A curriculum for entrepreneurial creativity and resourcefulness in New Zealand

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Submitted in fulfilment of the requirements for the degree of
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I certify that the thesis entitled

A CURRICULUM FOR ENTREPRENEURIAL CREATIVITY AND
RESOURCEFULNESS IN NEW ZEALAND

submitted for the degree of Doctor of Philosophy

is the result of my own work and that where reference is made to the work of
others, due acknowledgment is given.

I also certify that any material in the thesis which has been accepted for a degree or
diploma by any university or institution is identified in the text.

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Signed ..............................................................................................................

Date..................................................................................................................
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SUMMARY

This thesis asks: ‘How can tertiary education nurture entrepreneurial creativity?’
Entrepreneurship is considered to be a vital determinant of economic growth and the
entrepreneur is understood as someone who innovates and commercialises their own
innovation. The setting is New Zealand which is struggling to make the shift from relying
on primary production to becoming a ‘creative economy.’

The creative individual has been identified as a new mainstream but it is argued that in New
Zealand, education provision is inadequate for supporting the development of the practice
of entrepreneurship. The problem is not unique. Various writers are critical of business
education generally, and of the mismatch between the passion and chaos in entrepreneurs’
lives and the way education programs are typically organised as a linear sequence of
discipline-based courses with prescribed content, activities and outcomes.

Rich data were gathered from in-depth interviews with twelve nascent, new or experienced
entrepreneurs and two associates (one a marketer, the other a scientist). Each participant
was drawn from a different area of economic endeavour. They were asked to share their
stories and views about creativity, the connections between creativity and entrepreneurship,
business success, formal and informal education, and ways to improve tertiary education
programs.

The research found that a suitable environment for nurturing creativity will most likely
have structure but will also enable chaos. It will present opportunities for experiencing
diversity, and will stimulate unconscious and conscious mental processes. It will provide
scope for hard work that is fun and involves authentic risk-taking, and will enable both
individual and purposeful teamwork. The study also found that business success is not
based on knowledge but is rather about being resourceful. The becoming of the creative
entrepreneur thus includes developing capability to network with peers and mentors and
communicate with customers and staff, and developing passion for and resilience in the pursuit of a dream.

The findings suggest that in an age of uncertainty, nurturing entrepreneurial creativity and resourcefulness requires learning to be viewed as a practice-based community process where knowing and doing are interwoven with being. It is argued that this needs to align with Ronald Barnett and Kelly Coate’s (2005) notion of ‘a curriculum for engagement.’ It is suggested that an entire program might simply invite students to work collaboratively to identify and exploit an entrepreneurial opportunity by producing and commercialising an appropriate product/service innovation; to undertake this work as two separate projects – one within an existing organisation, and the other as a new venture; and to theorise their work. It is proposed that a suitable framework lies in William Doll’s (2002) advocacy for a curriculum based on a matrix of five Cs: ‘currere,’ complexity, cosmology, conversation, and community. To these, creativity is added as a sixth C.
CHAPTER 1: INTRODUCTION

1.1 ‘Hic sunt dracones’

‘Hic sunt dracones’ marked uncharted territories on the 1507 Lenox Globe, and in his book *New Zealand unleashed*, Carden (2007) suggests: ‘To many of us in New Zealand, “Here be dragons” might be an apt description of how we feel about the future. It’s unknown and a little scary’ (p.16). Indeed, Carden says that he writes in response to questions about ‘how New Zealand can thrive in an uncertain future’ (p.16). He suggests the focus should be on ‘how New Zealand should be’ rather than ‘what New Zealand should do’.1(p.17).

Carden notes Flynn’s finding that average IQ scores have risen significantly over the last century and that, for example, ‘a person whose IQ placed him in the top ten per cent of the American population in 1920 would today fall in the bottom third’ (p.28). Flynn suggests the change has occurred because the mind has to deal with richer and more challenging environments, and from this possibility Carden looks closely at the complexity of twenty-first century life and the uncertainty of New Zealand’s future. He builds a compelling tableau from scores of examples of dramatic change in technology, business and society, and from ideas from scholars across a wide range of disciplines. Some of the statistics he provides are indeed ‘scary’: 3.3 million white collar jobs in the US and $136 billion in wages will shift from the US to low-cost countries by 2015 (p.60); the number of high-income households in China will increase from forty-nine million in 2003 to ninety-five million by 2008 (p.61); India adds an additional twenty-five million to its middle class each year, and by 2025 over half of its population will be middle class (p.61). Amidst this turbulence, ‘New Zealand is sitting on the wrong side of the growth equation’ (p.62) and this may get worse because ‘[f]or every [New

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1 Throughout the thesis, all emphases within quotations from written sources are as in the original unless otherwise stated.
Chapter 1: Introduction

Zealand] person over sixty-five in 2005 there were just over five and a half workers toiling. By 2051, there will be just over two workers’ (p.63).

Having raised the alarm, Carden goes on to examine how societies handle uncertainty and complexity. He says that understanding the parts of the whole is important but he dismisses reducing things to simple fundamental laws because this does not explain ‘the swirl of human activity’ and reductionism does not therefore ‘get us to the finish line’ (p.78). He argues, instead, for understanding societies through complexity theory, and he unfolds its principles through the examination of systems as diverse as Europe during the Black Plague, a termite colony, and Auckland city. He argues that to cope with uncertainty, a society needs to be capable of adapting to its changing environment because ‘[a]t its most basic, life involves a struggle to convert energy into the structures necessary to survive’ (p.102). He says that top-down controls do not achieve the change required and that change emerges instead from complex interactions amongst a society’s members. ‘Out of these interactions,’ he suggests, ‘emerges a sort of “self-organisation” adequate to drive the adaptation necessary’ (p.102).

Carden goes on to explain: ‘Equilibrium can be hazardous. Why? Because the environment in which complex adaptive systems exist […] is always changing’ (p.112). He contends that ‘innovations rarely emerge from systems with high degrees of order and stability’ (p.112) and that chaotic systems are equally perilous. He concludes, therefore, that ‘[t]he key is to find the spot where disequilibrium breeds vitality and creativity, but doesn’t do so at the expense of all order and structure’ (p.112). Carden, thus, argues that three characteristics are vital to any society’s success: ‘[a]n ability to generate lots of useful ideas – “creativity”; an ability to capture the useful ideas of others – “connectivity”; and ‘a willingness to absorb new ideas – “flexibility”’ (p.120).

Carden proceeds to consider these ingredients in various national contexts and concludes that ‘the innovation story for New Zealand is mixed’ (p.219). The good news is that ‘New Zealanders have never been short on creativity and improvisation,’
but the bad news is that ‘[w]ithout the right support, good ideas just stay that way – as ideas. Our ability to build and develop them into money-generating activities is limited. Put it another way, we’re not coming up with enough new recipes’ (p.219).

Carden concludes by asking five questions:

Do we value sameness, or change and learning? Do we think that progress requires a return to past ways of thinking, or do we see it as infused with new ideas? Do we pine for a country comprised of people just like us, or can we appreciate the value of diversity, despite its challenges? Do we consider mistakes disasters, or the inevitable by-product of risk and experimentation? Do we crave predictability, or accept uncertainty? (p.285)

Carden’s book is stimulating, particularly his focus on complexity rather than reductionism, and on being rather than doing. His arguments that we need to produce not only ideas but to commercialise them as well, and that we should work at the margin between stability and chaos, are equally challenging. He argues that creativity enables societies to adapt and survive, and for me this raises questions about whether or not education helps set the conditions for creativity to thrive and for New Zealand to prosper.

1.2 My story

To explore these questions, I start with my own story because, as Ulysses says in Tennyson’s poem *Ulysses* (1954, first published in 1842):

I am a part of all that I have met;  
Yet all experience is an arch wherethro’  
Gleams that untravell’d world, whose margin fades  
For ever and for ever when I move.

In a former life I was a high school teacher of English. At the end of my first year of teaching I was an external marker for School Certificate English, the national examination taken by students at the end of year eleven. One question in the language section that year required students to provide a word beginning with the letter ‘e’ that matched the italicised part of the sentence: ‘He is *odd in his ways*.’ The answer
required in the assessment schedule was ‘eccentric.’ One of my 350 anonymous candidates provided the answer ‘ecclesiastical,’ spelt perfectly correctly. I asked my supervisor whether this novelty might qualify for the mark, and the answer was an emphatic ‘no.’ Like the conquistadors of the fifteenth and later centuries, our quest was more about taming dragons and converting them to orthodoxy than encouraging their creativity. ‘Eccentricity’ was a word to know rather than a state in which to be.

Several years later, my school was fortunate to participate in a pilot of internal assessment of School Certificate English. In this pilot, the student work that was summatively assessed was decided by individual schools and teachers. National consistency was assured by means of a ‘Reference Test’ taken mid-year by the students in all pilot schools to assess general English language ability and to determine a profile and grade pool for each participating school. The profiling arrangement was wholly norm-referenced and, therefore, as cynical as the external examination. The pilot, nonetheless, enabled teachers to make exciting learning their priority, rather than be preoccupied with preparing students for a three-hour, end-of-year examination. I recall my own students writing journals and doing illustrated class presentations on their hobbies and interests, groups publishing newspapers set inside novels and putting characters on trial, and students producing plays they wrote and writing alternative endings to plays they had read. Within its paradigm, the pilot was a success and it was extended to allow further schools to join, but it never became the national practice. For many schools and communities, especially those with traditions of ‘academic excellence,’ it was too soft. To this day, the school examinations lobby is a formidable force, and, in terms of Carden’s (2007) second question, is evidence that influential parts of the New Zealand community remain stuck in ‘past ways of thinking’ (p.285).

