by artists such as Dali and Escher. Likewise, various notations, symbols and codes, or critique each offer ways of objectifying ‘abstract’ ideas and ‘forms’. These may each provide a means by which the essence of, for example, mathematics, music, dance, expression, experience, or aesthetics may be theorised, find form, be represented and communicated. The problem of symbols and codes intensifies if/when these remain intangible (cognitive function), yet ‘evident’ in the sense that they may be ‘manifest’ through actions and/or media that allows or encourages certain freedoms of interpretation and meaning making. This view also embraced the view that some representational forms (e.g. sound, music, performance, improvisation, experience) could be fully objectified, and explained, ‘realistically’ within the (modernist) notions of truth/meta/grand theory, it should also respect the place of subjectivity, the uncertain, of difference, aesthetics, and the divine.

As explained in reading the small print and One in the Eye, over time, my reading, experiences with the Study Group and struggles to find a suitable methodology, led me to explore (through what started as concept and discourse analysis, concepts maps and later became interactive networks) a number of other ways of visualising (observing, recording, decoding) contextualised experience, encoding and representing that as data, process, narrative, theorising and meaning-making in terms that respected the conditions from which they emerged (pluralist, ambiguous, different, uncertain, dynamic). Through those various forms of representation (verbal presentations, narratives, models, transcripts, findings, etc.) I was able to theorise
action, revisit participants to verify, triangulate and develop a broader perspective and understanding of ongoing contextualised participant action. Commensurability emerged over time through my readings on complexity, connectionism, Organisational Theory, and gaining deeper insights into case study research.

By scrutinising the research literature for foundational principles and practices, reflecting on how these had or could relate to the evolving actions of the Study Group, my research naturally emerged in a form commensurate with that of ‘case study’. The issue of multiple or mixed methods approaches, techniques, narrative styles outlined by Stake (1995) had some resonance with the key qualities and dimension of my case. (Refer ‘Bound to bind’)

**Wave power**

This process of finding an appropriate means, or ‘fit’ for reflecting upon and engaging in real, emergent action-in-context meant reconsidering, for example, the means of accruing insights about the observable and the ‘unobservable’ and discovering the relevance of the known and the unknown. (Refer reading the small print.) It required developing the capacity to not simply change my ideas about what was meant by the ‘terms of reference’ but also to be able move relatively comfortably between and accept the range of possible and/or shared interpretations, irrespective of whether these dynamics were influenced by and/or reframing ongoing action-contexts that gave them some meaning. ‘Wave power’ refers in this sense to the innate energy that travels through a medium by transferring that energy between the components of that medium without necessarily causing any permanent displacement of the medium.

As conveyed in *One in the Eye*, it meant moving flexibly between, for example, formal ‘interviewing’ and informal ‘conversation’, each requiring different means of collecting and corroborating possible meaning - on numerous occasions conversations occurred incidentally, in places such as the corridor, pub, car park. In those circumstances I may not have had a means of formally recording that conversation (e.g. onto tape, notes) in *situ*, though there was no guarantee that
anything significant would emerge. Similarly, recording formal meetings or interviews was no guarantee that I would acquire important data, enable me to triangulate, verify or further enrich my previous findings.

As evidenced throughout the Scenarios, it meant being able to ‘read between the lines’ and relating (possible, multiple) interpretations to ‘conventions’ of ‘practice’ despite ongoing differences and variations that occurred within and between ‘observed’ events, occurrences and emergent issues. It meant embracing methods and practices that allowed flexibility when defining, capturing, representing the fluid terms of reference, engaging in processes of theorising, and representing multiple voices, interpretations and/or perspectives. It required flexibility in handling terms that appeared relatively stable by being able to adjust my distance to emergent practice and seemingly reliable terms of reference (such as ‘participant’, or ‘experience’, particularly as these were repeatedly re-contextualised) and recognising the dynamics and uncertainties associated with ‘participant’ action. What initially seemed to be convenient boxes and descriptions, conventions and means of establishing ‘outcomes’, faded as the boundaries of action became more dynamic, permeable or ambiguous.

That my research study occurred over a long time period (1998-2005) in one sense provided a condition that ‘allowed’ characteristics that are defined as ‘complexities’ to emerge. Complexity was not something I actively sought or initially chose to cultivate. It would have been easier to do what many other researchers do – recognise complexity, comment upon it as if it was part of the wallpaper, and then ignore or overcome it, yet, bring it back into the equation during the concluding generalisation.

Relationships between people and outcomes changed and grew (temporally, spatially and ideologically) such that preconceived boundaries blurred, overlapped and took on a new dynamic as new and greater potential arose. The notion of ‘focus’ moved from ‘looking in’ or ‘looking for’, to ‘looking around’, more and again, and ‘looking out’ (in more than one sense), such that it informed the ‘looking across’ and ‘looking between’. Without the extended time commitment, I doubt that I would have
questioned some concepts (e.g. participation and involvement; ambiguity and difference) as these may not have become evident, or the premise behind methodological principles and practices, to the same extent, if at all. For me, the ‘convenience’ of briefly intruding into the lives and contextualised actions of ‘other people’ and taking a short-term snapshot implicitly acknowledges and absolves the conventions of transitory research. The relatively superficial intrusion appears to legitimise the means to ‘test’ those practices (research and researched) and the terms by which the de-contextualised ‘findings’ as endorsed through theoretical abstraction are held to account against (new) criteria set and judged by those from a different community of practice, or ‘outsiders’.

**LOP sided?**

Thus, emerged a further crisis of representation - not only in terms of the dynamic relationships between detail and the notion of holism, but in finding a means to convey some essence of ‘outcome’. In one sense, an outcome of the inquiry can rest with the original research model (Action Focus, Fig 9). The main difference being, that at the beginning of the inquiry, it seemed that participants used the terms with considerable ease as if everyone ‘knew’. Yet in coming together, over time, it became clear that everyone knew, *differently*. Those ‘differences’ had the potential to enrich the meaning of the terms and the potential opportunities being considered, but for the fact that those differences mainly found expressive form through action that challenged the very nature and values of those essential differences. That is to say, a huge amount of time was spent in negotiating the potential manifestation of principles without negotiating or agreeing the foundations of those principles. Yet, when those manifestations clearly indicated differences of interpretation of those principles, it was then difficult in some cases for people to then handle those differences. (Refer Scenarios 2, 3 and 4).

Thus, while the research model LOP/ICT (Fig 38) remained a fundamental focus for me throughout my research study, the main shift that occurred was in how participants brought meaning to those terms, as referenced, through contextualised action. In the beginning the terms embodied ‘meaning’, at the end of the research, they embodied ‘different meanings’ (Figs 88, 49 and 32). ‘Different’ may have
referred to there being more than one meaning, some view or insight about how or where those differences may have been located, differences over time, perhaps through hindsight, or that meanings had become re-contextualised, abstracted, theorised, perhaps against different conditions or criteria. That those meanings were more complex, contradictory, evasive, dynamic, abstract, and so on, challenges the essential proposition that they became more *meaningful* or more *meaningless*.

Holstein & Gubrium (1998) posit that

… meanings are essentially indexical, i.e. they depend on context - objects and events have equivocal and indeterminate meanings without a visible context, and it is only though situated interaction that objects and events become concretely meaningful; the circumstances that provide the context for meaning are themselves self-generating - interpretive activities are simultaneously in and about the settings to which they orient and that they describe. Socially accomplished realities are thus reflexive; descriptive accounts of settings give shape to those settings while simultaneously being shaped by the settings they constitute. (142)

As Cilliers (1998) maintains, ‘opposites (indexicality and reflexivity) are unavoidable features of social reality’ (143). This important point is discussed further in *In Search of the Lost Chord*. It also underpins the development of my connectionist networks, as outlined in ‘reading the small print’ and my descriptions of context, as provided in ‘Terms and Conditions’, ‘If Then … ’ and within each of the scenarios.

