

Chapter 5: Findings, discussion and conceptualisation of informal learning in occupational practices

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Introduction

This penultimate chapter brings together the previous chapter on the 11 case studies, and the two literature review chapters on learning (informal and formal), work practices (normative and innovative/creative), and professional inquiry. There are two goals for this chapter. One is to delineate the case studies using the literature reviewed to provide deeper insights into the journey making and work practices of the participants' current occupations. The other goal is to formulate, using the findings, a conceptual framework to help us, as users, to understand and apply the two dimensions of learning and occupational practices. These activities ought to be viewed within the socio-cultural, economic and political contexts where the possibility of transformations of these participants might happen. These possible transformations would lead to another dimension that might affect the understanding, action, behaviour and cognition. This means the whole person can be modified: how to view the world (externally) and oneself (internally).

Findings

This section begins with an analysis of the 11 participants' case studies before discussing them. Following the analysis, the pertinent stages are discussed and from which the four themes: work practices, forms of learning, reflection, and social-cultural, economic and political dimensions are configured. These four configurations are delineated using the 11 case studies and supported by the related literature sources. At the end of this section and the discussion section, the foundation for a theoretical framework for (informal) learning in occupational practices would have been laid. This framework will be discussed in the third section.

The analysis covered the various stages (Robson and McCartan, 2016). They included identifying phrases, patterns, themes, and triangulating the identified scenarios from the case studies. These stages generated codes. From reading the case studies several times, 26 phrases or points of references were identified. Also, the frequencies of their occurrence were noted. Of these, further reduction of related patterns or sub-themes were evidenced into seven. And from these patterns, four themes were isolated. They included work practices, learning types, reflection and social issues. Furthermore, the analysis consisted of applying the identified themes to generalise a set of typology and linking it to the theoretical frameworks. The two authors in this monograph checked each other's analysis to agree on the final analysed findings.

The 11 case studies were read several times to be acquainted with them and arising from these were identifiable repeating points of references or phrases. These phrases are listed and discussed according to the frequencies of their occurrences, starting from the highest rates.

Five phrases scored a frequency of 11 times. They are informal learning, formal learning, journey-making and journaling, experiences, and reflection. Formative practise, or professional development has a frequency of 10 times. (Technical) knowledge and transformation have a rate of 9 times, and eight occurrences are skill sets and social interactions. Leadership, individual working/practice and emotional intelligence have frequencies of 7 times, whereas cognition and collaborative working with 6. Those phrases with four occurrences are coaching, normative working/practices (relating to standards), and problem-solving. Tacit or subtlety has a frequency of 4, and those of three occurrences are a community of practice, embodied approach, confidence, intuition, novel ideas, and love/passion. There were no points of reference at two times and finally, trust is mentioned only once.

Perhaps, at this stage, explanations of the terms would be helpful before looking at the sub-themes from the 26 points of reference.

The two forms of learning – formal and informal – have been discussed earlier in Chapters 1 and 2 and so further delineations are not necessary except that these modes of learning appeared to be significant in the 11 contributors' perspectives. Journey-making is perhaps not surprising that the term appears most frequently since part of the brief in writing the contributions is to explain their pathways to their current occupations. Relating to this journey-making is experience. This term may include their involvements, participations, encounters, exploits, etc. while making their transitions from where they start from to where they are now. Experiences from the perspective of this research monograph would also include not just life but occupational or work-related and, where relevant, pedagogic ones too. As with know-how, the tacit and explicit dimensions, as mentioned in the earlier chapters, especially Chapter 2, are pertinent in exploring this phrase. Reflection is the last of the most common term that has featured in the case studies. Perhaps, it is a phrase that may be elusive from a definition perspective. From a linguistic stance, this term refers to an activity, usually, a cognitive one that is associated with looking back, contemplating of one's past, relating to one's experiences, occurrences, missed chances, etc. Perhaps, from an educational standpoint, the research by Pollard, Anderson, Maddock, Swaffield, Warin and Warwick (2008) is, probably, the most definitive exploration on this subject especially as they offer a structural framework to provide a deep understanding of the process. Schön (1987) provides two types of reflection – reflection-in-action and reflection-on-action as a way of understanding the term from occupational and educational perspectives. However, there are critics (e.g. Atkins and Murphy (1993), Greenwood (1993) and Eraut (1995)) of this typology. They focus on the lack of clarity of the two types of reflection, the lack of acknowledgement of the time dimension and the inconsistencies between his theorising and the illustrated pedagogic interventions. Two of the main issues regarding this much-used term in education are the lack of a robust conceptualisation of the term, and the incoherence of teaching reflection to trainee teachers.

Formative practise, or professional development has the next highest number of hits. This practice is ongoing professional activity that occurs after qualification in the relevant occupations of the contributors. Perhaps, in more traditional professions such as law, accountancy and clinical practices such as Emergency Medicine, specific regulations are governing the need for continuous professional development (CPD). The rules might stipulate the forms CPD take, the required hours per year, etc.

Knowledge and transformation are the next two phrases on the list. Knowledge is defined eclectically in this monograph to encompass the various forms of knowledge including occupational, educational, technical and discipline-related. Knowledge also covers experiences of life, pedagogic and occupational forms. Perhaps, a more inclusive term might be know-how, and this might include abilities, capacities, intelligences and skillsets. These knowledge types may be explicit or tacit, and the literature sources by Polanyi (1966), Nonaka and Takeuchi (1995) and Collins (2010) have delineated on the implicit forms of knowledge. The delineation of knowledge has been covered in Chapter 2. A wide-ranging definition of knowledge by researchers (Eraut, 2004; Winch, 2014; Evans, 2016; Loo, 2018) is used to provide a comprehensive approach to understanding this term and also to apply it with deep insights to pedagogic and occupational practices. Transformation, again, was discussed in Chapter 2 and the related proponents of this term are Kegan (2009) and Mezirow (2009). For Mezirow (2009), transformation or transformative learning relates to changes in people mentally, emotionally and in short whole being that may lead to actions in a socio-cultural environment.

Interestingly, Mezirow included in his delineation the psychotherapy angle. Kegan (2009) provides a different approach to transformation, which he calls 'transformational learning'. Unlike Mezirow, Kegan provides five stages/steps of transformation. For Kegan (2009), this process is not only age-related but is also directly correlated to the levels of complexity of transformation. The highest level, which he names, the 'self-transforming mind', where not every person can attain.