My second career involved employment in three different government departments, all concerned with education. This included seven years, 1990-1997, in the policy group of the New Zealand Qualifications Authority which was established in 1990 to set up a New Zealand Qualifications Framework. When completed, the Framework brought together school, vocational and degree qualifications from so-called academic and
practical disciplines though a language of ‘learning outcomes.’ Within this discourse, standards of performance rather than content are specified, students are assessed in relation to outcomes rather than population norms, and the complexity of the outcomes determines the level on the Framework assigned to the component parts of a qualification, and to the qualification itself. The Qualifications Framework has become a key feature of the New Zealand education system because it is used, not only for national qualifications, but also by all tertiary education providers that want their own qualifications approved in order to access government funding.

At first, I was evangelical about the Framework. I liked, for example, the transparency of the standards-based assessment system and the ways it enabled purposeful dialogue about ends and means, and I applauded its fairness as an assessment method. I naively imagined that work like mine as an English teacher in the pilot would be set free so that students could grow creatively through language and they would be awarded results that truly reflected their achievements rather than what could be fished out of a grade pool. In time, however, that dream was destroyed by three contaminants. First, national standards-setting bodies invariably wrote standards and performance criteria so prescriptively that choices about means were strait-jacketed. Individual providers developed similarly narrow courses and qualifications because they tended to follow blindly the lead of the national bodies. The university sector avoided the worst excesses, but freedom for spontaneous exploration nonetheless ceased to exist. Secondly, moderation procedures were put in place to assure consistency of interpretation of standards, but the people attracted to moderation roles tended to reinvent the past by admitting only particular kinds of evidence of assessment. The worst demanded evidence of individual learning outcomes rather than of whole performances, thereby destroying visions of empowerment, flexibility and rigour. Thirdly, many schools participate in the national qualifications system, but also enrol their students in the Cambridge or International Baccalaureate examinations because they derive identity and comfort from knowing where they stand in the competition rankings.
Chapter 1: Introduction

My third career has been in an Auckland polytechnic, a tertiary institution offering qualifications at certificate to postgraduate levels. Much of my work in the past decade has been driven by a desire to reduce prescription and regulation, and to help people find ways to be free. This has recently become a passion as external demands for accountability grow and choke space, time and energy for creativity. A second focus in my recent work has been to pursue questions about what constitutes good learning and to promote debate and curriculum innovation. This has been particularly influenced by my own experiences as a student.

1.3 Transformative learning

From 1999 to 2001, I was enrolled in the Master of Education program at the University of Auckland. These three years were transformative, particularly in the ways I learned how to ask questions I had intuited but had never managed to articulate. I was particularly invigorated by a course on critical theories of education where I discovered alternative ways to read the world and the legitimacy of different forms of knowledge. For my thesis, I wrote about Power relations in peer- and self-assessment (Meldrum, 2001). The research was organised as a case study of twelve students taking one course in a bachelor degree program for students wanting to become social workers, counsellors and community developers, and for the analysis I developed an assessment model that I extrapolated from the writings of Freire and Shor. The final sentence of the thesis was: ‘The findings provide unequivocal support for Shor’s [1996] declaration that “power is a learning problem and learning is a power problem”’ (p.164).

Shor’s words construct the ‘arch wherethro’ gleams that untravell’d world,’ but perhaps more directly relevant to this doctoral thesis is a ‘special topic’ I took in the place of a prescribed paper. This study started out as a curiosity about change management because of the endless restructurings that had been taking place in education since the mid-1980s, and it ended as an essay I titled ‘Change’s knowledge in an ecological curriculum.’
Chapter 1: Introduction

The essay itself began with an examination of texts on change management, and I argued that this literature tends to be formulaic, reductionist and technicist. I then looked at Nussbaum (1990) who begins her collection of essays on philosophy and literature with the question: ‘How should one write, what words should one select, what forms and structures and organization, if one is pursuing understanding?’ (p.3). She goes on to state that ‘[s]tyle itself makes its claims, expresses its own sense of what matters’ (p.3) and, therefore, the complexity and mysteriousness of the world cannot be adequately stated in the language of transactional prose. She illustrates her point by asking:

what if it is love one is trying to understand, that strange unmanageable phenomenon or form of life […]? What parts of oneself, what method, what writing, should one choose then? What is, in short, love’s knowledge – and what writing does it dictate in the heart? (p.4)

In the essay titled ‘Love’s Knowledge,’ Nussbaum suggests that:

Before a literary work […] we are humble, open, active yet porous. Before a philosophical work, in its working through, we are active, controlling, aiming to leave no flank undefended and no mystery dispelled. This is too simple and schematic, clearly; but it says something. It’s not just emotion that’s lacking, although that’s part of it. It’s also passivity; it’s trust, the acceptance of incompleteness. (p.282)

I was excited by these ideas, and on the basis of Nussbaum’s argument, I turned to literary works to explore how they might help to develop ‘change’s knowledge.’ I selected Shakespeare’s *Hamlet* (1967, first performed in 1603) and Camus’s novel *The Plague* (1960, first published in 1947 as *La Peste*), because, I argued, it is possible to interpret both in terms of the management of change in times of crisis, and it is possible to see the two works as providing contrasting experiences of this. Hamlet is assigned his change task by his father’s ghost who declares: ‘If thou didst ever thy dear father love – / […] Revenge his foul and most unnatural murder’ (I.v.23-25). Hamlet resolves that ‘thy commandment all alone shall live / Within the book and volume of my brain, / Unmixed with baser matter’ (I.v.86-88), but he becomes increasingly fascinated with the very evil he is charged with rooting out. He finally succeeds in
revenging his father but the broader mission to rescue Denmark from rot is totally lost in a bloodbath that consumes all the main players.

Whereas Denmark is a poisoned garden, in Camus’s novel the Algerian city of Oran is ‘ugly’ and ‘without any trees or gardens’ (p.1). What starts out as the discovery of an occasional dead rat quickly escalates into a plague that tests the mettle of Oran’s citizens. The key question here is how to respond to a drastically changed circumstance in which an unfathomable evil inflicts terrible suffering. Early in the novel, Dr Bernard Rieux, the central figure, suggests that ‘[t]he thing was to do your job as it should be done’ (p.39). When the plague subsides and life returns to normal, Rieux reflects that ‘a man can’t cure and know at the same time’ (p.200). Hamlet, in contrast, comes to know too much and becomes paralysed by knowledge. After examining the two texts, I suggested that Hamlet fails miserably to put things right, whereas Rieux successfully carries out a mission that he barely understands. However, I also acknowledged that poststructuralists would challenge my neat, symmetrical readings as the only possible interpretation and would challenge, too, any claim that one reading of a work can definitively establish knowledge.

The essay ended with a proposal that interdisciplinary investigations offer stimulating opportunities for students to take apart and reassemble the ways of questioning and answering of contrasting value and knowledge systems. I argued too that this was consistent with Bowers and Flinders’s (1990) ecological argument that ‘[i]n no system which shows mental characteristics can any part have unilateral control over the whole’ (p.234). The study has relevance with regard to Carden’s (2007) challenges because the curriculum that was proposed rejected simple ways for understanding uncertainty and recommended instead a complex, interdisciplinary system for exploring a phenomenon of social and educational importance. The study started without any predetermined outcomes and it self-organised, between the chaos of all the ideas I encountered, and the stability required for creating an essay that was interesting and coherent. It is important to note, too, that I created my own course and, within it, I created an unconventional curriculum proposal. Therefore, when Carden asks ‘[d]o we value
sameness, or change and learning?’ (p.285), the answer is that we may value change and learning, but we tend to ignore the ecological principle of diversity. We achieve, therefore, the sameness that comes from viewing complexity and cosmology through only an individual disciplinary lens. In addition, we tend to embark on risk-free voyages with pre-specified structures that ensure the journey is not hazardous and that government funding can be secured.

1.4 ‘The ticket’ from ‘the game’

In 2003 I was appointed to a new position in my institution. I became the leader of the division responsible for pre-degree programs, and I decided that to do the job well, I needed to become knowledgeable about management. To that end, I enrolled in ‘Marketing for Managers,’ a course in the MBA at the University of Auckland. There were about fifty students taking the course. The gender split was even, the cultural mix was diverse, most were young and attractive, most were employed in corporate businesses, and those who were self-employed tended to provide services for corporate clients. There were no entrepreneurs in the class. We met for three hours each week for thirteen weeks. The classes were a mix of lecture and discussion, with only one person in fifty able to speak at any one time. The readings fitted Nussbaum’s (1990) account of transactional prose and, while the course was informative, it was also academically narrow and superficial. It made no attempt to be transformative. During breaks, I chatted with the other students and found that many recognised the limitations of the course but did not care because all they wanted was ‘the ticket.’ During class, I was impressed by the wealth of knowledge and the understanding of my classmates, and although I often felt like a fish out of water, I always scored amongst the highest marks because I knew how to play the game.

The first assignment was a group activity, and for this I worked with a student from Surf Life Saving Northern Region and another from the Crippled Children’s Society. We self-selected because we were the only students in the class from non-profit organisations. The assignment required us to choose an organisation, analyse its
environment, evaluate its strategic direction, and make recommendations for change. We selected the life saving organisation, adopted a consultancy role, and the title page of our report proudly stated:

PROPOSAL FOR CLIENT
Robert Barnes
CEO
Surf Life Saving Northern Region.