The ongoing shifts in emphasis within, between and for ‘learning’, ‘organisation’ and ‘partnership’, in one sense, meant that some semblance of balance remained if only in the notion that (re)organisational partnership action, as a means to consolidating and enhancing learning opportunities, was an integral quality to the claimed purpose of the partnership. On one hand the ongoing rifts and shifts ‘energised’ the partnership for what it was; on the other, ‘learning’ was generally a term that participants within the LLP used in general terms, to refer ‘others’, such as the beneficiaries (or recipients) of organisational / partnership practice. So despite ‘learning’ being an ideal that related both to the principles and processes of developing partnership practice, the ‘evidence’ of ‘learning’, as something attributable to the changing conditions of partnership practice, was less ‘tangible’[PML39].

**Bound to bind the unfettered?**

My scrutiny of the research literature for foundational principles and practices and reflection on how these had or could relate to the evolving actions of the Study Group led me to believe that my research was commensurate with that of ‘case study’. The issue of multiple or mixed methods approaches, techniques, narrative styles outlined by Stake (1995) had some resonance with the key qualities and dimension of my case[PML40].
‘Starters Orders’ outlines the essentials for my ‘case’ – that the natural conditions provided a boundary for what was to be studied and served as an inherent part of something that defined and framed what was to be studied. My approach for the study was to respect the natural condition and reflect on the case holistically and organically. This thesis, in the form of an intrinsic case study, could be described as a ‘detailed description’ of a complex ‘case’. What the case study is about (participant action within various partnership configurations) is encapsulated within and across the interweaving, descriptive narratives throughout the Activity Section. My construct has been further informed by Stake’s view of ‘Case Study’ (1995) in the sense that ‘it looks for the detail of interaction with its contexts’. It is also the exploration of ‘particularity and complexity’ and a means of ‘coming to understand its activity within important circumstances’ (2PM541). Thus, it was undertaken in ‘contemporary real-life contexts where the phenomenon of interest is interdependent, or enmeshed with the context of study (Yin, 1994). In the sense that the case has notional, unique ‘boundaries’ set by some specificity such as locale, time and place, culture, groups, policy, processes and activities, issues or opportunity, methodology, perspective and writing, it represents ‘a system’ (Stake, 2005).

Stake (2005), Yin (2003), Hammersley & Gomm (2000), Patton (1980), Denzin (1994), Creswell (1994) and Becker (1982) have each expounded on the virtues and idiosyncrasies of case study research such that this thesis can fit relatively comfortably within those descriptions. Nevertheless, beyond those generic descriptions, there are both controversies and confluences that arise, according to the ‘when’ or ‘how’ these writers have located cases (within for example, education, organisational studies, healthcare and so on), and referenced respective paradigms, approaches, perspectives, historically, epistemologically and/or ontologically. While these advocates seem to accept the interrelationships between action and context as a way of situating, describing and/or explaining phenomena, various precedents have also been set, in part, on account of the long history of case study research, and that they have been located within qualitative and/or quantitative approaches, both modernist or postmodernist (Luck, Jackson & Usher (2006). Flyvbjerg (2007) explored some of those idiosyncrasies in his paper ‘Five misunderstandings about case-study research”[PM542], supported by Lincoln in ‘The only generalisation is: there is no generalisation’ (Lincoln, 2000) while Stake (2005) has sought to counter
another argument - that it is important to understand what the case is ‘a case of’ (Ragin 1992). On one hand, the clearly objectivistic undertones of Ragin’s argument have foundations in empiricism and suggestions that ‘cases as objects’ are in some respects ‘pre-determined’, thereby supporting the ‘identification of variables of interest’ and ‘seeking causal relationships’ (ibid). Stake posits alternatives whereby ‘the researcher adopts a position of openness with respect to the case, allowing the case to emerge inductively through an interpretative research process’ (Luck, 2006). Hammersley & Gomm (2000) contribution to this debate prompts the suggestion that ‘causal vs. narrative analysis and authority vs. authenticity need to be addressed’.

In response to Ragin’s analysis for a ‘variable-orientated approach’, Stake counters this (2005) by identifying three types of case study: a) intrinsic, wherein the researcher is interested in a particular case in, and of itself; b) instrumental, which refers to an interest in a particular case with a view to examination of an issue for insights; and c) collective, involving ‘the collection of data from a number of cases to understand a particular phenomenon’. The key difference between the intrinsic and instrumental case study is not ‘the case’ per se, but rather ‘the purpose of the study of the case’. He also points out that ‘the more the intrinsic the interest for the researcher in the case, the more the focus of study will be on the case’s idiosyncrasy, its particular context, issues, and story’ (459). To recapitulate, there is the matter regarding what the case is ‘for’, what the case is ‘about’, and what the case might be ‘of’. Otherwise, this might be reframed as ‘purpose’, ‘description’ and ‘derivation/cause’ respectively.

Before providing my own perspective on the preceding arguments, I shall bring two other considerations to the fore. First, Ragin’s argument was documented in 1992. In 1995, Stake’s reference to ‘the boundedness’ of the case (and thereby drawing attention to it as an object rather than a process or system), was not that distant from that of Ragin. Nevertheless, Stake’s later discussion that referred to ‘intrinsic, instrumental and collective’ cases is documented 10 years later. Over that time, not only have notions about objectivity and subjectivity in social research moved on significantly, his reference to complexity has likewise moved on to the extent that he brings to the fore the notion that ‘a case study is expected to catch the
complexity of a case’, about the need ‘to force attention to complexity and contextuality’ and that the case represents ‘a system’. However, the lack of further explanation about what he (and other advocates of case study) actually means by ‘complexity’ required reference to other sources, such as those provided by, for example, Cilliers (1998), Osberg (2003), Kemprell (1995), Mainzer (1994) or van Geert (1994).

Into the thick of it …

My study was about partnership transactions within a unique setting. Its purpose was to observe partnership action in context in order to develop a view, through description, about those transactions. That view has been portrayed through different voices, description of action in context and through narrative form. It has been evident through reference to research literature and various theoretical constructs, perspectives and approaches that bring some coherence to the fundamental concerns of the study. My narratives serve to distil contextualised action through description in terms that sufficiently and appropriately convey the peculiarities of participant action within a unique setting. The following briefly explores the matter of ‘description’ by referencing some of the research literature and how this corresponds to my approach. It serves as a bridge between the other narratives in the research section, and that provided in ‘Starters Orders’ and ‘Bound to bind’.

Thick, thin, deep, wide and beyond …

‘Thick description’ (Stake, 1995; Yin, 1993; Hammersley & Gomm, 1998), is a process which involves ‘an in-depth description of the entity being evaluated, the circumstances under which it is used, the characteristics of the people involved in it, and the nature of the community in which it is located’. Thick description also involves interpreting the meaning of demographic and descriptive data such as cultural norms and mores, community values, ingrained attitudes, and motives. In a sense, there is some fit with my case description, though the above is an elaboration to that proffered by Geertz (1973) where he makes a distinction between ‘thick’ and ‘thin’ description[PM546] (derived from Ryle’s philosophy of mind).
As a semiotic concept, “culture is not a power, something to which social events, behaviours, institutions, or processes can causally be attributed; it is a context, something within which [interworked systems of construable signs] can be intelligibly—that is, thickly—described.” We must ever be attempting to uncover “the degree to which [an action’s] meaning varies according to the pattern of life by which it is informed. Understanding a people’s culture exposes their normalness without reducing their particularity.” (14)

It is further informed by Atkinson and Delamont’s discussion on analytical perspectives (2005; 832).

Thick description is too often used to convey the sense that ethnographic accounts are densely constructed with graphic and detailed cultural descriptions. Although this may be the case, it does not really capture the specific analytic force of Geertz’s idea, which is clearly intended to capture the degree to which cultural matters are overdetermined in the sense that there are multiple codings that generate meaning.

There are, as Geertz stressed, multiple perspectives or interpretative frameworks, that is, multiple motivational frames that inform social events and actions. An insistence on the intrinsic forms of culture and action give a particular force to the notions of thick description, as discussed below.