Going down the frequency order of phrases, we have skill sets and social interactions. Skills or skill sets, such as interpersonal and intrapersonal intelligences or 'soft' skills, are frequently emphasised in reports (especially government reports such as the 'Leitch Review of Skills' (Her Majesty's Stationery Office, 2006) in the UK and the 'Skills for prosperity: a roadmap for vocational education and training' (Commonwealth of Australia, 2011) in Australia) and even in research documents by (e.g. Brown, Green and Lauder (2001) on high skills and Bennett, Dunne and Carre (1999) on core and generic skills). Perhaps, the term is easily understood and identified by the public. One of the seminal papers by Dreyfus and Dreyfus (2005) on skills and their four-stage phenomenological model of skill acquisition have been critiqued. Loo (2018, p. 27) commented on their paper:

The notion of skills was not defined nor was there an attempt to offer any supporting conceptual frameworks. Furthermore, 'Intuition' appeared in the text only 11 times without any attempt to define it, as if there was common agreement with its definition. The article (Dreyfus and Dreyfus, 2005) started with making claims about knowledge engineers and medical expertise and that expertise could not be captured in systems that were bounded by rules. However, there was no attempt to define or use these occupational roles concerning illustrating the model of skill acquisition. Instead, driving and chess playing were used.

English (1993) offered not dissimilar perspectives to Loo (2018) regarding skills and the nursing profession.

In this monograph, skill sets are acknowledged not on their own but alongside other forms of know-how such as abilities, attitudes, experiences and knowledge.

Social interactions are activities that take place in social environments where there are exchanges between people within a system of rules, codes of behaviour and other codified or non-codified regulations. The settings of these interactions might include formal (e.g. organisations) and informal (e.g. gatherings) settings. The related concepts include social constructivist learning theories (e.g. the Zone of Proximal Development as propounded by the psychologist, Vygotsky (1978)). Sociologists like Castells (2002) and Knorr-Cetina (2005) lend their approaches to the importance of working in social environments and their effects on the work. It is this environment that the contributors in the previous chapter operated in.

Those phrases with a frequency of 7 include leadership, individual working/practice and emotional intelligence. Leadership abilities may be viewed as activities that provide a vision or a way of negotiating the future. This activity takes place in social contexts, and as with the previous phrase, it involves social interactions and abilities such as powers of persuasion are necessary to convince people of one's vision. Again, this topic was discussed in Chapter 2. Individual working or practice is central to this monograph as it involves occupational training by a person. This agency, i.e. a person, object, activity or organisation, is central to this research monograph. The corollary to individual working is collaborative working where people come together in pursuant to a common goal. Again, this involves a vision and action to create an outcome. From an occupational perspective, the outcome may be a product, service, a process that is a result of such agency practices. Emotional intelligence is a term which might easily be equated with researchers such as Goleman (1996) with his concept of 'emotional intelligences' and Gardiner (1999), 'multiple intelligence'. We have used interpersonal and intrapersonal intelligences as a conceptual framework, unlike that featured by Dreyfus and Dreyfus (2005). Goleman focuses on the psychological aspects of a person's skillsets, whereas Gardiner covers a broad spectrum of intelligences to include special, mathematical and logic, etc.

Six contributors mentioned cognition and collaborative working. Again, the latter phrase was mentioned in junction with individual working, and so no further explanation is necessary. Cognition is an activity relating to a person's mental capabilities and an epistemological approach of an eclectic definition of know-how) taken in this monograph offers the readers insights into the way occupational practices are performed. Gardner's (1999) concept of multiple intelligences and Sternberg et al. (2004)'s idea of creative leaderships provide possible frameworks to thinking about a practitioner's mental processes.

Coaching, normative working/practices (relating to standards), and problem-solving were phrases mentioned by four contributors in their descriptions of the occupational journeys. Coaching may be viewed as a form of educational activity, which is usually associated with the occupational practice. This activity may be delivered or facilitated by an experienced practitioner to someone with less experience. This relationship, as exemplified by Vygotsky's (1978) ZPD provides a working framework for understanding the dynamics of an 'expert' with a 'novice'. Examples of such occupational practices, which spring to mind, include apprenticeships, clinical training like Emergency Medicine and nutritional therapy, and education. This phrase

has traction to this investigation. Normative working refers to working in standard situations. Perhaps, the other end of the spectrum is creative or innovative working, which suggests an effective practice that is out of the norm where creativity is included. As in Chapter 2, creative working in the knowledge economy was posited as a version of innovative practice. The relevant literature surrounding this practice includes Nonaka and Takeuchi (1995), Drucker (1999), Reich (2001), Zuboff (2004), and Loo (2017). Normative working, perhaps the less 'seductive' of the two forms of practices, involves, like the creative cousin, uses know-how and some of the advocates include Kahneman (2012). Kemmis and Green (2013) and Evans (2016). Also, the normative occupational work is associated with professional standards where such regulations define the work practices, and that quality and accountability are prerequisites to belonging to a profession/occupation. Problem-solving may be viewed as a skill or a creative attribute. In Chapter 2, researchers such as Csikszentmihalyi (1988), Sternberg et al. (2004) and von Hippel (2006) offer conceptualisations of creativity. Relating to creativity is problem-solving, and the previous researchers have written about this ability. What is not usually mentioned is problem seeking, which is seen as a 'poorer cousin' to problem-solving. Perhaps, providing an outcome is viewed as more important than the earlier creative process of identifying or seeking the problem. Of course, both of these innovative processes are required.

Tacit or subtlety, as suggested by the four contributors has relevance with implied and non-explicit actions, which may not be easily identifiable. To this end, the opposite end of the spectrum is explicit knowledge. Loughran (2009), referring to teaching, mentions that this educational activity has a strong tacit dimension and that it is the job of the teacher educator to make it explicit for the trainees to learn from. Equally, one may argue that subtle actions are difficult to describe or write down and maybe easier to impart by demonstration as a teaching strategy. One may think about such activities as riding a bicycle. Perhaps, the most quoted of sources concerning tacit know-how is Polanyi (1966) whose type of knowledge is of the scientific variety. From the perspective of this monograph, there are specific contributors whose journey-making relates to the sciences such as nutritional therapy and occupational psychologist. For those in non-science-related occupations like acting, boardroom coaching, detecting executive coaching, knowledge strategist, leadership and management facilitating, management education, and professional opinion leadership, a different conceptualisation of tacit knowledge is needed. Collins (2010) offers a typology of three forms of tacit know-how ranging from relational, somatic and collective ones. These were mentioned in Chapter 2. Included in the previous occupational list are those in business, leadership and management occupations. Perhaps, the two Japanese researchers, Nonaka and Takeuchi's (1995) conceptualisation of the 'four modes of knowledge conversion' would be helpful. These modes include 'socialisation', 'externalisation', 'combination', and 'internalisation', which they call 'knowledge spiral'. The reasons why their model has traction in understanding tacit know-how are they view knowledge eclectically to cover practitioners' beliefs, theoretical or disciplinary knowledge, experiences, intuition, insights and hunches. The participants drawn from all levels of a business organisation are involved in this socially enhanced environment of close working, and it consists in socialising outside of office hours. Nonaka and Takeuchi's (1995) approach to viewing tacit and explicit knowledge would enhance our understanding of the 11 practitioners in this monograph.