We never met with Robert Barnes because this was not required. The assignment was an academic exercise, and meeting with Mr Barnes risked undoing the inventiveness of our recommendations and compromising the neatness of the argument we needed to construct. Indeed, we were awarded an A grade, and we were one of the top three of thirteen groups in the class. The lecturer splashed ‘excellent’ and ‘outstanding’ throughout our assignment, and in the assessment summary he wrote: ‘Non-profits are not easy subjects for this exercise but you’ve done a first class job. Your external analysis is exceptional. Your report is very thorough and shows a great deal of effort. Well done!’

For the second assignment, I wrote an essay about rebranding that I titled ‘Brand equity: Paradise lost and regained.’ I made reference to Milton’s poem, and in the feedback the lecturer said that ‘the “Paradise Lost” metaphor seemed strained a little, but that may be just me.’ Her overall comments were, however, very positive, including: ‘Superb! Well – if you’re not doing a PhD you jolly well ought to be.’ This more than any other event marks the beginning of the journey into the ‘untravell’d world’ that is undertaken in this PhD. I was beginning to be alarmed at the mismatch between the ‘creative economy’ I was hearing and reading about and the closed and stable system of the MBA. I was exhilarated by Florida’s (2003) book The rise of the creative class but I wondered where budding entrepreneurs go for learning support. I had started to doubt that business education helps set the conditions for creativity to thrive and for New Zealand to prosper.
Chapter 1: Introduction

The transition to the PhD was not immediate, however. After ‘Marketing for Managers,’ I enrolled in another MBA paper, ‘Accounting for Decision-makers.’ About an hour into the fifth lecture, I gave up struggling to work out how many cups of coffee Jack had to sell to break-even. During the break I told the lecturer I would not be back, and she replied: ‘Good. One less exam to mark!’ I walked away, my mind made up, and here I am.

1.5 Thesis overview

The research for this thesis started out as an interest in the tension between stability and orthodoxy on the one hand, and chaos and creativity on the other, and in how this tension might be played out in education for entrepreneurs. This interest soon organised itself into the research question: ‘How can tertiary education nurture entrepreneurial creativity?’ The quest for an answer has been a journey involving myself as researcher-traveller and fourteen ‘participants.’ These participants are twelve nascent, new or experienced entrepreneurs and two associates, one a marketer, the other a scientist. They work in diverse fields – horticulture, robotics, tourism, travel, bioinformatics, food, precision electromagnets, healthcare, wood science, clothes design, household products, fibre, and screen production and virtual worlds. They have provided rich insights into the creativity, connectivity and flexibility that Carden (2007, p.120) argues are vital for the success of whole societies.

The three chapters that follow lay the ground for the research. Creativity is defined as the making of something that is novel and useful, entrepreneurs are defined as people who innovate and commercialise their own innovations, and entrepreneurship is established as a critical force for economic growth. The research problem is given a location by introducing the concept of the creative economy, explaining that labour productivity in New Zealand is low by international standards, that the country needs to work more creatively, and noting that several government schemes to enhance innovation have achieved very limited success. In this context, the problem is given shape by explaining that education for entrepreneurs is problematic in New Zealand,
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and that this is not at all unique to this country. Indeed, the point is made that this thesis is relevant to any learning situation where there is a tension between stability and risk, and where the rhetoric of creativity disappears into the practice of convention. It is explained that the research journey has been designed as a qualitative investigation using in-depth interviewing as the research method, and that hermeneutics has provided a process for drawing all the material together holistically. Before proceeding to a discussion of findings, the fourteen participants are introduced one at a time so that the reader meets them ‘socially’ and they have a presence in the thesis and are not merely providers of quotable stories and ideas.

Chapters Five to Seven deal with answers to the first three of the seven questions I asked participants:

- What makes you creative?
- Why are you a successful entrepreneur?
- What is the connection between creativity and entrepreneurship?

The responses make it very clear that there is an unambiguous connection between creativity and entrepreneurship, and that creativity alone cannot assure business success. To make sense of the findings, two chapters are devoted to creativity – one taking a personal social approach and the other cognitive, and one to business success. It emerges that a suitable setting for nurturing creativity will most likely have structure but will also enable chaos; will present opportunities for experiencing diversity; will stimulate unconscious and conscious mental processes; will provide scope for hard work that is fun and involves risk, and space for relaxation and for ‘flow’; and will require both individual and teamwork. It also emerges that business success is not predicated on prior knowledge, but, rather requires good relationships with peers, staff and customers, and a capacity to create a dream and pursue it with passion and tenacity. It is concluded that, in essence, successful entrepreneurs are creative and resourceful, that these dispositions are about being and becoming, and that this has serious implications for curriculum design.
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Chapters Eight and Nine look at learning processes and business education, and they are informed by participants’ answers to three further questions:

- What roles have formal and informal education played in your success?
- What are your views of tertiary education programs that aim to enhance/nurture creativity and entrepreneurship?
- What improvements or transformation could be made?

The evidence is critical of the university and current business programs, and it strongly favours treating entrepreneurial learning as a practice-based community process. An examination of the literature suggests that while there are pockets of innovative business teaching practice, these fall short of the participants’ call for programs to be based on authentic experiences that involve genuine risk-taking.

On this basis, Chapters Ten to Twelve develop a curriculum proposal for nurturing entrepreneurial creativity and resourcefulness. The proposal starts with a chapter that provides a theoretical foundation based on the writings of two separate authors, William E. Doll Jr and Ronald Barnett. Barnett’s (2004) argument that in an age of supercomplexity, the educational task is ontological, rather than epistemological, is a key idea. It provides a basis for Barnett and Coate’s (2005) subsequent proposal for a curriculum for engagement. Doll’s (1993) advocacy for a curriculum based on a matrix of 4Rs – richness, recursion, relations and rigour – is considered, and close attention is given to his (2002) argument for a curriculum characterised by 5Cs – ‘currere,’ complexity, cosmology, conversation and community. It is proposed that the social and economic demands of twenty-first century life require that creativity be added as a sixth C, and that creativity will have a generative impact on the five other Cs. The following chapter gives life to this framework by making extensive use of participants’ ideas, and the next chapter strengthens the proposal further by examining the practice that is envisioned through the lens of each of the six Cs.

Chapter Thirteen concludes the argument, and it includes a discussion about whether or not I have betrayed Doll and Barnett in the interests of a performative vocationalism, and participants’ responses to the last question asked of them:
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- What role, if any, could you play?

It is, in effect, an epilogue, just as this chapter has been a prologue to the problem statement that now follows.
CHAPTER 2: THE PROBLEM

2.1 Introduction

Florida (2003) announces: ‘The creative individual is no longer viewed as an iconoclast. He – or she – is the new mainstream’ (p.6). In this chapter, the notion of the ‘creative economy’ is introduced and the importance of creative entrepreneurs is discussed. The problem of providing suitable education for new entrepreneurs, and for nurturing their creativity, is identified and explored. The chapter provides definitions of key terms – entrepreneur, curriculum and creativity – and it concludes with the research question and the aim of the project.

2.2 The creative economy

_Idealog_, a New Zealand magazine marketed as ‘the voice of the creative economy,’ was launched in January 2006. The publication is a partnership between three founders and the Auckland University of Technology (AUT). In the first issue, the Vice-Chancellor states that ‘the University wants to lead the discussion about what creativity and innovation mean in a commercial context and to become a central part of the emergence of New Zealand as a creative economy’ (McCormack, 2006, p.8). The founders explain that the purpose of _Idealog_ is ‘to inspire those of you who are in the business of ideas. […] Without new ideas, fresh thinking, and a determination to create something from nothing, New Zealand will become little more than a country of bus drivers and bartenders’ (Heeringa, MacGregor and Bell, 2006, p.8). The editor adds that ‘[c]reativity is demanded on every street corner of our economy’ (Cooney, 2006, p.10).

In a first issue article titled ‘Welcome to the creative economy,’ Heeringa (2006a) notes that New Zealand is struggling to deal with a fundamental shift from reliance on
the physical environment to developing an economy based on ideas and their commercialisation. He contrasts the traditional Braeburn apple with the Jazz, a ‘perfect’ new apple developed at HortResearch, and he argues that ‘[t]he success of the Jazz and the failure of Braeburn is a metaphor for New Zealand. Whether it’s kiwifruit or lamb, furniture or theatre, music or milk powder, the key for economic success is turning ideas into IP, and IP into business’ (p.36).

Whereas Tepper (2002) notes that internationally ‘there is a growing belief that changes in the economy have pushed creative assets to the centre of economic life’ (p.159), for others this ‘growing belief’ is a certainty. Furthermore, as the *Idealog* writers explain, the notion of the creative economy extends well beyond the traditional creative industries. Indeed Gibson and Klocker (2004) discuss how ‘academic knowledges circulate, stemming from theorization of academics as creative producers’ and how ‘knowledge production [is] part of the creative economy’ (p.423). Various other labels are also widely used, including the ‘innovative economy,’ the ‘knowledge-based economy,’ and the ‘information economy,’ as well as the less common ‘cultural economy’ (Pratt, 2004). Noting this assortment of brands, Godin (2006) argues that ‘the OECD, acting as a think tank for its member countries, has been an important promoter of these concepts, turning them into buzzwords’ (p.17). They may well be used as buzzwords, but they remain concepts with substance nonetheless.