This notion of thick description can be compared to Cilliers’ (1998) understanding of the process of being able to describe a complex system. Key to this particular theme is that defining the border of a complex system is ‘difficult’ and usually determined by the ‘purpose of the description of the system, and is thus often influenced by the position of the observer’, a process called ‘framing’ - that description will in turn be established by our ‘distance’ from the system (4). In that sense his further comment that elements are ignorant of the behaviour of the system as a whole such that complexity emerges as a consequence of the interactions within the system wherein context is encoded as part of the description of the representation (72).

Arnheim (1974) provides another perspective to the processes of description where the problems of objectification, description, deduction through perceptual mechanisms that account for the ‘visual facts’, the implicit (subjective, experiential, summative) and inductive qualities are more representative of ‘art’ as meaningful, feelingful expression (16). Key to this is the notion that, in order to understand, it is
necessary to face ‘it’ as ‘a whole’ and to look beyond the simple objective mechanisms (technique and medium) towards the integral dynamic qualities that proffer a theme or idea and that serves as a foundation for meaningful engagement (11). This line of discussion regarding ‘description’ is taken up again in my summative narrative, ‘In Search of the Lost Chord’.

**Case description**

My thesis is an attempt to give a realistic description of participant action within a specific setting. Through the presentation of some of its particularities it offers a synthesis of the complexities of that community of practice in terms of its actions as influenced by a range principles, motives, constraints and issues. It highlights a set of distinct yet overlapping issues and practices that collectively represented that community of practice at a particular point in time. It encapsulates a body of knowledge, understanding, skills, and beliefs of, and about, their actions whilst working in various partnership configurations. Through a variety of perspectives or lenses, the reader can reflect upon those actions and issues that were, and continue to be topical.

Through my long term and close involvement with that participant group my study emphasised certain opportunities and complexities pertaining to and subsequently informing processes of visualisation, representation and realisation about practice in the context of that participant group. This relationship and growing insight had a major influence on my actions as a researcher such that my research developed not only in response to the evolving complexities of participant action but also to the additional influences of the research community of practice.

**The case in hand**

My case study as a singularity{PM548], represents those interdependencies between my participant action within two communities of practice, the research study group and the research community. Furthermore, my ‘case study’ became more than something that solely defined or was defined by: a particular (or set of) methodological practice(s) (Flyvbjerg, 2007); or as a particular methodological
construct (Yin, 2003); or by the unique set of circumstances (Luck & Jackson, 2006); or as a strategy to solve a practical problem (Osberg, 2005); or for instructional purposes (Stake, 1997); or to necessarily to find/make ‘a case for’ something (Ragin, 2003); or to establish causal relationships; or as a means to make a generalisation within the context of a particular meta-narrative or grand theory (Lincoln & Guba, 2000); or, according to Stake (2005), being either instrumental or collective. The case study is a fusion of those qualities or practices.

Each facet of the study, each of the associated principles, practices, methodologies and issues not only provided means of triangulating, not just as a method to verify (through generalisation, falsification and corroboration) (ref Starter Orders) but as a way of holistically, unifying, bringing cohesion, congruence, and coherence (Furlong 2005). My case study encapsulates qualities of the intrinsic, instrumental, and the collective, of the peculiar and the generalisable, and of the principles and approaches of two communities of practice as they intertwine, develop dynamic, changing interdependencies, and highlight yet, also complicate, causal and casual relationships, descriptions, meanings and explanations.

It does not seek to ‘make vague’, but rather, retain something of the holistic, complex, different, uncertain, and dynamic nature of ‘the case’. In that sense, it is why I defined the study as a single, ‘intrinsic’ and complex. However, as Cilliers points out (1998; 4)

> Complexity is the result of a rich interaction of simple elements that only respond to the limited information each of them are presented with. When we look at the behaviour of a complex system as a whole, our focus shifts from the individual element in the system to the complex structure of the system. The complexity emerges as a result of the patterns of interaction between the elements.

Cilliers goes on to explain that this ‘catch 22 situation’ is problematic in as much that ‘a model that reduces the complexity, while being easier to implement becomes non representational’ (ibid; 70). This corresponds to Lyotard’s notion of micro-narratives that tell different stories about what they know and what they do. Their (facets of) knowledge does not take the form of a logically structured and complete whole, but rather takes the form of narratives that are instrumental in allowing them to achieve
their goals and to make sense of what they are doing (Lytard, 1984). Since these narratives are all 'local', they cannot be linked together to form a grand narrative that unifies all knowledge. The postmodern condition is characterised by the co-existence of a multiplicity of heterogeneous discourses ... (Cilliers, 1998; 113) (Refer: Navigation)

The case is, in itself, 'what the case is of', that is, it serves to emphasise the holistic complexities of participant action arising as a consequence of itself. In that sense, it emphasises the notion of poiesis (as the process of creation and cultivation), if not autopoiesis (as a form of reiteration, regeneration as a self-representational form; Maturana, 1980). Likewise the capacity for self-organisation is a property of complex systems which enables them to develop or change internal structure spontaneously and adaptively in order to cope with, or manipulate, their environment (Cilliers, 1998). This goes some way to respond to Ragin's (extraneous) concerns (1992) about case definition, though, as Stake points out (2005; 444) Ragin was seeking 'theoretical generalization, justifying the study of the particular only if it serves an understanding of grand issues or explanations'. This may be partly countered by the view that 'justification' for something need not rest solely on extrinsic criteria or conditions - justification based on proposition or belief (perhaps in the form of warrant, rationality or probability) can in turn be contextually or socially determined, such that intrinsic value is essentially an ethical or philosophical property.

As evident throughout the thesis narratives, there are numerous ways of articulating, situating and/or justifying the sense of emergent, generative process of meaning making, or knowing. In 'In Search of the Lost Chord' I chose to use the metaphor of musical improvisation through performance as a rich and dynamic means for developing and articulating ideas within an action setting. By referencing those processes to the arts, it embraces the inherent ambiguities, semantics, inter-subjectivities of complex partnership action. Furthermore, it draws attention to the fact that while issues may be visualised, problematised or handled differently by the arts and sciences, their various concerns also overlap – the point here being that each could learn from and enrich the other – neither being the solution in itself, but rather an additional way of knowing.
My case study offers a contemporary focus within a real life context, the result of which has already informed the practices of that participant group, through my interactions and their interests in drawing upon my understanding of the case. That reiterative process broadened my own insights and informed my practices within the context of both the study group and in terms of my research practice. That process of inquiry also included the presentation of ideas, issues, practices and questions to the research community through a number of research conferences. These were an important means to test evolving theories, such that these provided a further feedback look, particularly with regards to the development of my various research models and situating my understanding about network theories within the wider research context and within my own study.

For the study group and myself, the insights from engagement in action shifted the emphasis from the ‘known’ or the potential about the ‘unknown’ more towards the process of ‘knowing’, essential to which are processes of dealing with difference, doubt, change and action. As stated by Witkin (1976), the terms ‘knowing’ and ‘action’ refer to one and the same process. ‘They are the project of an object medium through its behavioural medium and vice versa.’ (9)

The issues that emerged from the case study largely arose from a set of interrelated properties or dimensions that were as topical during the research study period (1998-2004) as they are today. These issues or complications arose from:

- things being complex, emergent and partial
- things being dynamic, uncertain, unstable, and (requiring or leading to) change (both planned and emergent)
- things being different (within and between; initially, during, eventually)
- differences in the visions, purposes, means, motives and notions of mutuality of, or for, all players – all players referring not only to ‘partners’ or stakeholders, but also including beneficiaries
the differences of opinion about the relevance of those complexities, whether they were an ‘issue’, a priority, and for whom or why; and whether these required, or justified the energy to manage them, or whether these differences could be accepted as being representative of ‘the partnership’ as a whole, with a life of its own as it ‘learned’ and made its actions meaningful.

**topicality?**

In one sense, these issues are relevant, not only to the research community but also to newly evolving partnership configurations, particularly those that transpire from or between people or groups from different organisational setting, different sectors, and for those wishing to somehow strengthen a notional bond or practical benefit from ‘learning’ in and through partnership action.