Turning to those phrases indicated by three contributors, these include a community of practice (CoP), embodied approach, confidence, intuition, novel ideas and love/passion. CoP is part of the genre of phrases, which refers to the social contexts of occupational practices, which include learning and teaching. The learning concept of social constructivism, propounded by Vygotsky, Piaget and Bruner, argues that learning occurs within the social structures of the relevant stakeholders especially the learners and acknowledging and understanding where the learners are from will improve their learning activity. Vygotsky (1978) suggested the CoP concept where learners learn not in a vacuum but a socially oriented environment and thus affected their learning. He also offered the ZPD concept, which is favoured for understanding learning in apprenticeships and the training of clinicians. From the perspectives of the 11 contributors, CoP would also include their organisational settings, the stakeholders they deal with and even the broader environment that may affect their occupational practices. The embodied approach represents the concept of providing something tangible or concrete to an idea, expression, quality or notion, which may otherwise be intangible or invisible. This activity may be advantageous in facilitating learning for those who may not have the experiences and perceptions to comprehend a new expression or concept. Interestingly, only 3 participants mentioned confidence. One would think that this ability of one's belief or trust in achieving the required outcome would be prerequisite for a first step in a journey? Part of the journey making of these contributors would involve making several attempts to getting to where they want to be or are at presently. And these series of step changes include the whole being would require a degree of confidence. Perhaps, it would be interesting for other readers to understand the forms of confidence and the related factors that led up to the modifications in the contributors' journey making to achieve what they had gone through. Intuition has already been mentioned alongside the earlier discussions of skill sets and tacit knowledge. Nonaka and Takeuchi's (1995) concepts are pertinent to this phrase. Novel ideas are related to creativity and innovation, and these have been discussed in Chapter 2 on creative working, especially from the knowledge economy landscape. Love/passion for the job is viewed as an attitude and related to this attitude is know-how, which in this monograph covers a wide array of elements. This attitude is understated as it is obvious that such a positive frame of mind is needed in the pursuit of any goal and in this case, an occupational one.

The final phrase that is mentioned by one contributor is trust. Trust may be viewed alongside confidence and love or passion as positive ability. In the case of Nonaka and Takeuchi (1995), their concept of belief may also be included in this genre of abilities to understand occupational practices.

So far, we have delineated the 26 phrases that were used in the writing up of the 11 contributors. The next stage is to reduce these into a doable list of sub-themes before coming up with a shorter list of themes for discussion. Even at this stage, having read the above texts, one can envisage the possible connections between the phrases. Seven sub-themes were identified, and in no particular order, they are learning, know-how, social, attributes/attitudes/capabilities, working, creativity, and reflection.

For the learning sub-theme, it includes informal and formal ones. The know-how sub-theme covers skill sets, cognition, knowledge, experiences, and tacit/subtlety. Social sub-theme consists of social interaction, CoP, leadership and coaching. Attributes etc.

sub-theme includes confidence, trust, intuition and love/passion. The working sub-theme has these phrases: collaborative working, individual working, normative and formative working, and embodied application. The penultimate sub-theme of creativity consists of problem-solving, and novelty /ideas, and the final sub-theme of reflection includes phrases of thinking, journey making, and transformation.

The next stage of the data analysis encompasses four themes. They are work practices, learning, reflection and social. Regarding the work practices theme, the phrases include working, creativity, attributes and capabilities. In the second theme of learning, it covers learning, know-how, attributes and abilities. As one would have observed, there are commonalities between the two themes. These are attributes and capabilities. The third one – reflection – is also the seventh sub-theme, and the fourth theme is also the social sub-theme. The rationale for not linking these to other themes is because these two sub-themes and themes are and significant. Thus equal discursive spaces are required for the final two themes., and the next section will discuss the themes using the case studies and supporting literature sources.

Discussion

From the analysis above, it would make sense to try and classify the significant narratives from the 11 case studies from Chapter 4 into the four themes. On reflection, the four themes offer us a structured framework to think about the narratives and indeed this approach allows us later to create a conceptual framework, but the reality is the narratives are too interconnected for such a thematic approach. Thus, a joined-up discussion using literature sources from the earlier review chapters and the pertinent narratives is pursued. This discussion takes the forms of a. delineating the observed interconnected dimensions of the 11 cases and b. examining the two main themes of working practices and learning.

We identify at least three connective aspects. The first connective dimension is creativity (Csikszentmihalyi, 1988; Gardner, 1999; Sternberg et al., 2004). Scholes (p. 105) mentioned this aspect ('Work practices' theme) when she referenced her professional practices:

My learning from one helps to inform both my practice and my ongoing learning in another. I have not abandoned the learning from one in order to pursue a different career. For example, my formal legal training taught me to approach problems logically and objectively and look at problems from the bottom up and the top down.

She referred to her ability to problem seek and problem solve regarding her legal training.

However, Dennis (p. 67-68) offers the unusual perspective as a management educator with his application of imitation, assimilation and innovation model, which inspired from his love of jazz playing. Dennis's love of music and innovation in his music making is via his father, both as a musician and music educator. This form of enculturation was later refined and honed into his teaching of management:

I began this journey exploring the jazz metaphor back in 2003 when I published my first paper. Back then I began imitating those scholars who were writing about the jazz metaphor in the organisational studies space, I relatively quickly moved to assimilation (by identifying a gap in the marketing literature) and introduced the jazz metaphor, but written from my perspective as a jazz musician. Innovation then subsequently followed by examining in depth my practice as an improviser and going beyond merely writing about jazz and its linkages with marketing discourse; I was indeed breaking down the intricate workings of the jazz group and exploring the infinite art of improvisation, in short, bringing the jazz metaphor to life. I took this a step further by developing my academic publications into practical workshops that I continue to deliver to my students and as an Executive Education package.

I like to think that I continue to challenge orthodoxy in the management education space through arguing for alternative lenses to examine aspects of leadership and management discourse. My primary lens to achieve the latter is of course jazz music through the application of the jazz metaphor, based on a dissection of my own practice as a gigging musician. By doing this, I offer my strategy students (of all levels) an alternative view strategic management, drawing upon the principles of jazz and improvisation.