Howkins (2002) explains that while neither creativity nor economics is new, what is new is their interrelationship and the ways they combine to create value and wealth. People who own ideas are now said to be more powerful than those who work machines and even those who own machines. Howkins argues that the raw material of the creative economy is human talent which he describes as:

the talent to have new and original ideas and to turn those ideas into economic capital and saleable products. […] The most valuable currency is not money but ideas and intellectual property, which is intangible and highly mobile. The management of creativity puts a premium on entrepreneurial, just-in-time, temporary, ad hoc working. It is driven more by education than by technology. Investments in education, research and *thinking* increase creativity’s value and
effectiveness as surely as do investments in other capital assets increase theirs. (p.213)

Florida (2003) similarly argues that in today’s economies, creativity and competitiveness go hand-in-hand. He notes the emergence of a new creative class of thirty-eight million Americans comprised of people in science and engineering, architecture and design, education, arts, music and entertainment, whose economic function is to create new ideas, new technology and/or new creative content. Around this core is a broader group of ‘creative professionals’ in business and finance, law, health-care and related fields who engage in ‘complex problem-solving that involves a great deal of independent judgment and requires high levels of education or human capital’ (p.8). Florida (2005) goes on to argue that today, ‘the terms of competition revolve around a central axis: a nation’s ability to mobilize, attract, and retain human creative talent’ (p.3). Peck (2005) notes that this argument ‘has proved to be a hugely seductive one for civic leaders around the world’ but he adds that ‘while creativity strategies have quickly become the policies of choice […] they also work quietly with the grain of extant “neoliberal” development agendas, framed around interurban competition, gentrification, middle-class consumption and place-marketing’ (p.740). Whatever the politics, it seems difficult to argue against Florida's (2005) report that the percentage of people in creative occupations in New Zealand jumped from 19 percent in 1991 to 27 percent in 2002 (p.9), and his contention that globally, ‘the creative sector accounts for the lion’s share of all wealth generation’ (p.29).

2.3 Labour productivity

While the number of people in creative work may have jumped, a discussion paper from the New Zealand Institute (Skilling & Boven, 2005) tells another story of significance. Despite strong economic growth since 1990, New Zealand’s per capita income ranks twenty-first out of thirty OECD countries. Two thirds of growth is the result of the increased number of hours worked and only one third is due to labour productivity growth. Over the next fifteen years the labour force will grow at only half the rate of the past fifteen years. Maintaining economic growth will, therefore, require
substantial improvements in labour productivity. New Zealand, it seems, needs to work more creatively.

Skilling and Boven’s paper also asserts that New Zealand’s share of world trade is falling, and it is argued: ‘Growth is about getting many things right, and a wide range of policies will be required to lift New Zealand’s labour productivity […]; for example, education and innovation policy, savings policy, infrastructure investment, the tax system, and labour markets’ (p.2). The paper adds that to deliver the sustainable productivity growth that the economy requires, domestic improvements must also focus on international engagements. Commenting on the Institute’s report, Oram (2005) agrees that the economic imperative is ‘radically different business models that enable us to produce higher value, more sophisticated products and services, and get them out to the world’ (p.D2). This imperative becomes a warning when Oram (2007a) goes on to suggest that ‘[q]uite simply, we’re living far beyond our means,’ and that unless adverse economic trends are reversed, ‘international financial markets will lose confidence in our ability to pay them back’ (p.19).

Since 2005, the New Zealand Institute has produced six discussion papers focused on the need to create a global New Zealand economy. The latest (Skilling & Boven, 2007) is titled So far yet so close and addresses the need to rethink location in relation to markets. In a separate essay titled The New Zealand economy: The next 20 years, Skilling (2006) argues that ‘the increased importance of technology, ideas and knowledge has not made the impact on the New Zealand economy in the way that it has in many developed countries’ (p.1). He notes that Australia’s annual per capita income remains about 30 percent higher than New Zealand’s and he laments the possibility that lifestyle is a greater priority for New Zealanders than is making the policy and personal changes required to generate growth. He concludes that ‘[w]e need a genuinely Team New Zealand approach to building the economy, with a real partnership between the public and private sectors’ (p.11).


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2.4 Growth and Innovation Framework

The Government has not been sitting on its hands. In February 2002, the New Zealand Prime Minister, Helen Clark, announced major initiatives for growing an innovative economy. These were generally known as the Growth and Innovation Framework or ‘GIF.’ The purpose was to move New Zealand away from dependence on the export of agricultural products to more ‘knowledge-based’ industries. The GIF gave special attention to four sectors – information and communications technology (ICT), biotechnology, screen production, and design. These were selected because of their high growth potential and because their technologies and capabilities are considered to be enablers of activity across the economy generally. A private sector taskforce was established for each sector, with $110 million set aside over four years to support a range of projects.

Three years later, on 25 July 2005, the Ministry of Economic Development (2005) released a report titled The Growth and Innovation Framework Sector Taskforces: Progress with implementation. The same day, The New Zealand Herald reported that Jim Anderton, the Minister of Economic Development at the time, said of the taskforces that ‘they set the goals for themselves, and they set them fairly high. Some of them, we even question ourselves’ (p.C14). The following day, in an editorial in the same newspaper, Nowak (2005) was far less kind and argued that ‘you get the impression from looking at its results so far that it’s a half-hearted one based on airy-fairy, pie-in-the-sky goals that the Government isn’t really serious about’ (p.C4).

However, he, like the Minister, concluded that the full review to be produced in June 2006 would provide a better assessment than the progress report.

In the event, no such review occurred. In October 2006, the Ministry’s GIF website (Ministry of Economic Development, 2006a) announced that:

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2 Throughout the thesis, government departments are of New Zealand unless otherwise stated.
Chapter 2: The Problem

This website is no longer current as the Government’s economic development thinking has evolved since this site was last updated. The Government’s current focus is on economic transformation. This work builds on the Growth and Innovation Framework, and continues the Government’s long term commitment to lifting incomes and quality of life through innovation and raising productivity.

Visitors to the GIF website are provided with a hyperlink to another area of the Ministry’s website where the Economic Transformation Agenda is outlined. This agenda is much broader than the GIF, and Oram (2007a) comments: ‘Growth and innovation morphed into economic transformation, then disappeared into the language of sustainability’ (p.21).

Two reports posted elsewhere on the Ministry’s website provide insight into the unravelling of the GIF. In one (Ministry of Economic Development, 2006b) it is noted that during the period 2003-06, New Zealand Trade and Enterprise (NZTE), the Ministry’s implementation agent, sponsored too many projects which diluted strategic direction. Of the three best funded projects, only one (ICT) was in a GIF sector. In the other report (Ministry of Economic Development, 2006c), it is stated: ‘Although the GIF industry bodies have had some success in pursuing their economic development objectives, there is a risk of government becoming the financial guarantors of these and future bodies.’ The GIF is damned with faint praise, and the political and bureaucratic jumble resonates with Skilling’s (2006) argument that moving the economy will require ‘deliberate, aggressive, sustained action’ but ‘the disappointing reality is that little truly meaningful action has been taken over the past decade despite lots of talking’ (p.2).

2.5 BetterbyDesign

Design is one of the four sectors included in the GIF, and, after three years of planning, the ‘BetterbyDesign’ strategy was launched by Tom Peters at a three day conference described in The New Zealand Herald as a ‘bootcamp’ (Bond, 2005, p.C1). The strategy continues to be rolled out in association with New Zealand Trade and Enterprise. The BetterbyDesign (n.d.) website explains that the aim is ‘to help New
Chapter 2: The Problem

Zealand companies increase their exports and profits through the better use of design in their products and services. As well as focusing on products and services, it is also stated that ‘[d]esign-led businesses take a strategic approach, incorporating design through every aspect of their business.’ This is consistent with Howkins’s (2002) point that in the creative economy, ‘[c]reativity is present at all levels of business from the management of a company to the development, branding and shape of each product’ (p.xi).

The BetterbyDesign website features news, events, stories, case studies, web links, and a recommended reading list. There is also a directory of industry sectors and design disciplines, each with case study illustrations of design problems, solutions and benefits to clients. In 2005 there were three case studies from the education sector. The solutions in these cases covered marketing tools for a private training establishment teaching English to international students, an education communications plan for a public sector organisation, and rebranding for a university with a corporate identity problem. None of these incorporates design into ‘every aspect’ of the respective organisations, and in each case the solution was to a problem that is peripheral to the core business. In 2007, the three were replaced by nineteen new case studies, but all of these concern design consultants that educate clients, rather than education organisations that teach students.

In 2005, the major education project organised by the BetterbyDesign Taskforce was a three day foundation course for business titled ‘Profit by Design.’ The day one content covered Design in a Global Context, and addressed the question ‘What is Design?’ Day two covered individual sessions on Perspectives in Design, Principles of Design, Metaphors of Design, Design and Business Strategy, Design Case Studies, Design Disciplines, and Design Challenge Part 1. Day three picked up Design Challenge Part 2, and added Strategic Design Brief, Design Business Processes, Managing the Design Process, Synthesis Conversation, Action for Design, and Next Steps. The Taskforce also provided a Masterclass ‘lecture’ series with a similar sweep of content. In 2006 these initiatives were replaced by a ‘Design Integration Program’ that takes
participating organisations through a six-stage process: Selection, 360 Assessment, Planning, Resourcing, Execution, and Extension. The earlier lecture approach has been replaced by the provision of advice, but the form is still directive, linear and crammed with content, and it is noteworthy that the organisations that have participated to date are mainly high-profile companies.