In general terms, both the research study group and the research community represented those who believed that those dynamics and uncertainties and complexities represented instabilities, doubts and problems that were to be avoided, controlled, normalised or resolved in some way. Both communities of practice also represented those who believed that the dynamics, uncertainties, differences and potential of partnership contexts, actions and relationships were indicative of the complexities within their own organisational practices and that these differences therefore invigorated and justified the benefit of engaging in evolving practices of partnership and learning.

The enthusiasm and energy that was focused on those issues, gave life to the partnerships. Over time, that life, that energy, fluctuated as emphasis shifted between those stances, as practice emphasised the advantages and disadvantages of either stance, and until such time that the partnership configurations have evolved beyond that energising principle. The point at which partnership action became routine, normal or predictable, coincided with: the end of my research study. Furthermore, it not only coincided with the point at which many of the key ambassadors who initially energised the partnerships left and focused on other developments, and also, the point that these transitory partnerships became
reconfigured as a Local Strategic Partnership. These new Strategic Partnerships were both a move by central Government to reduce the number of learning partnership organisations, and a means to relocate these under the control of the local authority.

In another sense, the above issues particularly highlight the matter of visualisation, representation and realisation. As a researcher, the complexities, dynamics and uncertainties raised a number of technical, ethical, theoretical and aesthetic difficulties, as discussed in Navigation, in each of the narratives in the Research Section and as also embedded in other narratives in the Activity Section. They encompass the problems of: handling scale, scope and complexity of transactions; the problems of multiple, changing, uncertain meanings, perhaps due to ambiguity/semantics, and the range of beliefs about known/knowing as intrinsic/extrinsic, subjective/objective; the emergent nature of the study in terms of dealing with the ‘potential’ of the (un)known and the ongoing processes of meaning-making; and the ordeal of constructive, destructive and restructuring of the case as a holistic narrative; and how these complexities find representational form, structurally, graphically and through narrative. Such problems led me to conduct a (meta)analysis of methodological practice in order to understand how the transformation of and transitions between ‘experience’, ‘data’, ‘analysis’ and ‘(re)presentation’ of the essentials might occur (e.g. ‘Basic formula’, Fig 62, various (local) concept maps, (distributed) networks such as ‘Participant’, Fig 63, and ‘Network Models’ Figs 12 and 83 that were based more on network and complexity theories). This was discussed as a holistic interdependent process that I also related to ‘context’, ‘action’, ‘theorising’ and ‘meaning’ such that it led to the development of important methodological models (e.g. CATM, Fig 56; Linked Rings, Fig 58 and interactive 3D models such as ‘Worlds apart’, Fig 85). As discussed in One in the Eye, my exploration and use of 2D, 3D, 4D and interactive models were an important way for me to move from dependence on local to distributed representations of experience, associated complexities (as outlined above) and find representational form as a thesis.
Patching the Whole?

To return to the diagram Fat Patches (Fig 87), this concluding strand explores, in another way, the notion of trajectory. I have stated in Navigation and Starters Orders that the trajectory was a consequence of emergence rather than a deterministic approach whereby the patches were means to verify a pre-determined view. Hence the suggestion that my trajectory arises from the interweaving (micro)narrative descriptions and representations that give breadth and scope to the patches themselves, yet holding to the notion that there was nevertheless a path of development and realisation over time. Within that path were, nevertheless, expectations and assumptions from different communities of practice regarding the purposefulness of that enquiry, those contextualised forms of participant action and from the meanings that may be ascribed or derived from this venture. In that sense, it questions the notions of its integrity and trustworthiness and or value, not only within the participant contexts, to ‘insiders’, but within a wider dimension, to ‘outsiders’ (Furlong & Oancea, 2005). The following provides views that support related texts pertaining to ‘me’ to principles of ethics and validity (in Terms & Conditions), and to the important question about ‘knowledge’ – where and how this may be ‘located’ in relation to the notions of product and/or process (In Search of the Lost Chord).

From end to end

The narratives in this thesis are retrospective, abstract and partial accounts that, whilst written with hindsight, are a struggle to handle and convey emergence and associated uncertainties integral to the study. They each provide a platform to juggle with generalisations, yet founded on and supported by raw data, and as interweaving articulations that wrestle with processes of visualising, realising and representing key processes, issues and products of the inquiry. As explained in Navigation/Structure, integral to each narrative are the further conditions that: each encapsulates context, action, theorising and meaning-making in addition to different/interweaving forms and layers of analysis. Those layers might be conveyed as in-situ, informed by retrospect, hindsight and/or through insights gained through contextualised experience, particularly by drawing upon experiences gained in and conveyed through other scenarios and reflecting on research literature. Thus, the accounts cannot and are not isolated cases but components of the entire case.
Essential to the perspective imbued within the thesis is my dynamic role as co-participant and researcher. My contribution to the contextualised action, the study, the thesis, is conveyed throughout by a narrative style that does not necessarily struggle to be insider or outsider, as if that might resolve a methodological or technical issue. Rather, it celebrates the highly privileged unification of me as both participant and researcher. In the early stages of my study, I was led to believe that this duality was an issue, such that a clear distinction had to be made between me as one thing or another, as it had significant implications for ‘objectivity’, for ethical and methodological trustworthiness, as if making a distinction between my roles somehow enabled me to become a different, better person.

Perhaps the issue is not so much whether I was an insider/outsider, but to what, as determined by whom, such that this then somehow denotes or implies ‘an issue’, whether this somehow ‘tarnishes’ the possible contribution that could be made by one who cannot, or does not want to make such a distinction, possible though it may be. I strongly maintain that the practice of the Research Study Group were enriched, not solely because I brought to it a perspective that was informed by my own research interests and processes, and further supported by the influences of research literature. It was also enriched by the diversity and complexities of other personalities who were involved in many different ways, as teacher/s, manager/s, parent/s, student/s, clergy, social worker and so on.

Further evaluation

As a researcher, my ongoing concerns that I was conducting my research ‘appropriately’ were exacerbated by being a participant in two quite different communities of practice and by working within uncertain and emergent conditions. The challenge of handling my doubts and concerns about my own practice was not solely limited to technical issues, whether for example, I had chosen an appropriate and effective way of visualising, capturing, coding, representing experience as ‘data’; whether that process was ‘properly’ and ‘effectively’ analysed such that further theorising and interpretations were ‘rational’, ‘truthful’ or ‘reliable’; and whether I had taken the ‘right’, or ‘sufficient’ measures to check ideas, issues, findings against
other experiences, other events, other data, other people’s views, and so on. Those problems were intensified by the conditions of the study such as: the cycle of ‘data’ (as an interpretation of action) leading to further analyses that became operationalised as a further form of participant action leading to the creation of new experiences or ‘data’; handling the dynamics of experience that lay within and between ‘action’ and ‘context’, central and peripheral, detail and issue, significant or otherwise, and according to temporal and ideological shifts such that those notional distinctions became redefined according to a new dynamic that did not fit easily with certain theoretical interpretations. (refer reading the small print and One in the Eye)

These overarching concerns were ongoing and considerable such that these contributed to my exploration in (and further doubts about) many different methodologies, approaches, perspectives, narratives, styles, definitions (see Evolving assumptions, Fig 45). They led me to question the purposefulness of the act of engaging in and extending my own knowing and learning, and how that might (then) correspond to that of others. By participating in numerous facets of the research study group’s activities I could partly allay some of my concerns insomuch that evidence and findings recurred in various forms and/or over time. Furthermore, my ongoing interaction with co-participants, or partners, was such that through direct dialogue with me, from their own various perspectives and through their various forms of engagement in ongoing action they could verify or dispel my concerns. Through to the time of submitting the thesis, some colleagues continued to contribute to my research study by reading and commenting on my evolving narratives and ideas. Therefore, my system of analysis was internally framed and substantiated by corresponding and verifying my views to those of others upon which my analyses had evolved.