Dennis's innovative approach has resonance with Nonaka and Takeuchi's study of innovative practices in Japanese companies. For Dennis, it is about acquiring through imitating his father's approach to teaching jazz and assimilating his own experiences in hanging out with other jazz musicians to acquire the language of music-making and playing and finally innovating resulting from these experiences. This three-stage process involves both explicit and tacit know-how as delineated by Nonaka and Takeuchi and their management-business research. They used the term "nomunication" (Nonaka and Takeuchi, 1995, p. 151) to describe this socialisation activity of drinking and communicating through the use of metaphors and analogies. Dennis, we presume, would equate with this enculturation approach while imitating and assimilation the world of jazz making through his years of observing his father and in particular being with jazz musicians in pubs and such like venues.

In the 'Learning' theme by Toribio-Mateas (p. 113), it was critical thinking. The aspect of creativity and his clinical expertise are linked to his acquisition of informal knowledge, and is part of his decision-making. This description may resonate with Kahneman's (2012) system 2 of the decision making process as this requires a reflective element using his past occupational experiences, theoretical know-how and his continuous professional development. In the 'Reflection' theme, Toribio-Mateas (p. 118-120) described creativity as co-discovery, co-creation and adaptation.

In the "Social contexts' theme by Atter (p. 45) as 'off-piste' questioning:

I recall an exploratory meeting with a major financial services institution in Hong Kong. I had prepared a formal pack of data, with sample questions, key points, etc. However, when we went into the meeting, he ignored my briefing paper and began by asking the Board member across the table "...you like Jazz?"

This was very new to me. I followed his lead and learned to go “off-piste” with the client. I started to reflect this in my contact reports and became ever more curious about what was going on outside the formal content of the meeting.

Staying with Toribio-Mateas (p. 110-111), there is also a leadership angle where he is operating in an emerging occupation of healthcare professional opinion leader. He is presented with daily challenges and opportunities and is exposed to complex problems in the real world. His abilities include adopting new and existing scientific knowledge and adapting to the challenges. This form of leadership may not be too removed from Sternberg et al.’s (2004) ‘integrating existing paradigms’ leadership style where the ideas from several disciplines are viewed as related and not as distinct, and they are integrated and made relevant to healthcare. Wate (p. 124) offers a different form of leadership skills with his setting up of a multi-agency system in England to access the ‘critical communities’ in facilitating his detective work in children social care. This leadership approach has similarities with Sternberg et al.’s (2004) ‘re-initiation leadership’ where Wate moves the police force in the safeguarding of children social care work to a different starting base by setting up a multi-agency system.

The second connective example relates to formal and informal types of learning. These overlaps could be found in the ‘Work practice’ theme by Rees (p. 100) as her own learning pathway, and Scholes (p. 105) as ongoing learning. In the ‘Learning’ theme, Rees (p. 102) mentioned formal learning concerning reflexivity, private and formal forms of learning:

The journey of formal learning that traces my increasing understanding and practice of reflexivity has witnessed me move from a student, first of languages and culture, then of health sciences to become a qualified healthcare therapist, and latterly a teacher and educator of therapeutic and communication skills, and reflective practice. Formal training, professional experience and practice have been unquestionably formative but must not hide the fact that ultimately I am developed to no greater extent via these processes than via my personal, spiritual and emotional journeyings – which lead to different ways of knowing (Seeley & Reason, 2008). Although learning since then has become more formal, my knowing remains dynamic, tacit and instinctual, bound up with who I am personally as well as who I discipline myself to be professionally (Nonaka and Takeuchi, 1995). The two leach into each other. It is the intertwining of formal with private learning, of the personal self and professional self that leads to the challenge of practitioner knowing and how to communicate it.

Rees (p. 99) again in the ‘Reflection’ theme indicated the tensions that existed between formal and informal learning, whereas Toribio-Mateas (p. 112-113) used lifelong learning in his reflective practice. In the ‘Social contexts’ theme, Binks (p. 57) used the phrase self-managed learning.

Self-managed learning as a philosophy is something that I use to inform my professional practice with groups of clients. It is also something that I use to inform my own learning. I develop my own knowledge best when working with other, curious professionals. We explore together, supporting the person, but also providing robust challenge to the thinking. We learn with and from each

other in a way that is generous and generative, exploratory, uncomfortable and profoundly compassionate at times. Yes, I have internalised much of the practice that I have learnt over the years and can use my skill as a facilitator to facilitate my own learning. However, it is in the social space, the community of practice with its infinite variety and few if any easy answers where the real learning comes.

The phenomenon of challenge from Macdonald (p. 90-91) offers different perspectives: negative challenging experiences at school, and supportive challenges from family members, friends and a Managing Director of a company he worked for. Regarding his negative school experiences:

School had a profound effect on my self-esteem, self-belief and future aspirations. It is little wonder that I struggled to think of what I wanted to do as I felt unable to do anything worthwhile. It is little wonder I joined the army as a basic soldier. Even when asked to go for a commission I refused the opportunity, as I knew how stupid I really was; after all, I had been taught that I was worthless.

Schooling had convinced me that I was not academically minded, I was too stupid to be taught anything worthwhile, and that I would not go very far in life at all in terms of becoming successful or living up to my father's ideas of success. The whole experience left me feeling a failure; schooling had a most damaging impact on my formative years and this from an institution, and people, who should have known better.

However, his time in the British Army was a turning point for him when his Commanding Officer believed in his 'Socratic questioning' approach and his army experiences gave him the confidence to turn negative challenges to positive ones especially in Macdonald's civilian career. These seemingly 'everyday' events will chime with readers who may have not dissimilar events in their lives especially the failure of their eleven-plus examination at the final year of the English primary school education. And recovering from such adversities later in life is a remarkable testament to turning around a seemingly 'dark cloud hanging over one's head' into something positive, and fulfilling for oneself and with others.

Werrett offers a slightly different challenge in her journey, not in her schooling, but at her university period:

My appetite for learning started at a young age. An innate curiosity and conscientiousness coupled with a desire for recognition and reward encouraged me to work hard. Early success built self-belief and motivated me further. As a child of the seventies, learning involved passive reception of didactically transmitted knowledge. What Freire (2005) refers to as the banking approach to education. Whilst I undoubtedly gathered some useful knowledge and obtained the required qualifications, my early schooling and exam success were characterised by what is known as a surface approach to learning (Marton and Saljo, 1976) involving turgid memorisation and regurgitation of information, now mostly forgotten.