A further change has been renaming an earlier audit process as ‘360 Assessment.’ The audit had been subject to criticism in an article in *Idealog* (Labone, 2006, p.19) where several auditees were asked: ‘How was it for you?’ Their responses included the following:

The biggest benefit was being asked questions for which we had no easy answers. That’s what we’re working on now. … I never thought of us in a design sense. But I guess everything is design, unintentional or otherwise. We want to be intentional now.
Steve Nathan, chief executive, Commac

The audit is fundamentally flawed. It has been conceived by DINZ [Design Institute of New Zealand], which is nothing more than a self-preservation society. … They told me nothing useful except that maybe our building is not very well designed. Thank you – that will help a lot in our international sales.
John Heng, chief executive, Click Clack (p.19)

The Government’s BetterbyDesign program also included several design education initiatives overseen by the Tertiary Education Commission, although it is noteworthy that the URL that provided outlines of these (Tertiary Education Commission, n.d.a) disappeared between March and October 2007 to be replaced with ‘Error 404 - Page Not Found.’ What is particularly disturbing is that all reference to a national Design in Business Academic Forum held in March 2006 (Tertiary Education Commission, 2006) has vanished from the website. This event was attended by leading academics and people in business and creative industries, as well as Dr Michael Cullen, the Minister of Tertiary Education at the time. Areas identified for action included the development of a ‘more flexible learning environment’ with shifts ‘from linear to random’ and ‘from profile to self-determination’ (p.22). Participants’ closing agreements included the statements: ‘There is a need for business to become more design aware’; ‘New Zealand’s competitiveness will be enhanced by the adoption of
design principles and perspectives’; and ‘The forum has resulted in a range of valuable perspectives on linking design and business education more closely. To maintain this sharing it is proposed that an on-line resource be set up to continue opportunities for networking and sharing resources’ (p.28). A year later Roger Bateman (personal communication), a forum participant, noted that nothing has eventuated ‘except for the expelling of more hot air.’ It now seems that the Design in Business education initiative has suffered the same fate as the Growth and Innovation Framework.

### 2.6 Struggling with a fundamental shift

The founders of *Idealog* see New Zealand ‘struggling with a fundamental shift, from relying on the physical advantages of rich volcanic soils and buckets of rain to an economy based on ideas and our ability to sell them’ (Heeringa, 2006a, p.36). The necessity for making this transition is underscored by Skilling’s (2006) point that New Zealand’s labour productivity ‘in terms of output per hour worked is just 79 percent of the OECD average’ (p.2).

Pink (2005) extends the case for change by arguing that abundance, outsourcing and automation require nations in ‘the advanced world’ to move ‘from an economy and a society built on the logical, linear, computerlike capabilities of the Information Age to an economy and a society built on the inventive, empathetic, big-picture capabilities of what’s rising in its place, the Conceptual Age’ (p.1). Pink identifies these capabilities as design, story, symphony, empathy, play and meaning. He defines design as ‘a classic whole-minded aptitude’ and positions it as the means by which ‘utility is enhanced by significance,’ thereby enabling differentiation in markets saturated with material abundance (p.70).

The GIF’s aim to enhance creativity and develop knowledge-based industries reflects Pink’s argument, but as Skilling (2006) laments, ‘[w]e talk a big game here, but often do very little’ (p.8). The BetterbyDesign strategy also aspires to support the development of the creative economy but it seems beset by five major problems. First,
there is confusion as to whether the focus is on business generally or on design disciplines. The former is the Government’s strategic interest, but the latter seems to be the preference of the BetterbyDesign Taskforce. Secondly, published material suggests a primary interest in brand-related matters rather than organisations, products and services, and the means of production. Thirdly, the BetterbyDesign Strategy seems to be more in-house than universal. Fourthly, the strategy’s education initiatives betray a focus on the delivery of prescribed content rather than on the deep learning processes that might be associated with a conceptual age. Fifthly, the Tertiary Education Commission seems to be too preoccupied with reforming the funding of the tertiary education sector to pursue the advice of the Design in Business Academic Forum.

Oram (2006) recalls the catalytic Knowledge Wave Conference in 2001 and its ‘grand plans and earnest enthusiasm for dragging New Zealand into the knowledge economy.’ He notes that five years on, slow progress has been made and it is easy to be cynical when ‘[w]e’ve changed but the world has changed faster’ (p.D2). Another view of grand plans is Bourdieu’s (2000) contention that ‘the vision of the engineer must be abandoned in favour of the vision of the gardener’ (p.19). The gardener metaphor is picked up again in Chapter Thirteen.

2.7 Entrepreneurship

In various ways Howkins (2002), Florida (2003, 2005) and Pink (2005) – as well as Hamel (2000) and Collins (2001) – describe the coming of an age of creativity as an economic force. Earlier, Drucker (1985) observed ‘a profound shift from a “managerial” to an “entrepreneurial” economy’ (p.1). He noted that management began as a discipline during World War II. For a time it remained confined to big business, and ‘the time has come to do for entrepreneurship and innovation what we first did for management in general some thirty years ago: to develop the principles, the practice and the discipline’ (p.17). Drucker’s co-location of ‘entrepreneurship and innovation’ foreshadows a relationship between entrepreneurship and the creative economy. This points to the way that the growth of the creative economy owes much to the emergence
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of entrepreneurship as an economic driver. Drucker’s 1985 call for the development of
the principles, the practice and the discipline itself invites an examination of what has
happened since.

A helpful resource is the Global Entrepreneurship Monitor (GEM), established in 1997
to investigate relationships among entrepreneurship, economic development and
national prosperity. Each year, participating countries are expected to conduct
independent investigations using standardised methods and measures. The researchers
are business academics. New Zealand joined the project in 2001, and the New Zealand
research is undertaken by the Centre for Innovation and Entrepreneurship. The GEM
NZ 2001 publication (Frederick & Carswell, 2001) states that the project aims ‘to
reveal the nature of entrepreneurship as a social and economic phenomenon in the New
Zealand context’ (p.16). Four New Zealand reports have been produced – 2001, 2002,
2003-04, and 2005. It is noteworthy that where the discussion in the first report is
generally positive, anxiety creeps into the second, and this shifts towards despair in the
third. The fourth is entirely devoted to Maori entrepreneurship. No fifth report has been
produced because of a lack of funding (Frederick, personal communication).

2.8 GEM NZ 2001

The GEM NZ 2001 provides some important definitions. It states: ‘Entrepreneurship is
based on the availability, perception and conversion of opportunity’ (p.9). The writers
define innovation as ‘something new which has the potential of changing relationships’
and, because not all innovations are exploited, they define entrepreneurship as ‘the
commercialisation of innovation’ (p.14). They define an entrepreneur as ‘a person
attempting to create a new business enterprise either through spotting a new
opportunity or out of necessity, job loss or redundancy’ (p.14).

The GEM NZ 2001 reports that New Zealand rates in the top three countries (along
with Australia and Mexico) for ‘total entrepreneurial activity’ (TEA) with a score of
18.2. TEA is measured as the percentage of the adult population considered to be
entrepreneurs.’ The researchers believe, however, that ‘only a small percentage of new entrepreneurial firms could be classified as dynamic, export-oriented businesses’ (p.40).

2.9 Entrepreneurship and education

The GEM NZ 2001 considers entrepreneurship within a framework of ten conditions: financial, government policies, government programs, education and training, R&D transfer, commercial infrastructure, internal market openness, physical infrastructure, cultural and social norms, and Maori dimension. As part of the data gathering, the New Zealand researchers interviewed forty ‘key informants’ about these ten conditions (p.30). When asked to identify the most important conditions for entrepreneurship in New Zealand, cultural and social norms came top with thirty mentions, and education and training was second with eighteen. Asked about the three most important problems facing entrepreneurship in New Zealand, cultural and social norms again came top with thirty mentions, financial support second with twenty-four, and education and training third with twenty-one. Thus, cultural and social norms and education and training are both crucial conditions, and both are also problematic.

Informants were provided with statements about national conditions influencing entrepreneurial activity and were asked to rate these as true or false (p.31). The statement regarded most false (with a score of 1.44, where 1 is false and 5 is true) was ‘teaching in primary and secondary education provides adequate attention to entrepreneurship and new firm creation,’ and the second most false statement (1.70) was ‘teaching in primary and secondary education provides adequate instruction in market principles’ (p.31). The problem with these statements is that they treat entrepreneurship as course content to be acquired, rather than as a process to be understood and experienced. A more interesting statement on school education was ‘teaching in primary and secondary education encourages creativity, self-sufficiency, and personal initiative.’ Here the score of 2.17 is marginally better than the result for
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the other two statements, but informants nonetheless considered it to be more false than true.

Two statements are provided about tertiary education. The statement ‘colleges and universities have enough courses on entrepreneurship’ inappropriately asks about amount rather than quality, and the score here was 2.35. The other statement is ‘the level of business and management education is truly world class.’ This too is problematic as it assumes there is a known benchmark against which respondents can make a judgment. The score for this statement was 2.26.

2.10 Entrepreneurship and cultural and social norms

Seventy-five percent of the forty key informants identified cultural and social norms as both a critical condition and a major problem for successful entrepreneurship in New Zealand. The researchers note that the term entrepreneur is often equated in public minds with ‘dishonesty and opportunism’; there is a ‘tall silo’ culture where potential entrepreneurs are ‘not willing to give up control and live outside their comfort zone’; and there is the ‘great clobbering machine’ also known as the ‘tall poppy syndrome,’ of which one informant said ‘if you succeed you get whacked around the ears; if you fail you get whacked around the ears’ (p.32). More seriously, the researchers describe New Zealand as ‘a modest culture unaware of its excellence and unable to celebrate itself’ (p.32).