A further concern then arose as to whether that ongoing and comprehensive process of participation, research process, of triangulation, of internal and external validity, within the context of what has been described as a unique setting, would sufficiently or appropriately satisfy the interests of ‘outsiders’. For example, with ‘insider’ research, the concept of validity becomes increasingly problematic for some, because of the researcher’s involvement with the ‘subject’ of study. Positivists may
argue that, because of this involvement, the researcher is no longer ‘objective’ and their results may be distorted. Thus, from this essentially correspondence view of validity – whereby ‘valid’ or ‘true’ knowledge corresponds to an objective world – the validity of insider research is threatened (Kvale 1995). On the other hand, neo-positivists and anti-positivists claim that, because complete objectivity is impossible, the researcher’s biases threaten validity or trustworthiness.

There are also many cited advantages of insider research. Some argue that insiders have a wealth of knowledge to which the outsider is not privy (Jones, quoted in Tedlock, 2000). It is argued that interviewees may feel more comfortable and freer to talk openly if familiar with the researcher (Tierney 1994). From an anti-positivist perspective therefore, ‘insider research’ has the potential to increase validity due to the added richness, honesty, fidelity and authenticity of the information acquired. Problems arise however, in those cases where one’s ‘authenticity’ requires validation, which, if presented as essentially valid, is actually asking to validate validity (Goldkuhl, 2000). Put another way, there are disputes that ‘validity’ is a valid requirement – in much the same way that a Mozart minuet does not deserve or require validation, any more than the Mona Lisa does, or belief in God … or alternatively, should ‘validity’ be called something else in order to correspond to that particular form, principle, perspective or practice (Merriam, 1988; Furlong, 2005).

Promoters of anti-positivism and anti-positivist qualitative research claim that arguments against ‘insider research’ are applicable to all research. For example, one can never guarantee the honesty and openness of subjects, and our research is always coloured by our subjectivities. Complete objectivity is thus impossible. The task is to minimise the impact of biases on the research process, to carry out research in consciousness of its socially situated character and to make the researcher's position vis-à-vis the research process transparent (Hammersley 2000). By making the research process transparent and honest, it is argued that readers can construct their own perspectives that ‘are equally as valid as our own’ (Cohen et al. 2000: 106).
As stated by Furlong & Oancea (2005) ‘trustworthiness’ is a concept that is defined very differently in different research traditions such that technical measures (including reliability, warrant and authenticity) derive from different interpretations, and that ‘virtuous’ research should therefore, have some correspondence with ethical, aesthetic and epistemic dimensions. So, if some external warrant is subject to change, to different definitions, to different measures, to different and/or shifting criteria that were (to be) constructed according to the process and the output of the research inquiry, and to esoteric qualities relating to ethical or aesthetic qualities, how could I then confidently resituate my research study into a different community of practice as credible, distinctive, erudite and informative?

In one sense, my participation in research methodology course, my reading of research literature and contributions at various research conferences has helped challenge and (re)situate my practice, concerns, techniques, approach and overall case study. While those interactions were not a comment on the thesis per se, these experiences did nevertheless help contribute to the development of several of the theoretical propositions therein, particularly with regards to the construction of my models in relation to various network theories and methodologies.

**Inside out?**

The thesis has been largely been written as a summative document that is on one hand representative of the actions of a particular community of practice within a unique setting. It references facets of that research that fed back into and informed that practice. As a summative document it has the potential to inform participants from a different community of practice, the research community. That community is large and has many interests, motives and accountabilities. My interests were not to refute or substantiate a particular approach, methodology, technique, or claim. Rather, through description, it brings to the fore the notion that while the diversity of participant action in context can support the view that there are different ways of knowing and much to be gained from exploring those different ways of knowing, this also rests upon being nothing more than a stepping stone, a point between the known and the unknown, a point that cherishes potential.
By focusing on multi-organisational cross sector partnerships the thesis has also entered research territory that previously, was sparsely explored or documented. Certainly, research and literature regarding group interactions within organisations has a considerable history, much of which falls within organisational theory and social research. However, my initial investigation of the research literature did not reveal many relevant research studies about group interaction between organisations, particularly from different sectors, upon which my own study could draw. Certainly, there were references to technical data, aspirations, contributions and ideologies by the business and government sectors to particular initiatives in education, such as the ‘Education SuperHiways Initiative’ (DfEE, 1997), or the ‘National Grid for Learning’ (DfEE, 1997). However, those sanitised documents were generally ideological papers that could be used to drive policy, social reform and investment. My research has emphasised the practicalities, problems, difficulties, issues of ‘outsiders’ trying to find mutual bases that should have optimised investment, opportunities and potential as these were (re)defined according to the perspectives of ‘participants’ who were trying to understand and implement those innovations and opportunities for themselves. It points to the strategic, policy making processes in addition to those ways in which these were (re)interpreted by different people with different motives, interests and means. While those interactions that were particular to a unique setting, the principle of cross sector, multi-organisational partnerships has remained topical as central Government is again striving for cohesion, unity and means for their revised social reform agendas. Schools are increasingly expected to form cooperatives, trusts, and partnerships that serve as stakeholder groups for ‘beneficiaries’ whilst the terms of ‘beneficiary’ are ever expanding to encompass more people and interests from ever increasing contexts.

I feel that the uniqueness of the thesis in part rests upon aesthetic and representational qualities, which, because of being unconventional, highlight concerns about processes of visualisation and representation of experience and interaction within complex settings - these representational issues go beyond the technicalities arising from the use of case study, narrative, diagrams, hypertext as modalities of and for expression. They encapsulate the matter of complexity, not simply as a term that frames uncertainty and doubt, symbolism and subjectivity and (holistic) interaction but also as a key to the principles of energising purposefulness,
justifying risk taking and the ongoing exploration of potential, alternative, and difference. Without these dimensions the purpose and benefit of exploration is negated, resulting in no contribution to knowing or learning. Thus, I have kept matters of complexity to the fore rather than dismissing it as problematic, simplifying it, or reintroducing it within a final analysis as a way of addressing difficult issues for which there was no simple answer.

Part of that uniqueness emerged through the course of trying to find representational form for practice, issues and processes evident or emerging through the research study. These included for example, the matter of defining the complexities of participant action when these were in themselves, ambiguous, likely to change, perhaps inconsistent in their different forms, tacit, obscure or concealed and influenced by many different factors that were also changing. To make these explicit meant that subsequent objectification did not resolve the subjective principles upon which they were based. Furthermore, those theorised models provided referents that were further theorised in terms that allowed the abstractions to take on new representational form. Thus the referents for context and action, theorising and meaning, which are in themselves indistinct, dynamic and interdependent, were transformed from a linear, local representation into a model that became two interlinked animated rings. (Figs 55 to 61) That level of abstraction not only helped with my theorising of other dynamic and complex concepts and issues but also allowed me to develop my representations into three-dimensional and interactive models (Fig 71; Figs 84 to 86 respectively). Thus, these models were not solely alternative representations for data, but also the means by which I theorised, abstracted and re-presented ideas. While this process started out as a personal aid to dealing with the range, scale, scope and complexity of the data, and to my theorising I realised that by incorporating these models into the body of the thesis they not only provide a distillation but also collectively offer an alternative way to clarify the narrative. Additionally, they provided a bridge between the principles and practices within different disciplines paradigms and approaches.
Summary
In Search of the Lost Chord?

Jigsaw poiesis

It seems that many people who attempt to complete a complex jigsaw generally start with the edges, or some definable patterns within, and perhaps have some preconceived idea of what it should look like when it is finished. I think it would be a rather different proposition if there is no perceivable edge, and the picture being reconstructed is more akin to an animation - a piece goes down, but its shape or image changes by the time the next piece is added, and so on? And what if each dynamic piece no longer rests on a two-dimensional plane but performs within a more multi-dimensional space? In a sense, this is how we participate in day-to-day action - the patchwork of action providing a rich texture, a dynamic matrix that symbolises experience and meaning-making. Much of that action is driven by difference, uncertainty and potential. This thesis symbolises a dynamic patchwork or fluid collage of action in and through action. It provides a permeable channel that serves to convey something about the importance of immersion and emersion, as a way of thinking about the nature and qualities of on-going action, rather than as a means to an end per se.

Play it again Sam?