This foundation left me ill-prepared for my university years studying a joint English / History degree where teaching was considerably less structured. The legacy was made more problematic by a chance conversation with a newly found acquaintance who planted a belief that university was predominantly a place to have fun and that working hard was no longer necessary. With only three hours a week of compulsory scheduled class contact and harbouring the assumption that I would get a degree regardless of my efforts, I struggled to motivate myself to undertake the required personal study. Gregarious by nature it felt alien to me at that time to sit for hours in a library attempting to read and digest books. Reading for me had always been a leisure activity and associated with relaxation so I struggled with the concept of passively reading as part of my study. Easily distracted and tired from a newly found social life I spent a disproportionate amount of time in the university library coffee shop.

Werrett's challenging time at university eventually turned for the better while working at a blue chip organization where she developed her management skills, ethical values, time management abilities, and effective relationships with employees and management. As part of the management team, she understood the relevance of the workplace politics.

Like the challenging journeys of Rees, Macdonald and Werrett above, they are the fortunate ones who have managed to turn negative challenges into positive ones through the application of their intelligences (Gardner, 1999), and reflective abilities (Schon, 1987) amongst other perceived concepts of learning and work. However, there are also others who may not be as fortunate as the Reeses, the Macdonalds and the Werretts. We hope that this publication might in some way inspire them.

Werrett describes a turning point in her life to be herself:

Over time though, despite success in my chosen career and having achieved my original career goal, I became aware that something wasn't quite right. I was stressed and frustrated by the politics and my lack of agency within large organisations and quickly grew bored with each new role I undertook, moving on quickly whenever a new opportunity presented itself. What was I running from? Where did I want to go? Around the same time personal digestive issues and the death of my mother caused me to reflect on what I wanted from life. I realised that my personal development was thwarted and that I was now hungry for a different type of opportunity, one that would afford me more agency and flexibility and that had the potential to fit alongside future family life. I grew interested in developing my own business and enjoyed the prospect of career success being more closely predicated on my own efforts. Around this time, a chance conversation with a friend sparked an interest in nutritional therapy this turned out to be a key turning point in my career history and a nourishing influence on my future learning and development.

The above illustration by Werrett might almost be taken out of the leaf from Csikszentmihalyi's (1988, p. 330) idea of a 'rare event in life' that could motivate one to start a creative action, like in Werrett's case, to forge a new career path in nutritional therapy in order to be herself. As Csikszentmihalyi (1988) suggests, this creative act cannot be done by one alone as we live in a 'socio-cultural system'.

The know-how such as knowledge, experiences, abilities and skill sets are examined. The contributors mentioned experience in both learning and work. Due (p. 72) used her past work experiences when working for a UN agency. Hannah (p. 83) in the 'Learning' theme, views her minutiae of everyday experiences as opportunities to understand the world better and apply to her acting.

The essence of acting is 'to hold, as 'twere, the mirror up to nature,' (Shakespeare's Hamlet). Therefore, the minutiae of my everyday experiences become opportunities to understand the world better in order to represent it through art.

I am fortunate that we live in a time where the product of my profession is wrapped into the fabric of our lives. Our leisure time is bound up with the cinema, theatre, radio - and most homes have a television or streaming device. It's part of many people's daily routine to wind down by watching something in the evenings. Television dramas, documentaries, the news, reality shows are all food for the hungry artist

Staying with the 'Learning' theme, Scholes (p. 103) sees her experiences as a common thread to the learning of her four professions.

I have had careers in four professions: in chronological order, these are nursing, law, HR and executive coaching. The common thread, going through each of my experiences, is that each piece of learning adds to, and takes from, earlier learning experiences. Those learning experiences are a combination of formal learning and informal or situational learning. I put no more emphasis or importance on either one of those methods; it has been the combination of both that has been most beneficial to me in my career... I should briefly say that what I mean by informal learning is not only the development of practical skills and experience through doing things and putting theory into practice, but also includes paying attention to what is going on in the moment and listening to those around me who can direct me to what is the next appropriate step.

For Scholes, formal and informal learning are of equal importance. She uses her learning to put theory into practice. Alongside this approach, she observes and listens to direct her in her next step. Scholes views informal learning as having a qualitative basis, where she looks at previous experiences, past learning, and finds patterns in them. The formal programme (in Chapter 3) offered at Middlesex University captured the formal (structured) and informal (occupation-related) learning elements where learners enrolled on this doctoral course to formalise their informal learning that they had gained from their professional practices. Part of the informal learning while gaining experiences on the job might also be reliant on formal knowledge gained from earlier academic learning. This conundrum of formal and informal learning is played out on the Middlesex programme. The intricate mix of the explicit and tacit nature of learning could also be viewed from Nonaka and Takeuchi's (1995) four-stage-sequence of their knowledge spiral. In a sense, the Middlesex programme is about bringing together the explicit and the tacit know-how, and developing the practitioners as learners to become more insightful professionals within a formalised and supporting structure.

Hannah's (p. 87) learning includes from and with peers as a social activity:

Another member of the cast and I were having a deep and meaningful conversation over some strong Sake one night when she revealed that she desperately wanted to improve and deepen her work. Another member of our company, the eminent Academy Award winning actor Ellen Burstyn, had actually co-founded Lee Strasberg's illustrious American school for working actors in New York, The Actors Studio. So we asked her to lead some classes in The Method with us. What followed was a series of master classes on the Harold Pinter Theatre stage with those members of the cast who wished to join. Ellen talked us through exercises in sense memory. And then we later applied these skills to speeches. My dresser also joined the sessions as he was keen to learn. It was extraordinarily generous of Ellen, and such a privilege. But also a reminder that we never stop learning at any age, and can get fresh insight into our craft from taking another approach.

Dennis's (p. 63-64) learning to improvise occurs informally and formally but it includes a socialisation dimension to it as with Hannah's:

For me, it was a combination of hanging around commercial musicians playing the Working Mens' Clubs (my dad played seven nights a week most weeks, in various bands providing live musical accompaniment for cabaret acts), as well as some fine jazz musicians. I guess I learned a lot about music, life and culture generally in my childhood – particularly from some of the characters I met along the way in the Working Mens' Clubs and I have no doubt that these early childhood experiences have contributed to my professional practice as both musician and educator. I learned very early on how to engage with people from diverse backgrounds, with a range of differing opinions. This, I feel helped shape my practice as a management educator in the fact I can appreciate and respond accordingly with a diverse range of learners e.g. from 1st year undergraduate students through to international students, through to senior leaders.