The GEM NZ 2001 notes that innovation and ingenuity are an integral part of the Kiwi culture and that this is epitomised in the metaphor of the ‘number eight wire’ approach to technology in which anything can be made, improved or fixed with a piece of fencing wire. The report adds that while some business academics consider the number eight wire mentality to foster the self-reliance and confidence needed for small business, others consider it to render Kiwis ‘improvisers,’ rather than ‘innovators’ (p.13). The GEM writers note Thompson’s argument that ‘[p]erhaps No. 8 is really for adolescents. You need it – and then you need to abandon it’ (p.13). Heeringa (2006b)
similarly says that ‘New Zealanders have historically been superb at inventing and innovating. Our legacy is in farm-based tinkering. We fail in commercialisation, which in essence is marketing’ (p.77).

2.11 GEM NZ 2002

The GEM NZ 2002 (Frederick, Carswell, Henry, Chaston, Thompson, Campbell & Pivac, 2002) is similar to the 2001 report with current data and feature stories. However, anxiety emerges as a theme in the research analysis. The report mounts a defence of entrepreneurship by arguing that while New Zealand pays significant attention to small business and innovation, not enough is paid to entrepreneurship. The report states that entrepreneurship is a ‘vital determinant of economic growth’ (p.13) and repeats the argument raised in 2001 that New Zealand has an entrepreneurial gap between start-up and wealth creation that can be filled with smart policies and programs. The 2001 report argued that ‘[a] knowledge-driven economy is one in which the generation and commercialisation of knowledge play the predominant part in the creation and redistribution of wealth’ (p.11). The 2002 report notes, however, that ‘most of our entrepreneurs aim quite low. Typically, they want to start a six-person business in the inward-looking service industry focused on the Auckland market’ (p.12).

The report concludes with a plea for a national policy on entrepreneurship that includes new education initiatives. It is noteworthy, however, that the researchers again define education solely in terms of content to be taught when they recommend that entrepreneurship education includes topics such as negotiating, leading high-growth companies, new product development, opportunity analysis, commercialisation of technologies, and the challenges associated with venture development (p.46). Creativity is also included, but as a topic to be covered rather than as something to be nurtured.
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2.12 GEM NZ 2003-04

The GEM NZ 2003-04 (Frederick, 2004b) reports that TEA has increased but again asks ‘if we’re so entrepreneurial, why aren’t we creating more wealth?’ (p.8). Again the answers are that horizons are set low, and there is ‘no policy to increase the supply of people who are capable of taking innovations to the global market place and of acting as catalysts for economic growth, employment, and increased national prosperity’ (p.8).

Another disquieting issue is the researchers’ conclusion that New Zealanders continue to fail to see the connection between innovation, economic growth and higher standards of living. Skilling (2006) makes the same point. The GEM researchers argue that New Zealanders, including the Labour Government (elected in 2005 for a third term), ‘look down on entrepreneurs’ and believe that ‘[t]he word entrepreneur is suspect of ill-gotten gains, exploiting other people, and not sharing with the community’ (p.50). They claim that about fifty high-flying entrepreneurs receive a disproportionate amount of attention from policy-makers, while the needs of 320,000 go wanting. It is striking that Prime Minister Helen Clark wrote the Foreword to GEM NZ 2001 in which she stated ‘[d]eveloping a supportive culture that encourages entrepreneurial excellence is a critical challenge for all New Zealanders to embrace’ (p.8), yet the GEM NZ 2003-04 ends with the statement that ‘the New Zealand government is caught in “innovation-speak” and small business policy’ (p.55).

2.13 GEM NZ 2005

The GEM NZ 2005 (Frederick & Chittock, 2006) focuses specifically on Maori’ entrepreneurship and identifies high rates of entrepreneurship but some disturbing trends. First, Maori who start up new ventures or run existing ones are less educated than the general population engaged in similar work. Secondly, there are lower

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Maori are the native people of New Zealand and are known as the ‘Tangata Whenua,’ the ‘People of the Land.’ In 2006, the New Zealand census found that Maori constitute 14.6 percent of the total population of 4.2 million.
transition rates from start-up to established Maori businesses. Thirdly, only 37 percent of Maori entrepreneurs’ businesses survive forty-two months, compared with 63 percent of the general population’s (pp.9-10). It also is noteworthy that more Maori than non-Maori ‘experts’ agreed with the statement that ‘university programmes do not provide adequate preparation for entrepreneurs’ (p.11).

2.14 Muddle

The GEM research identifies serious concerns but there are also problems within the first three reports. One is a tangle related to the scope of the research. In the GEM NZ 2001, the researchers defined entrepreneurship as ‘the commercialisation of innovation’ (p.14) but they factored this out of their definition of an entrepreneur as ‘a person attempting to create a new business enterprise either through spotting a new opportunity or out of necessity, job loss or redundancy’ (p.14). The result is that the research data include vast numbers of small businesspeople in service industries who are not truly engaged in the ‘commercialisation of innovation’ and do not, therefore, contribute directly to the creative economy. It seems that the GEM researchers have offered a muddled response to Drucker’s challenge to develop the principles, the practice and the discipline of entrepreneurship.

The second difficulty relates to the forms of education and support that are considered appropriate for developing practice. Barnett and Coate (2005) note that higher education is expanding throughout the world but there is little talk of ‘curriculum’ per se. Most of the literature seems oriented instead towards improving teaching without addressing the core question: ‘What is it to be “an accomplished human being”?‘ (p.4). They note, too, a preoccupation with means over ends which gives rise to a performative professionalism ‘overly concerned with the skills levels of students and with the effectiveness of programs in driving up those skills’ (p.18). A performative professionalism seems to be the goal of the sort of education valued by the GEM researchers and by the BetterbyDesign Taskforce. This is an issue that warrants investigation.
2.15 Definition: Entrepreneur

A definition of entrepreneur needs to be settled before continuing with the discussion of education. As already stated, the GEM researchers define entrepreneurship as ‘the commercialisation of innovation’ (Frederick & Carswell, p.14). This definition gives rise to a fundamental question: Do innovators produce items for commercialisation by others, or do the same people both innovate and commercialise the innovation?

Collins (2001) provides an answer by way of an illustration:

Entrepreneurial success is fueled by creativity, imagination, bold moves into uncharted waters, and visionary zeal. As a company grows and becomes more complex, it begins to trip over its own success – too many new people, too many new customers, too many new orders, too many new products. What was once fun becomes an unwieldy ball of disorganized stuff. [...] In response someone [...] says, ‘It’s time to grow up. This place needs some professional management.’ The company begins to hire MBAs and seasoned executives from blue-chip companies. Processes, procedures, checklists, and all the rest begin to sprout like weeds. [...] Chains of command appear for the first time. [...] The professional managers finally rein in the mess. They create order out of chaos, but they also kill the entrepreneurial spirit. [...] The creative magic begins to wane as some of the most innovative people leave [...] The cancer of mediocrity begins to grow in earnest. (p.121)

Collins is clearly of the view that entrepreneurship involves the same people in producing innovation and in its commercialisation. Bolton and Thompson (2000) agree:

The entrepreneur is both an opportunity-spotter and a project champion. But he or she may not possess these implementation capabilities – in which case the individual will need a partner who is able to do this well, or must hand the idea and opportunity over to a project champion if it is successfully to come to fruition. [...] However, the true entrepreneur [...] is able to combine and execute both roles successfully. (p.28)

The GEM research project thus comes unstuck because on the one hand it includes people who match Collins’s understanding of an entrepreneur but on the other hand it also includes people in small businesses who are ‘inward looking’ service providers. This might well be because the researchers’ definition of innovation as ‘something new
which has the potential of changing relationships’ (p.14) allows for the inclusion of people who are innovative only in the ways they commercialise existing products. A better understanding of the term ‘innovation’ is thus required.

In his book on the European Union’s Innovation Program, Thackara (1997) says that ‘we take innovation to mean two things: first, the commercialisation of a technologically changed product in such a way that the new design delivers improved service to the user; and second, improvement in the way an item is produced – which may involve new equipment, new management and organisational methods, or all of these’ (p.12). Thackara substitutes innovation for entrepreneurship, and he makes it clear that innovation encompasses changes to products and changes to the means of production.

Hamel (2000) goes further. He argues that ‘industry revolutionaries take the entire business concept, rather than a product or service, as the starting point for innovation’ (p.15) and that ‘a product-based view of innovation is excessively narrow’ (p.17). He adds that innovative newcomers do not win by ‘executing better’ but rather by ‘changing the rules of the game’ (p.12). Although this is a self-proclaimed ‘revolutionary’ view, Hamel does help to make it clear that an entrepreneur engages in a far more creative and holistic project than a smart operator who only makes improvements to a line of production or service.

The distinction between the two is, of course, arbitrary, and Kilby (1991) is right when he compares entrepreneurship with a ‘heffalump’: ‘It is a large and important animal. He has been hunted by many individuals using various ingenious trapping devices. […] All who claim to have caught sight of him, report that he is enormous, but they disagree on his particularities’ (p.1). Nonetheless, it is noteworthy that growth through product development and business infrastructure is emphasised in the Ministry of Economic Development’s (2005) progress report on implementation of the GIF Framework. It is also striking that the stated aim of the ‘Profit by Design’ education program is to enable participants to translate insights into customers’ motivations into
Chapter 2: The Problem

‘differentiated products and services’ and to ‘use design thinking to enhance all your business processes’ (Tertiary Education Commission, n.d.a). This clearly merges innovation and its commercialisation and fits Collins’s understanding of entrepreneurship.

The definition of entrepreneurship as ‘the commercialisation of innovation’ is sound. For the purposes of this thesis, the notion of an entrepreneur will, therefore, be limited to those who both innovate and commercialise their innovation. It will encompass product and production innovation as well as business concept innovation. This decision has been made because my research interest is in those people who enable economic growth through innovation. These entrepreneurs are innovators and designers on the one hand, and businesspeople and managers on the other.