My naturalistic research inquiry was, for me, about exploring and engaging in the richness and diversity of social interaction as an informed practitioner.[PM550]. Here I am using the term ‘informed practitioner’ in the fullest sense of bringing together and synthesising the multi and inter-disciplinary professional participant (viz. observer and observed), processes of critically engaging in complex action, where the cycle of process/product is indistinct in its iterative cycle that is variously framed by dynamic ideological frameworks, and my ‘being’.

Through that research process, the richness and diversity of processes, perspectives and practices became more apparent to me, each of which represented a potential to enrich my ways of seeing and understanding the world.[PM551]. That process was embodied in action, through participation in the day-to-day processes of social interaction, of brokering, of partnership within a heterogeneous, pluralist, diverse and dynamic setting. These purposeful means of engagement, of finding a niche and of
compromising, provided me with an important path to understanding the diversity of views about the processes of learning and how this might be contextualised. These important insights and realisations were nurtured, through interdependent processes of theorising and meaning-making. This process of engagement and immersion in my research contributed to my personal and professional enrichment in many indefinable ways.

As Witkin expresses in the Intelligence of Feeling (1976):

*The knowing of fact and object, vital though it is for the adaptation of the individual in his environment, is nevertheless quite insufficient in itself. To be properly adapted the individual require to be able to relate meaningfully to the world in which he has his being. (p1)*

This notion of ‘being’, of becoming ‘critically attuned’ is variously conveyed in different fields as craftsmanship, artistry, enculturation, negotiation and reification, each of which symbolises ‘a way of knowing’. By way of example, Eisner (1998) presents a way of ‘knowing’ through the art of appreciation, likening this to ‘connoisseurship’, and further suggests that: ‘It can be displayed in any realm in which the character, import, or value of objects, situations and performances is distributed and variable, including educational practice.’ (p63). Importantly, connoisseurship is not simply a matter of ‘sensory differentiation’ but also occurs through our understanding of the conditions that give rise to these qualities:

*The point is that true connoisseurship includes the ability not only to experience qualities, but to experience qualities as a case or a symptom of factors that have a bearing upon the qualities of that which is being experienced. (p65, ibid)*

There are limits to such ideological, and essentially idealistic notions within complex, dynamic and ambiguous conditions. In this sense, I am mindful of Kushner’s comments (2000), not only in relation to the judgemental issues implicit within Eisner’s claim, but also in his line of reasoning for finding representational form through the use of case study. My way of becoming informed was through immersion as participant observer, and through perceptual differentiation as a holistic process of visualisation and representation. This then shares the common enterprise of trying to construct and convey an image of the world, with the aim of furthering our understanding of that world.
For me, an important part of that process of engaging in research practice was that search, that process of enquiry, which highlighted different ways of finding out, about finding different ways of theorising and trying to make sense of things. Through that process of personal and professional enrichment, I discovered that there was, and is, no single way, no panacea. That process of immersion, and trying to find appropriate ways of handling the notion of emergence and potential, of reification, of accepting that ‘uncertainty’, provided and enriched that process by energising the process of trying to come to terms with potential through action, and which in turn, re-energised potential.

**Improvisation**

The best way I can find for expressing this process is through the analogy of musical improvisation. When one is playing, both trying to find and express ideas, the seemingly apparent outcome re-energises the potential and in turn provides part of the solution - that being, the further exploration of the potential. In one sense the apparent outcome is some abstract which is largely perceived through sound, and in another sense, the apparent outcome is some abstract not perceived through that acoustic medium by the audience but by the performer whose ideas find some fleeting manifestation in mind. This is a reiterative, partially informed process, where potential energises further potential through balancing uncertainty and certainty, through outcome that serves as process, and process that serves as product, or, potential product. When one stops playing, some of the potential remains, for a while, and takes on different meanings and which, can not be shared so easily in those same forms of expression. In much the same way, that relationship between ‘the idea’ or inspiration and its subsequent synthesis, may not in fact, resemble the medium of expression and its manifestation as embodied through sound. However, the quest is not simply in the outcome per se but rather in the process of finding one - for performer and audience alike, however ephemeral, however construed. When listening to and trying to appreciate that dynamic process in which one participates before, during and after, (generally) justifies the processes of engagement itself, despite its transitory (un)certainties, potential ambiguities and richness of meanings that may be evoked through that process. What one is left with is some semblance of meaning, potential and uncertainty, and this is why the emergent process continues.
**Participant performance in action**

To look at this another way, the performances that formed the basis of the study were largely improvisatory - some of which were more traditional or conventional, perhaps, variations on a theme, or re-arrangements of existing pieces, time honoured ideas, rehearsed, clichés. Other performers were engaging in much more free-form improvisation. Each found their niche, performing within their ensembles, perhaps in the string, or brass section of a large orchestra, performing well rehearsed, set programmes that attracted ‘the right audience’, others perhaps performing impromptus - both nevertheless, ‘live’, and therefore subject to variation. Some performers belonged to just one main group where the pieces were determined on their behalf, and personal taste was not the overriding factor. Some played in other groups, perhaps playing different instruments, different styles, different structures, to different audiences. Some performers found themselves in the front row as their style, ability or convention gave them prominence, while others played second fiddle, or something more base, yet contributing to the overall effect - individual performing ability difficult to establish and not necessarily determined however, by ‘position’. Within the large ensembles there was inevitably less room for free improvisation, and the differences between performances could have been more attributable to interpretative differences. Conversely, those performing within other free-style improvisatory groups were nonetheless bound by stylistic idioms and expectations. Thus, the emergent improvisations might have been ‘tweaks’, or slight variations around a theme wherein the essential qualities were ‘in there somewhere’, suffused with the idea, the moment, the potential, and integral to changing forms, approaches, perspectives, ideas and understandings.

Applying these emergent principles to the partnership entities, it was not unusual to find an individual taking a performing role that was not their specialism. Within a large ensemble, the collective performing ability generally masked the qualities of the individual, but within smaller group settings, and according to the qualities of the other performers, this became more noticeable and in some cases, influenced the overall dynamics of that group. Such group dynamics were complex interactions of compromise and tolerance, of osmosis and synergy as notions of mutuality, etiquette, clarity and unity eddied in fuzzy self-organisational ambiguity and difference.
**I packed my bag and in it ...**

To continue with the analogy of musical improvisation may also help convey something about the form of the ‘case’ or ‘entity’, that is, the collective bound form, or narrative, and which synthesises the dynamic interdependencies of different forms of action. For example, the idea of creating a piece of music by first starting with durations, to which one adds various timbres, then dynamics and eventually pitches, is, I believe, not how the majority of composers nurture an idea they may have into a medium that seeks to stimulate the minds of others. Yet, a perceived nuance will only ‘be’, due to its difference and its place within its perceived context, and the perceived dimension and dynamic of that context as a whole.

My case study has been construed and represented as a ‘synthesis’ - a dynamic entity wherein, the narrative in its various forms, provide implicit and explicit visualisations and representations as a collective image. It brings together, in the form of a single, complex realisation, a number of interdependencies. These interdependencies, perceived by me as dualities, and variously defined through disturbances, ambiguities and differences of and in action, energise the synthesis. I shall return to the issue of ambiguity and difference later in this narrative. Here, I have adopted Wenger’s (1999) construct of a duality that is seen as ‘a single conceptual unit that is formed by two inseparable and mutually constitutive elements whose inherent tension and complementarity give the concept richness and dynamism’ (66), and for which, the ‘synthesis’, in Hegelian terms, seeks to resolve conflicts between the initial proposition (thesis) and its negation (antithesis) - the tension that exists between two conflicting of interacting forces finds some form of resolution by establishing truths on both sides rather than disproving one.