Relatively soon after my initial meeting with Gerard in 1996, I began sitting in with various local jazz groups and 'having a blow'. At that point, I was still very much finding my voice and both my technical ability on the trumpet and my knowledge of harmony etc. was still very much embryonic. What I did find, though, is the more I did this, the more I started to improve as a player and the more confident I became. Indeed, I was receiving feedback on my playing from experienced musicians; I was learning the rules of being part of a jazz combo and I was learning lots about the music in terms of its historical context. The formal learning I was undertaking with Gerard was now being augmented with more informal learning taking place in on the bandstand. I was imitating less and predominately assimilating in my improvisatory practice, steadily taking more risks in an attempt to innovate in a live performance setting.

For Werrett (p. 134), learning includes with peers as well as teaching:

Although organisational weariness beckoned me towards a self-employed career, time soon showed that my destiny was to work with others. I found it isolating to work by myself. As a newly qualified nutritional therapist I craved the opportunity to engage with peers, to discuss cases and to build new knowledge based on such encounters. In constructivist terms, knowledge is generated socially through interaction with others... Teaching as a way of learning is well established. Bringing to mind what we have previously studied leads to deeper and longer lasting retention of material studied than simply just revisiting material (Duran, 2016). Preparing material for seminars meant that I had to find ways to simplify the concepts to make them easier for students to grasp. I had to make my tacit knowledge explicit. In order to do this I used metaphors, analogies and visual depictions to help my students to comprehend the key points; a process that Nonaka and Takeuchi (1995) describe as externalisation. This process benefited not only the students but also helped me to embed many concepts that I do not believe I would otherwise be so comfortable with. Perhaps this is because as Gartner, Kohler and Riessmann (1971) argue, that learning for one's own benefit and learning to teach others involve different cognitive processes.

The above exemplars highlight the diversity of learning approaches, whether they involve formal and informal learning, learning in a controlled setting of Hannah's workshops or Dennis's 'having a blow' jazz sessions or Werrett's more structured learning as a nutritional therapy practitioner or educator. These are learning in social settings with differing locations, needs, stakeholders, practices and know-how, which may lead to some degree of transformation (Greenfield and Lave, 1982; Coffield, 2000; Kegan, 2000; Mezirow, 2000; Jarvis, 2006; Illeris, 2007).

These examples of social learning provide a logical connection to the third connection dimension of social contexts' theme. Such examples were identified in the 'Work practice' theme (by Due, p. 72-73), in the 'Learning' theme (by Hannah, p. 83), and in the 'Social contexts' theme (by Atter, p. 45 and Wate, p. 124).

Due's (p. 72-73) work ('Work practice' theme) in the developing nation exemplifies the social element in her engagement with different stakeholders with their cultural and ethical dimensions and her first-hand experiences of social justice, welfare and political systems.

The last year of my contract I spent in a field office where I was more involved in practical work and got hands-on experience from working in a developing country with local people.

My work in development cooperation and in a developing country was a unique experience that has had a lasting professional and personal impact on me. Working with people from different cultures was exciting but also challenging, and I had to become more tolerant and able to adapt to different situations. My interpersonal sensitivity increased, and I became more aware of the importance of understanding and respecting ethical codes of different cultures.

My worldview changed because of this experience as I got a much broader perspective of life and a better understanding of the issues of poverty,

underdevelopment and development assistance. At the same time, I learned to better appreciate the social justice and welfare and political stability of developed societies.

Referring to moral values, for Scholes (p. 105), ethics offers her a common thread across her four professions, and her abiding career decision is asking the question, is what I am doing ethical? Thus, ethics is her moral and professional compass. The social dimension is heightened in Hannah (p. 83) acting career where television dramas, documentaries, the news, reality shows, plays, films and radio programmes are all food for her professional development.

From the 'Social contexts' theme, in Atter's (p. 45) case, his understanding of Asia covers extensive reading on the subject, enrolling on language classes, watching movies, visiting cultural sites and consuming the related cuisine are all ways of understanding and getting acquainted with the location where he operates in. For Wate (p. 126), the setting up of sub-groups is a way of understanding and accessing these communities of practices for his detective work.

The above examples reinforce the connectedness of the four identified themes of 'Work practice', 'Learning', 'Reflection' and 'Social contexts'.

In addition to work practice as a theme, it also covered collaborative and individual working styles (Nonaka and Takeuchi, 1995; Reich, 2001), normative, formative and innovative/creative working (Csikszentmihalyi, 1988; Sternberg et al., 2004; Kemmis and Green, 2013; Evans, 2016; Loo, 2018), attributes, attitudes and skill sets (Eraut, 2004). Atter and Due mentioned the two working styles. Atter (p. 47) described the close working relationships with Mr Chu where trust, as an attribute, was essential. Due (p. 72-73) worked independently in a developing country, and that taught her self-confidence. Other qualities, attitudes and skill sets (know-how) were fostered and heightened through collaborative working with local people in the developing country. The know-how included tolerance, ability to adapt, interpersonal sensitivities to understanding and respecting ethical codes of the different cultures resulting in changes in her world view and appreciation of social justice, welfare, and political stability in the developing world. At the same time, Due (p. 72-73) admitted that working in this manner was challenging.

Staying with the attribute, trust, Atter trusted his colleague, Mr Chu, whereas, Macdonald (p. 92) was trusted by his Managing Director of an organization on learning and performance. Trust can be a two-way street.

Binks (p. 53-54) mentioned intuition (as mentioned by Nonaka and Takeuchi, 1995) as a work-related attribute.

One can't talk about experience without connecting to what is commonly referred to as intuition. How do experts make judgements without going through the laborious process of 'working it out'? Is it just rapid pattern recognition, or is it more than that? How does intuition turn experience into a creative resource in the moment?...which whilst possibly associative, has a much greater degree of insight.

The quality of insight is something that seems key to me as a practitioner...The first is holistic intuition which is derived from different sources of data and integrated in a gestalt. This seems to consider the complexity of the situation and gives a way of thinking about what is paid attention to; what is foreground or background, figure or ground...The second is inferential intuition, which would seem to be based on previous analytical processes having become automatic...the final one is affective intuition, essentially having a feeling about a situation, good or bad. Whilst I concur that emotions are a very useful source of data; I would contend that the amount of emotional intelligence required to discern between what is actually about the situation in front of you and your own biases and projections is considerable, and not that common.