2.16 Education for entrepreneurs

In 2004 the needs of budding entrepreneurs were investigated in the UK by the newly established National Council for Graduate Entrepreneurship. Hannon (2004) and his research team identified three priorities: ‘bringing the future forward for nascent graduate entrepreneurs; building institutional capacity and educator capability; and the creation of opportunities and environments for entrepreneurship practice’ (p.2).

Hannon found ‘low recognition of entrepreneurship as a process of learning’ (p.7) and, using Shapira’s (1975, 1982) intentionality model, argues that ‘[i]ncreasing desirability (I want to do it) and feasibility (I can do it) will then enhance propensity (I will do it)’ (p.15).

Birch (in an interview with Aronsson, 2004) has a single-minded view as to how intention might be converted into practice. He has degrees in engineering and applied physics and later took an MBA and a doctorate in business. When starting his first business, a research company that went on to be highly successful, he found ‘I didn’t have a clue what entrepreneurship was about. Not a clue! And I have more business education than most people’ (p.291). Birch says that many business schools teach
people to be ‘mice’ rather than ‘gazelles,’ and he argues that ‘the entrepreneur needs to be able to handle risk, terror, and fear. […] And whatever routine they go through to deal with this terror is what makes the entrepreneur successful’ (p.289). He concludes that ‘if you want to encourage entrepreneurship, it should be through some kind of apprenticeship’ (p.289).

Birch implies that the business schools are incapable of adaptation, and Gardner (1999) is only marginally less doubtful. He argues that use of all of the eight and a half intelligences he has identified would produce substantial benefits for business, but business schools highlight only linguistic and logical intelligences. He warns that if cost-conscious businesses increasingly turn to experts trained by other means, university business schools will either have to adapt or close (p.198). Meyer (2001) explains that ‘[t]he foundation of the B-school ideology is control in organisations. […] Now along comes a great market demand by students who wish to learn more about entrepreneurship. Controlling corpocracy alienates most of these students’ (p.2). Meyer goes on to state that:

Entrepreneurship teachers value the creation process, which is in alien juxtaposition to those who find control all important. And control is the fundamental basis of bureaucracy. Yes, there is a needed balance between structure and chaos, but freedom is necessary for entrepreneurship and creation to thrive. (p.3)

Echoing Meyer, Grint (1997) argues: ‘Much of what is taught in management or business schools […] often appears as a banal paradox. It is banal in that it appears to regurgitate what everyone already takes for granted and knows to be true. It is a paradox because, despite being full of common sense, it doesn’t seem to work’ (p.2). Grint says that chaos theory opens new understanding by showing that ‘the world is random at the micro- or short-term level, but relatively predictable at the macro- or long-term level’ (p.77). He argues that:

managers have to slough off their assumption that the absence of (managerial) control leads to chaos in an anarchic sense, and adopt the idea that lifting the lid leads to the self-organising element of chaos. In effect, that chaos is not the random sequence of unrelated ideas, but an environment constrained by patterns
that will emerge if they are allowed to emerge and if the general desired direction of the organisation is both clear to, and clearly understood by, the workforce. (p.81)

Grint’s argument, which parallels Carden’s discussion of complexity theory – see Chapter One 4, can be applied equally to the management of a business and to curriculum management. Indeed Doll (1993) argues that ‘[t]he feature that I find most distinguishes the post-modern from the modern paradigm, and the one that holds the most implications for curriculum, is self-organisation’ (p.158). Tossey (2002), a teacher, also suggests that the edge of chaos, the dynamic between stability and instability, can be the most effective and most creative place to operate.

### 2.17 Management education

The problem is nicely summed up in a quote Meyer (2001) borrows from the poet W.B. Yeats: ‘Education is not the filling of a pail but the lighting of a fire’ (p.2). This matches Birch’s call for experience of ‘risk, terror and fear’ and resonates with Mintzberg’s (2004) concerns about MBAs. Mintzberg argues that ‘[m]anagement is a practice that has to blend a good deal of craft (experience) with a certain amount of art (insight) and some science (analysis). An education that overemphasises the science encourages a style of managing I call “calculating” […]’ (p.1). He is particularly critical of the use of case studies where the data for making decisions are provided but tacit knowledge of the situation is absent and therefore ignored. The data are analysed and arguments are rigorously debated, but ‘[a]ll this about a situation that everyone in the classroom has read but no one has experienced, for decisions that can be made but never implemented’ (p.52). Mintzberg argues that:

> Managers have to sense things; they have to weave their way through complex phenomena, they have to dig out information, they have to probe deeply, on the ground, not from the top of some mythical pyramid. The ‘big picture’ is not there for the seeing, certainly not in any twenty-page document; it has to be constructed slowly, carefully, through years of intimate experience. (p.52)

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4 Chaos and complexity theories will be discussed more fully in Chapter Six.
Chapter 2: The Problem

My own marketing assignment is clearly implicated here. Indeed, Mintzberg starts a major chapter titled ‘Wrong ways’ with a quotation from Whitehead: ‘The secondhandedness of the learned world is the secret of its mediocrity’ (p.20). Mintzberg explains that the activities of business schools are organised around business functions that are disconnected from each other. Each is ‘rock solid’ and ‘pushes its own angle, its own content, its own biases, and, at the limit, its own ideology: “shareholder value” in finance, worker “empowerment” in organisational behaviour, “customer service” in marketing, and so forth’ (p.31). Students, Mintzberg says, are consequently left with what Whitehead (1983) called the ‘passive reception of disconnected ideas’ (p.31). Mintzberg says that while businesses seek to dismantle their silos, business schools constantly reinforce theirs.

Mintzberg argues that every economy and every company needs a mix of exploration and exploitation, but business schools avoid exploration by giving primacy to the teaching of analysis in the context of what is knowable. This is the same problem spelt out by Gardner (1999). Quoting Fallows (1985), Mintzberg contends that ‘[t]he problem today, increasingly, is that we have two cultures – specifically, two very different approaches to the process of managing: […] one the entrepreneurial, informal, outside-normal-channels, no-guarantee and the other professional, representing “security, dignity, and order”’ (p.128). He says that:

True entrepreneurs get out of school as fast as they can and get on with life [because er]ntrepreneurship is […] largely an act of faith, requiring the imagination of the artist more than the calculation of the technocrat. So entrepreneurs go largely by inner belief, and that is their great strength as well as their debilitating weakness. (p.134)

The challenge is to deal to this weakness in a way that is meaningful for entrepreneurs.

Gregory (2000) also writes about graduate management education. She discusses the use of intuition in decision-making and cites Landrun’s (1993) study of creative business innovators that found intuition the one common characteristic. She argues, however, that intuition is not on the formal management education agenda. She points out that the foundational management writer Fayol (1949) identified five areas of
management: planning, organising, commanding, coordinating, and controlling, followed by repetitions of this cycle. This style values a systematic, analytical approach to achieving results with little or no room for creativity or personal initiative. According to Gregory, management education continues to focus solely on developing Fayol’s five key areas. Gregory points out, however, that Parikh and others (1994) paint a very different picture for business: uncertainty and unstable environments; faster decisions being made about complex problems; the need to be creative, more innovative and more efficient problem-solvers.

Hannon (2004) calls for learning experiences that convert desirability to feasibility to propensity. Other writers add that these experiences should be first-hand (Mintzberg, 2004) and authentic (Birch, in Aronsson, 2004), honour freedom, creativity (Meyer 2001) and intuition (Gregory, 2000), allow chaos (Doll, 1993, Grint, 1997, Tossey, 2002), and utilise multiple intelligences (Gardner, 1999). Hindle (2005) notes the tendency to conclude that the business school may therefore be the wrong place, but he insists that place is a second order issue and that the primary issue is ‘experiential teaching methods and milieus’ (p.6).

Hindle, a professor in the Australian Graduate School of Entrepreneurship, sets the bar high. He says that the focus should be the whole person such that ‘through mastering the detail of this subject matter and thinking about it, I will be mastering myself and some of the mysteries of the world: I will become a constructive and valuable voice in the conversation of humanity’ (p.21). He argues that entrepreneurship should be taught ‘experientially; creatively; joyously; respectfully; adaptively; and – dare one say it – entrepreneurially,’ and labels these his ‘six mandates’ (p.22). He insists on the need for a program ‘as distinct from mere courses’ (p.23) and, quoting Whitehead (1929), maintains that ‘the antithesis between a technical and a liberal education is fallacious’ (p.27). Hindle concludes that despite all the advances in the volume of courses and programs over the last ten years, ‘most still lack this quality of transcendence that is the hallmark of university education’ (p.29). He suggests that the university can provide
the richness and the rigour that is required for developing entrepreneurial practice. This is a possibility that will be explored further in this thesis.

2.18 Definition: Curriculum

This exploration will follow a complex journey, culminating in Chapters Ten, Eleven and Twelve where a curriculum possibility will be proposed. The proposal will be based on the work of two major curriculum theorists: William E. Doll Jr and Ronald Barnett. Particular attention will be given to Doll’s (2002) vision of a curriculum based on five Cs: currere ⁵, complexity, cosmology, conversation, and community. While the definition of an entrepreneur can remain stable throughout the journey, understandings of curriculum will evolve in response to experiences on the way.