These dualities can be objectified as left/right, good/bad, Research Study/Research Group, certainty/uncertainty, and so on. Many dualities occur through the ambiguities that may derived from different, or multiple meanings, such as that which occurs through interpretation, and re-interpretation of terms and actions to different settings and enacted in different ways by different people. For example, ‘organisation’ is in itself a duality as it can be interpreted as process/product, and holds multiple meanings as the term is used by different cultural groups. Similarly, the uncertainties of meanings for some relatively simple concepts (e.g. ‘bond’ or ‘red’), or more complex concepts (e.g. ‘learning’ or ‘partnership’), suggests an irreconcilable, indeterminate, complex issue emerges. Thus, dualities are manifest in different ways, and can be further differentiated by notions of, for example, synergy, yin-yang, autopoiesis and complexity, and which set further dualities as such notions are refuted or supported by dualist traditions of science, art, determinism/voluntarism and so on. That is to say, a duality can be seen as an opposite, part of a continuum, or a difference that can occur at any point on
that continuum, a point made clearly by Kosko (1994) in his narrative about fuzzy thinking, which explores the grey, the in-between, the permissiveness of the ‘matter of degree’. A key duality was explored in ‘Uncertainty – the issue located?’ (Fig 48) in which the matter of a proposition is energised by the question …

These perceived dualities are manifest through my reflective, negotiated, interpretative visualisations and which serve as an expression of my knowledge and understanding, my experience, my world. This entity is therefore, an objectification of a personal world of experience encapsulated as action. It is an ethnographic\([PM559]\) (Atkinson & Hammersley, 1998; 110), complex case which, as a study, represents the processes of inquiring, discovering and embodying that process in a representational form that has the potential to convey further meaning derived from those expressions\([PM560]\) (Stake, 1995; 2). Thus, the ‘case’ that is so far defined as ‘a synthesis’, represents a holistic, complex, dynamic case that has found representational form through images and imagery, as an expression of personal experience in and of the world.

**Cases and other baggage**

The process of conceptualising this case study, in part, finds its representational form by relating the processes and products of the entire study as a complex, dynamic, self-organisational construct that can be conveyed through the analogies of hypertext, texture, or harmony. Each of these terms suggests a collective in which, the existence, purpose, nuance and subtleties of any component has some importance within itself but predominantly contributes to the whole. Each ‘component’ has some part to play, provides a part of the detail, but draws fuller meaning from the collective. In one sense, there are limits to the extent that one may perceive the collective - as ‘objectified’ by those parts. Conversely, there are limits to the extent that meaning of a part is determined by that part rather than its references to the whole. A further dimension is that it is not so much the potential that exists within the part or parts but rather, the enterprise of exploration and evocation as energised by those parts and which then imbues those parts with meaning. This case study is then, like the components of a piece of music - the scenarios symbolise a number of improvisations that draw on and share the elements, but each having its own patterns and forms; the research section represents the potential for bringing these
together in some way through various techniques, forms and structures, but which are themselves dependent on the elements. So too, the elements represent some form and structure which can be reapplied within the whole to take on meta-structures [PM561]. These also give emphasis to Eisner’s notion [PM562] (1974) that ‘the world can be represented in as many ways as we-as-humans are capable of so doing’ - Mozart, Stravinsky, Cage, Beatles, or Barry essentially drew on the same basic material, to affect the same sets of emotions which are heightened according to the personal nature of engagement [PM563]. My composition, alongside those of other artists, scientists, technologists and other actors who are striving for a richer understanding of the world, constructed from experience, through action, serves as a dynamic expression of that action.

**Quest shuns an answer?**

My research quest sought to reflect upon and better understand the processes or forms of action as participants engaged in new Partnership configurations and Projects, in much the same way that one might attend a concert of art gallery. There is in that sense, some notion that ‘finding out’, ‘being there’ and gaining ‘experience’ or ‘insight’ pertains to processes that are indistinct from ‘outcomes’, the problem being that, from a research perspective, the matter of also being able to find or recognise a point of ‘closure’, or some ‘solution’ or answer to that quest. The various modes of engagement, ideological assumptions and aspirations indicated or engendered by literature and participants alike, alluded to the view that reconciliation was and is somehow achievable, required or desirable, that uncertainties, doubts, dynamics, histories, ambiguities and cultural precedents might somehow be resolved sufficiently to appease the complex conditions within which the thesis evolved, and that some compatibility might be found between the multiple contexts, practices, perspectives, conditions and purposefulness of engagement, as if it rested on finding some inherent, stable quality of representation and meaning. While such a belief can be comforting, it is also paradoxical insomuch that any representational form needs to be sufficiently dynamic that it can portray inherent or essential differences and dynamics, ambiguities and uncertainties, without purporting to stabilise beyond what is necessary. Offering some form of stability to practices that are inherently unstable, dynamic, uncertain, would in one sense, appear to be antithetical other than the fact
that the stabilities and meanings that participants established, however fleetingly, served as stepping-stones within what appeared at that time, as a fluid, unstable and potentially uncomfortable situation. Resolution was however, inevitable in the sense that time moved on and the dynamics of those situations became embedded or lost within the complexities of context and subsequent action. Each of the different narratives in this thesis describes action in action, when in fact, that action has now embedded within new contexts.

Knowledge emerges from our interactions in this universe, and feeds back into this same universe, such that the universe becomes increasingly meaningful for us. This means we cannot have knowledge of our world, once and for all, it is not something we can see, something to look at. Rather, it is something we have to actively feel our way around and through, unendingly. (Osberg & Biesta, 2003)

I Think I’ve Found the Lost Chord …

The thesis typifies a crises of representation – for what has been personified and realised as emergent, complex, dynamic and uncertain, it nevertheless, seeks to build new opportunities for and relationships between knowledge claims, how and wherever these may become situated, and however they may hold, infer and evoke meaning and values.

In one sense there is a pragmatic issue here that relates to my own teaching experience and understanding of learning - that largely relied on taking account of and balancing logistical constraints, determinisms and fundamental beliefs as to what teaching and learning is all about. There are clear advantages to be gained from simply giving students facts and solutions, just as there are others to be gained from providing opportunities wherein students have greater freedom to explore, discover, reflect, synthesise, personalise and contextualise meanings and values. Managing that process and verifying new meanings within prescribed contexts should be as problematic for the teacher as for the student, though further dependencies arise according to how ‘outcomes’ are perceived, valued and held to account (a question that Dewey (1934) raises as a duality between ‘development from within’ and its ‘formation from without’. With this lies the proposition that one may be able to teach effectively, not solely because the information that one imparts is pertinent and correct, but that the true effectiveness derives from the conditions and practices within which learners engage, rather than in ‘the knowledge’ being imparted per se.
Knowledge, knowing and believing are of course, as final as any process of meaning-making will allow or suits the purpose of further engagement in learning, participating, living. Just as ‘nothing’ can be explained [PM564] mathematically, scientifically, philosophically, linguistically, culturally, so to can the referential propositions likewise, enable the case for God, beauty, electrons, truth, p-branes, freedom, community …

To express this in another way: The crisis is not solely within the representational form per se and its inherent capacity to claim or evoke meaning but rather in the perception of its potential to do so. This matter relates to: how and where knowledge claims are founded (metaphysical objectivity and/or subjectivity); to the perceived values for knowledge as encapsulated in ongoing processes and/or products of enculturation; how ethical claims and judgement relate to conditions or perspectives that may be, for example, normative, aesthetic, and/or theological, etc.; and also, to those formal systems where, or if, risk (if allowed to) plays a part.