She distinguished three intuition varieties: holistic, inferential and affective (Pretz, 2014). The first variety is derived from different sources of data, and these are integrated in a gestalt manner. The middle type is based on past analytical processes, which have become automatic, and the third type relates to a feeling about the situation. Scholes (p. 105-106) describes her use of intuition as

from critical incidents and critical reflection, heavily underpinned by the initial formal training and qualifications, and, importantly for me, listening to the situation. The formal training was usually the first step in acquiring sufficient knowledge and developing basic skills to be able to practice competently at the entry level of my profession. The qualifications and practice certificates I gained in nursing and law signified to me and others that I had sufficient knowledge and skills to practice safely and ethically.

This know-how is perhaps new to the findings by Eraut (2004) and Winch (2014) but not to Nonaka and Takeuchi (1995, p. 11) where the informal learning of know-how focuses on “highly subjective insights, intuitions and hunches that are gained through the use of metaphors, pictures and experiences”.

Scholes (p. 110) also used the phrase, ‘greed for new experiences and knowledge’ is surprising as this attribute has typically negative connotations and here, it offers a positive slant.

An observation of the narratives in the 11 chapters is the similarity of the know-how in both working and learning situations. Scholes (p. 110) again emphasised resilience, curiosity, willingness to try something new and the fear of missing out, kindness, and the patience of others in giving her opportunities. Toribio-Mateas (p. 120) mentioned open-mindedness as an attribute for him to explore creatively, which he used as co-discover, co-create and adapt accordingly (Maguire 2015). Scholes (p. 103-104) and Toribio-Mateas (p. 118) included serendipity as part of their armoury of know-how. They viewed this feature as an aptitude for seeking new ideas and discoveries by chance. However, one may suggest that this may not just be down to luck but having the antennae to ideas and opportunities and using them to their advantage. This approach has resonance with an unconscious problem seeking and solving, which Csikszentmihalyi (1988) and Gardner (1996) would appreciate. This aspect of creativity has been discussed earlier.

Binks (p. 54-55) offers insightful descriptions of reflection and work practices, which lead to her approach of co-facilitation with colleagues:

As a professional facilitator and consultant, reflective practice is something that I both use myself and encourage other practitioners to use. I am taking reflective practice as a particular element within learning from experience, as it is seen as an essential tool in the continued development of a number of professions including teaching, facilitation and social work...This *knowing in action* seemed to be characterised by Schon as intuitive, 'artful', something cultivated with experience and used spontaneously... I find myself drawing predominantly on my knowledge of facilitation, adult learning, psychology and leadership. Much of this is happening on the experiential and imaginal levels of knowing and perhaps even on the transpersonal. As such, more of a challenge to process cognitively, or at least linguistically. This relates to the above discussion of intuition. My accumulated experiences are available for me to draw on, without needing to be fully consciously aware. This is a fascinating experience; it is akin to putting my hand into a lucky dip and coming up with just the thing for that moment...This final element, *reflection on action*, is perhaps what most people are familiar with and where reflective practice often begins. This idea of reflection on action doesn't have to occur removed from the experience but is often seen as something that happens after an interval of time, perhaps only a few minutes, but even overnight...This goes back, for me, to the social processes of learning, the reflection after the fact and the sharing of that reflection is still a useful aspect of learning, if not the whole picture... I would consider the act of co-facilitation with colleagues from a variety of backgrounds and schools of thought, to be the single biggest source of my professional learning...The joy of having been afforded the opportunity to work in an environment where there is an overt focus on the practice and principles of facilitation is perhaps a rare one.

The above narrative by Binks covers several themes of social learning (including co-facilitation as a deliverer), working in a community of practice, reflection and transformation. In short, the encompassing passage offers a birds eye view of this research monograph.

The final point concerns the future of work. Due (p. 78) offered her vision of this in the forms of interdisciplinary know-how, and the offer of education on team working. Due's idea is not too dissimilar to Loo's (2017) findings in his research on creative workers. He suggested that these workers' know-how ought to be multi-disciplinary and that higher education institutions should provide collaborative working and learning, including in assessments.

In summary, the discussions have centred on two identifiable spectra from the four themes. The first one relates to work practices: the normative and innovative/creative types. The second spectrum refers to the learning theme. The two ends of this learning spectrum are formal (including professional inquiry) and informal forms. And within the concept of the learning spectrum, we could argue that there are further related theories of learning. These are lifelong learning and transformational learning. Both formal and informal learning types situate in the lifelong learning concept as learning occurs throughout the lifetime of a person. However, a person will achieve only

certain stages of Kegan's five stages of transformational learning. As estimated by Kegan (Kegan and Lahey, 2016), the fifth and final stage – the self-transforming mind - might only be achieved by less than one per cent of the population and seldom before their late '50s or '60s. Perhaps, connecting work and learning is reflective practice as identified by our contributors. Unlike Schon's (1991) conceptualisation of his reflection-in-action as having a 'conversation with the situation', for some of our contributors (e.g. Binks, Dennis, Hannah, Scholes and Werrett), this involved more of a socialisation process with other stakeholders as well as self-reflection. This socialisation activity may be different to Schon's more cognitive approach. Lastly, we might observe that the social contexts such as socio-cultural, economic and political dimensions would affect the participants' work practices and learning landscapes. In the next section, a conceptual framework will be delineated.

A Conceptual Framework of Occupational Education: Occupational Practices, (Informal) Learning (and Teaching)

This research monograph focuses on informal learning, professional inquiry and occupational education from an epistemological perspective. Two spectra were observed. The first spectrum is related to work practice, which is connected to the participants' professional inquiry regarding their work and their occupational roles (part of occupational education). The other spectrum refers to learning, and again, this relates to the three aspects of the book title. Connecting to the two spectra is the relevance and importance of knowledge. Knowledge is widely defined in this book, and thus the epistemological reference in the book title. These two activities – work practice and learning – are affected by the social, cultural, economic and political landscapes. This perceived structure is merely a device to help us to think about this investigation and is by no means discrete. As we have pointed out earlier, the work practices, learning, reflection and social contexts are interconnected and thus they need to be viewed as a whole entity, where one aspect (e.g. work) cannot operate without the other (e.g. learning).

Insert Figure 5.1

The conceptual framework (Figure 5.1) is based on the literature review chapters (Chapters 2 and 3) and the 11 case studies in Chapter 4. Learning (OECD, 1996; Commission of the European Communities, 2007; Illeris, 2007), for this investigation, may be viewed as a spectrum of formal (by researchers such as Clarke and Winch, 2004) and informal learning (by researchers such as Greenfield and Lave, 1982; McGivney, 1999; Hager, 2004; Jarvis, 2006) forms. Thus we envisage a spectrum of learning with the one end showing formal learning, and the other, informal learning. Of course, this is a continuum where the division of the two forms of learning is not clear-cut, and the apparent division is dependent on the contexts of learning, work and socio-related dimensions. For example, Rees (p. 102) described this learning continuum as "the two [formal and informal] leach into each other. It is the intertwining of formal with private learning, of the personal self and professional self that leads to the challenge of practitioner knowledge and how to communicate it". For Rees, the connectedness of the learning types is evident together with the epistemological aspect and identities (though, personality is outside the scope of this investigation). For Scholes (p. 103), "Those learning experiences are a combination of

formal learning and informal or situational learning. I put no more emphasis or importance on either one of those methods; it has been the combination of both that has been most beneficial to me in my career". She provides an even-handed perspective of these learning forms.

However, within this learning spectrum (as a vertical one in Figure 5.1), practitioners learn throughout their lives as a child via experiences, formal education, life experiences and at work and beyond. This idea of lifelong learning (OECD, 1996) is an additional dimension to the learning spectrum. The other aspect is transformational learning (Kegan, 1982; Kegan and Lahey, 2009) where a person's education may be viewed as a five-step scheme with the hardest step – the self-transforming mind – to attain. Rees (p. 97) alluded to some of Kegan's transformational learning stages in her description of journaling activity.

The germination of reflective practitioner knowledge for me was incidental to life events. These events unceremoniously pulled assumptions up from under me and shattered paradigms, pushing me to reflect for survival. As a child, I mimicked my mother, keeping a diary consistently every day of every year from nine years old until my early twenties. Although the activity was unstructured and free-flowing, I came to understand the cathartic nature of writing reflectively very young, and found value early, which helped me maintain this discipline. The content of my diaries illustrates my development through the stages of consciousness as outlined by Kegan (Love and Guthrie, 1999), with early writing exploring self-categorisation, bound by self-interest (no abstract thinking) and later writings demonstrating a developed sense of behavioural expectations and social awareness, but still immature in terms of a sense of responsibility and true consideration of others.

Insert Figure 5.2

The horizontal spectrum (in Figure 5.1) refers to the professional/occupational practices of work. Residing at one end is normative practice (Figure 5.2) (Kemmis and Green, 2013; Evans, 2016; Loo, 2018) and at the other end, innovative/creative practice (Drucker, 1993; Nonaka and Takeuchi, 1995; Reich, 2001; Zuboff, 2004; Loo, 2017). These work practices might be performed individually or collectively/collaboratively.

Concerning normative occupational practice (Figure 5.2), Rees (p. 100) used 'the availability bias' to describe practitioners' standard mode of operating/working 'inside a box within which they feel comfortable'. Toribio-Mateas (p. 113) insisted the term "is paramount in the context where I operate as a clinical practitioner, where I find myself needing to implement newly generated evidence into my practice". This form of making disciplinary knowledge relevant to his practice may be associated with Bernstein's (1996) recontextualization process where knowledge is modified, translated and relocated to Toribio-Mateas's practice. We envisage, for normative practice, a possible three-tier structure of practices. From the bottom upwards, are the past occupational experiences, i.e. experiences of previous work practices such as in a different professional capacity (for example Scholes's earlier occupations in nursing, law and human resource management). The middle tier refers to a practitioner's current occupational practice, and the top-level relates to pedagogic roles (where 7 of

the 11 practitioners have some form of teaching/coaching activities). For each of the three tiers, there involves similar recontextualization processes. One is content recontextualization where disciplinary knowledge is made relevant to the current practice (may it be teaching or professional), and this know-how is again modified in readiness for practice. One may view the first process as relating to curriculum development and the other process, for carrying out work practices. For the second recontextualization process for each of the three tiers, knowledge of the organisation/institution such as its protocols, systems and related professional regulations etc. are pertinent to the work practice along with the modified disciplinary knowledge. Scholes (p. 103) encapsulated this by indicating it is “putting theory onto practice”. In the final tier on teaching, all the know-how from the three practices come together to provide a final process – Integrated Applied Recontextualization – where the accumulated know-how (integrated applied pedagogic knowledge) is applied to teaching and the related strategies such as demonstration, peer learning and role play are chosen to fit the specific part of the curriculum and the occupational context.

The innovative/creative work practice may be viewed as four quadrants with two dimensions of individual-collaborative working styles, and single and multi-contexts of work (Loo, 2017). The first dimension is self-explanatory. The other refers to contexts such as reliance on technologies in the workplace, the use of multi-media platforms (e.g. Facebook, TV, cinema and internet), teaching, and adhering to several sets of regulations in the production of a product or a service. In each of the quadrants, the relevant knowledge type as exemplified by Drucker (the technologist), Zuboff (the informed worker), Nonaka and Takeuchi (the knowledge-creating crew) and Reich (the geek and shrink) apply. Embedded in the quadrants are the creative dimensions of Csikszentmihalyi's system's view of creativity (1988), Gardner's multiple intelligences, Sternberg et al. 's (2004) 'propulsion model of creative leadership', and von Hippel's (2006) 'democratisation of innovation'. For example, the quadrant of the individual working and single context, a nutritional therapist might be working with a client on a specific diet. Another quadrant of collaborative working and multi-contexts might involve a transport strategist working on a large project in a developing country covering road, rail and air transport systems alongside collaborating with several stakeholders of local people, NGOs and other international agencies.

Both these normative and creative work practices and learning spectra require know-how. Know-how is defined as knowledge (disciplinary, pedagogic, tacit and explicit), experiences (occupational, life and pedagogic), and attributes, attitudes and skill sets (Clandinin, 1985; Shulman, 1987; Bernstein, 1996; Eraut, 2004; Loughran et al., 2003; Loo, 2012; Winch, 2014). The diverse range of attributes, attitudes and skill sets has been covered in the previous section. Examples of the know-how include confidence, curiosity, empathy, ethical stance, greed for new experiences and knowledge, interpersonal sensitivity, intuition, kindness, open-mindedness, patience, problem seeking and solving, resilience, serendipity, trust, tolerance, and willingness to try.

Finally, the two spectra would be affected by the social, cultural, economic and political contexts (Figure 5.1). To illustrate from the 11 contributors, Due (p. 73) gave an insightful account of "working with people from developing country...with people

from different cultures...to better appreciate the social justice and welfare and political stability of developed societies". For Atter (p. 45), he mentioned his quest for "or cultural sites. I mentioned this in meetings. I would ask them something I'd seen, perhaps a museum, historical site, a movie or a new restaurant. I noted down their reactions and the personal anecdotes that this often evoked".

Summary

In this chapter, the narratives from the 11 case studies were discussed using the literature sources from the earlier literature review chapters, which led to the conceptualisation of work/occupational practices and learning.