Meaning and appreciation then, is not so much a matter of simply understanding a component, an element or collection of elements, the terms of reference, the contextual, historical and extrinsic relationships, any more than it is a simple matter that what people get from an experience might be solely based on an intense personal or cultural bond with specific facets of the essentials (for example, the notes, the processes, the structures, the histories and cultures). I suggest that the meaning of the work, as a single term, is not simply the sum of the meaning of its parts, neither is the entire meaning of the work solely that if its highest architechttonic level. Its meaning is only in part that which has been ascribed through my perceptions, visualisations and representations as just one part in the communicative process and for which, there is an inevitable fallibility. Stravinsky was not being fallacious when he commented that ‘music is incapable of expressing meaning’, any more that Hindermith was in his later remark that ‘music is incapable of expressing anything’. This issue of establishing, or the ambiguities of meaning is not of course exclusive to any one field:
Meanings are construed, and the shape they take is due, in part, to the tools people know how to use. Different disciplines employ different tools. Thus, which meanings become salient is a function not only of the qualities ‘out there’, but of which tools people bring to them. (Eisner, 1991:36)

Holstein & Gubrium (1998) posit that ‘meaning structures are public but they are also locally circumscribed’ and in which sense ‘interpretative practice reflects local circumstances and resources’. Meanings to a person are ‘a function of how he or she has experienced the combination of thinking, feeling, and acting throughout life experiences’ (Novak, 1998) and dynamically occur through what Wenger refers to as ‘a negotiation, or reification’:

Reification is not a mere articulation of something that already exists. Writing down a statement of values, expressing an idea, painting a picture, recounting an event, articulating an emotion, or building a tool is not merely giving expression to existing meanings, but in fact creating the conditions for new meanings. (p68)

In discussing meaning, Wenger highlights, not only the system within which meaning may occur but also on how ownership of that meaning may occur, suggesting that ‘it must have currency within an economy of meaning where it is recognised as a legitimate contender’ (p210). While ownership involves both the internalised and externalised notion of ‘control over meaning’, it also refers to ‘our ability to negotiate them’, and ‘become part of who we are’. Thus there is an interplay between meaning that can be see to be independent or ‘private’ and that which is ‘shared’, ‘systematised’ and mutual. Of course, knowledge that we a participant in what Wenger refers to as multiple ‘communities of practice’, where there may be slight transformations of meaning within and between those practices, can lead to assumptions of ownership, appropriation or displacement of meanings for political purposes, or simply ‘games’ that can allow for the handling of the ambiguities of meaning to greater effect. Hence, ownership of meaning can lead to the situation where on one hand, technical discourse of ‘professional communities’ can ‘assume ownership of the issues themselves’, while on the other hand, lead to a situation where ‘the more you know, the more you know you don’t know’ - personal circumstance will then determine the importance of such a view [PM565].
Therefore, articulating creative, improvisatory processes, significance, effect or value of outcomes acquired from listening to something as ‘tangible’ and as ‘simple’ as a Mozart minuet has its problems. This may be particularly so where the alternative forms of description or explanation are somehow expected to relate to something conveyed in a different form, with different, externally determined ideals, conditions, accountabilities and yet, somehow, remain commensurate. Cilliers (1998); Osberg (2003)

This is not to say we cannot model or theorise about radically contingent systems by looking for their rules of operation. Obviously we can and do, and pretty successfully, although within limits (e.g., the weather).

Conversely, rather than ‘alternative’ forms or descriptions, these could be valued as multiple, additional, different representations, each with a power to broaden, enrich and further stimulate further meaning making by recognising and/or theorising those differences. Mozart may ‘sound better’ if one has a better insight into ‘how to listen’.

We may, therefore, presume to recognise and understand ‘knowledge’ by describing patterns (regularities) according to sets of rules; and where those patterns don’t appear to exist, rules are nevertheless applied in order to find the patterns that enable some understanding to be formed. On one hand, meaning has some dependence on how close or open, local or distributed these systems and/or rules are, whether or not these processes are ‘participative’ and to what extent. On the other hand, it is not so much whether rules can and should be applied but more a matter of commensurability to conditions, circumstance, perspective, expectation, accountability, acceptance, and so on.

Certainly, the search for answers and solutions is a customary feature of research and clearly there has been some benefit in the past from asking the wrong questions or drawing false conclusions – otherwise the physical world would still be the centre of my universe and string theory[PM566] would have lost its power of elasticity. So, has science?

Essential qualities and values that emerge through engaging with artistic performance have the potential to provide a consciousness that extends beyond the notes or actions, beyond the theory, the histories, the aesthetic, the criticism, beyond
the definable, without undermining the power of those particularities, qualities and values. That these experiences can or should be corroborated empirically, be falsifiable or have limited predictive power, validity or justifiability, is perhaps, more of a problem for science than for art. In much the same way, science has problematised other essential qualities of experience and life (e.g. belief, truth and reality being ‘things' that are inevitably contestable), rather than accepting these as additional dimensions or levels of consciousness that can enrich, inform, evoke and engage – things that essentially, underpin experience, difference, uncertainty, as means to meaning-making and informing an emergent, dynamic understanding and experience of the world.

**Further unfolding**

Dewey's theory, in *Art as experience* (1934) was an attempt to shift the understandings of what is important and characteristic about the art process in the ‘expressive object' to the process in its entirety, a process whose fundamental element is no longer the material work itself, but rather the development of an ‘experience'. This expansion of the bounds of aesthetic philosophy demonstrates the connections of art with everyday experience. To emphasize what is aesthetic about an experience is not, finally, to emphasize what is apolitical or impractical or otherwise marginal about that experience; rather, it is to emphasize in what ways that experience, as aesthetic, is a

'manifestation, a record and celebration of the life of a civilization, a means for promoting its development' and, insofar as that aesthetic experience relates to the kinds of experiences had in general, it is also the 'ultimate judgment upon the quality of a civilization'. (336) [2]

Osberg & Biesta (2003) express this as ‘a way of being that is less concerned with representing the real that it is with living it out in different ways (84)’. They propose that

… complexity suggests a temporal epistemology which implies that the quest for knowledge is not in order that we may develop more accurate understandings of the finished universe, as it is. Rather, the quest for knowledge is about finding more and more complex and creative ways of interacting with our environment and through doing this - through intervening in the processes of the universe - we find out how to create new and more complex environmental conditions with which we can interact in yet more complex and creative ways.
Complexity’s challenge to representation comes from the idea that

... models of complex systems appear not to be representations in the usual sense of the word. They cannot be understood to ‘stand for’ or depict reality. They don’t say something about how the world really is. In that sense, this is also the case with scientific theories, which attempt to reduce the world to a system of rules or laws. This challenge to representation, we believe, does not imply that we should attempt to do without representations, but that we need to rethink the purpose of our representations. (ibid)

This crisis of representation is not unique to how one may theorise complexity, or to theology, science, art and experience in the world, though each, according to Cillier’s theorising of complexity, could be said to represent a ‘complex system’ – particularly in the sense that they are open, interact with their environments, and that ‘the ‘scope of the system is usually determined by the purpose of the description of the system, and is thus often influenced by the position of the observer.’ (Cilliers 1998; 4)

This thesis, as a model of representation of action-in-context, is likewise, inevitably, a simplified, local representation of complex and open systems. Openings, gaps, cracks, uncertainties, doubt, potential, opportunities only exist on the bases of what is ‘there’ - the manifestations, examples, issues, principles, the schema, The process by which the thesis encapsulates and/or contributes to further meaning-making, to (additional) forms of knowing, depends on its intrinsic/extrinsic worth, and/or the path/s that the reader takes, with options being to explore the associated narratives. In which case, Navigation or the Linked Rings both provide appropriate stepping stones for knowing, knowing more, knowing something else, knowing something different. Moreover, the thesis offers ways means and reasons for developing the capacity to handle ambiguity, and that ‘recognition of its inherent dynamic to give life and enliven being and meaning perpetuates that very cycle of life, being and meaning’ (Wenger, 1999; 83).
Fig. 89  Linked Rings
Epilogue

The Question[PM567]?

Being alone, sitting quietly in the sun, one day, I was approached by a stranger[PM568].

“Hello. Do you mind if I ask you a few questions[PM569]?”
“No, not at all. I like a challenge[PM570].”
“Do you believe in God[PM571]?”
“Yes, of course[PM572]. Do you[PM573]?”
“Yes. Yes, I do[PM574].
“How interesting. In which one[PM575]?
“What do you mean[PM576]?
“Are you a Muslim, Hindu, Buddhist, Mormon, … catholic[PM577] … or perhaps you’re a scientist[PM578]?"
“Oh[PM579]. I’m a Christian[PM580].”
“Ah. So you believe in ‘that’ God then?
“Yes[PM581]. Which one do you believe in then[PM582]?"
“All of them - as far as I know … though my knowledge is somewhat limited. Perhaps you have other insights that differ from those of us who only think we know[PM583]?”

The stranger[PM584] walked away[PM585] …

Sitting alone, I noticed it was still sunny, though it didn’t seem quite the same.

‘Are we willing to look for it (knowledge) wherever it might be found, or only from the people who are supposed to possess it?’

Lewis, M. (2001, p77)