For the moment, therefore, a starter definition of curriculum is all that is required. Barnett and Coate (2005) write: ‘Crudely, we might say that a curriculum is a set of educational experiences organised more or less deliberately and that pedagogy is concerned with the acts of teaching that bring off the curriculum’ (p.5). The use of the word ‘set’ is important here because curriculum, in my understanding, is about the conceptual whole rather than its operational parts. It is noteworthy in the literature, however, that the term pedagogy is generally used in relation to the strategies and tactics that teachers use in their classrooms, yet some scholars who write specifically about ‘pedagogy’ are also developing outstanding curriculum theory. Two notable examples cited in this thesis are Freire – see Chapter Eight, and Ellsworth– see Chapter Ten.

Barnett and Coate's (2005) definition is indeed crude but for this thesis it is adequate nonetheless because it serves to draw a distinction between curriculum design that focuses on the architecture of the overall learning experience, and pedagogy that is

⁵ ‘Currere’ the verb means to run a course, whereas ‘curriculum’ is a noun and represents the course itself. This difference will be discussed further in Chapter Ten.
more concerned with the construction of the specific teaching strategies that are used on a day-to-day basis.

2.19 Definition: Creativity

‘Creativity abounds’ in Doll’s (2002, p.52) curriculum vision but it does not constitute a sixth. Barnett and Coate (2005) argue that the curriculum has to enable students to work things out for themselves and ‘become selves, strong, careful, open, resilient and critical selves’ (p.48) but they do not identify being ‘creative’ as a core disposition.

Mayer (1999) notes that ‘the majority of writers endorse the idea that ‘creativity involves the creation of an original and useful product’ (p.449). He produces a table to show the defining features identified by other contributors: Gruber and Wallace: novelty and value; Martindale: original and appropriate; Lumsden: new and significant; Feist: novel and adaptive; Lubart: novel and appropriate; Boden: novel and valuable; Nickerson: novelty and utility (p.450). Clearly the notion of originality and usefulness fits well with the work of the entrepreneur in the context of the creative economy. Mayer points out, however, that it is not clear whether creativity is a property of people, products or processes. This has implications for how creativity might be nurtured in a curriculum for nascent entrepreneurs. A second issue raised by Mayer is whether creativity is a personal or social phenomenon. This too has implications, especially with regard to Doll’s advocacy for a curriculum that values both the individual inherent in the notion of currere, and community. Also relevant is Carden’s (2007) argument that successful societies value not only creativity but also connectivity and flexibility (p.120) – see Chapter One.

It therefore appears that creativity needs to be problematised, and this may be a reason why the curriculum theorists seem to steer a wide berth. Other reasons might be related to the way that, according to Sternberg and Lubart (1999): ‘Creativity is important to society, but it has traditionally been one of psychology’s orphans’ (p.4). They identify six paradigms within which creativity has been studied: mystical and spiritual
approaches, which have been hard for science to shake off; pragmatic approaches, such as de Bono’s, concerned with developing rather than understanding creativity, and generally perceived as commercial; psychodynamic approaches seen to be adrift from the mainstream; psychometric approaches associated with paper tests and seen to trivialise creativity; cognitive approaches seeking to understand mental representations and processes underlying creative thought; and the social personality approach focused on personality variables, motivational variables and sociocultural environments (pp.4-10). It thus seems that a curriculum for entrepreneurs cannot take creativity as a given and needs to be based on clear understandings about why people are creative and how.

Nickerson (1999) helps to open a discussion about how to nurture creativity. He argues that nature and nurture are important determinants of creative expression but debate over which has greater effect is not useful; all people of normal intelligence have potential to be creative to some degree but few realise anything close to their potential; creative expression is desirable because it enriches the lives of self and others; the search for ways to enhance creativity is ‘a reasonable quest in the absence of compelling evidence that such a search is futile’; ‘the evidence, although somewhat tenuous, suggests that creativity can be enhanced’; and ‘how to enhance creativity is not well understood but there are possibilities that merit exploration’ (p.392). Exploring these possibilities is important because, as Howkins (2002) points out, ‘the creative economy will be the dominant economic form in the twenty-first century’ (p.xiv) and globally, ‘[c]reative people and organizations are becoming more businesslike; and business is becoming more dependent on creativity’ (p.xvii).

Developing an appropriate education platform for nurturing creativity will not, however, be easy. Cropley (2001) reports that surveys show that teachers overwhelmingly support creativity but in practice frown upon traits associated with creativity such as boldness, desire for novelty or originality (p.137). He provides a range of evidence including two articles from the Creativity Research Journal: Westby and Dawson's (1995) finding that teachers described creative children as being similar to the kind of child they least liked, and Scott's (1999) meta-analysis of studies that
arrived at the same conclusion and her own finding that ‘US elementary school teachers rated creative pupils as more disruptive than less creative youngsters’ (p.137). Cropley also includes evidence from non-English speaking countries including Oral and Guncer's (1993) finding that Turkish teachers see highly creative children as ‘belligerent and defiant’ (p.137).

Robinson (2006) similarly says that ‘we are educating people out of their creative capabilities’ (p.1), and ‘as children grow up, we start to educate them progressively from the waist up. Then we focus on their heads, and slightly to one side’ (p.2). In like vein, Bolton and Thompson (2000) note that ‘our culture and our educational system – to name but two factors – not only inhibit the flowering of entrepreneurial talent; they positively discourage it’ (p.4). At the heart of the problem lies the core tension between orthodoxy and control, and creativity and change. Csikszentmihalyi (1996) notes that humans are born with two contradictory sets of instructions: a conservative tendency based on the instinct for self-preservation and an expansive tendency made up of instincts for exploring and enjoying novelty and risk. He states that ‘the second can wilt if it is not cultivated’ (p.11).

Creativity cannot, however, be ‘cultivated’ without an awareness of ethical issues. Craft (2003) poses dilemmas for the educator and asks:

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\text{To what extent is it desirable to encourage and sustain the ‘disposable’ culture, where obsolescence is built in at the design stage of many consumer goods and where fashion dictates the need for constant change and updating? […] How desirable is it to encourage those values which present, via the market, ‘wants’ as if they were ‘needs’? (p.121)}
\]

Bauman (2000) goes further in his description of ‘liquid modernity’ characterised by a ‘compulsive, and obsessive, continuous, unstoppable, forever incomplete modernization; the overwhelming and ineradicable, unquenchable thirst for creative destruction’ (p.28). He argues that uncertainty has become permanent (p.137), therefore a curriculum dilemma might be how to enable the student entrepreneur to be with uncertainty without willfully contributing to it. Bauman (2005) argues that the individual has moved from being gamekeeper to gardener to hunter. The gamekeeper’s
role is to ‘defend the land assigned to his wardenship’ (p.305), the gardener ‘assumes that there will be no order at all in the world in his charge were it not for his constant attention and effort’ (p.306), and the hunter goes for the kill, moving from one forest to the next. A further dilemma might, therefore, involve marrying Doll’s notion of community to the kill that may be required for commercial success.

Questions about whether creativity is a social or person phenomenon, why and how people are creative, and how creativity can be nurtured will all be explored later in the thesis. For the moment, a definition of creativity is required and, as already stated, Mayer (1999) notes that writers generally agree that ‘creativity involves the creation of an original and useful product’ (p.449) This definition is satisfactory and is given scope by Bruce and Bessant’s (2002) explanation that ‘creativity is the ability to combine ideas in new ways to solve problems and exploit opportunities. Innovation is the successful application of new ideas in practice in the form of new or improved products, services or processes’ (p.32). Creativity thus lies at the heart of the being of the entrepreneur as innovator and businessperson.

2.20 The global context

Oram (2007a) notes that:

Unlike Ireland, Singapore, Finland and other small countries that have transformed their economies, we [New Zealand] have developed no large new technology, high value export sectors such as software, electronics and telecommunications. OECD countries with populations under 10m have doubled their exports to an average of 54% of GDP while ours has stagnated at half that level. (p.18)

However, prosperity does not depend on large new technologies alone. Indeed, Carden (2007) quotes from a report from The New Commission on the Skills of the American Workforce (2006) which concluded that:

Those countries that produce the most important new products and services can capture a premium in world markets that will enable them to pay high wages to their citizens. In many industries, producing the most important new products
Chapter 2: The Problem

and services depends on maintaining the worldwide technological lead year in and year out, in that industry and in the new industries that new technologies generate.

But that kind of leadership does not depend on technology alone. It depends on a deep vein of creativity that is constantly renewing itself, and on a myriad of people who can imagine how to use things that have never been available before, create ingenious marketing and sales campaigns, write books, build furniture, make movies, and imagine new kinds of software that will capture people’s imagination and become indispensable to millions. (p.214)

Just as large new technologies are not the whole story, nor is prosperity solely about big business. Indeed, Oram (2007a) notes that:

   for the first time in economic history, micro companies employing, say, a few dozen people – typical of New Zealand businesses – can participate. They can play to the world by tapping into technologies such as the internet and into global financial and trade systems. (p.292)

However, while the opportunities are certainly there, appropriate support is not always available. The Finland Ministry of Trade and Industry (2007) has sponsored a study of high growth SME support initiatives in nine countries (Australia, Brazil, Finland, Hong Kong, Hungary, Italy, Netherlands, Spain, United Kingdom). The research found a ‘misguided policy emphasis […] on facilitating small business operation’ (p.80) and on providing ‘a stable and smooth operating environment for small firms’ (p.79) rather than emphasising ‘quality and dynamism’ (p.79) and accepting that high growth new ventures are ‘volatile’ and that there will be ‘casualties’ (p.85). The report notes too that ‘[i]t is not uncommon for innovation policies to seek to address high growth and innovative firms without collaborating with relevant SME support initiatives’ (p.83). Incoherence and a tension between stability and risk are not, therefore, unique to New Zealand, and the solution that this thesis proposes might well be of use in any environment where Florida’s (2003) ‘creative individual’ as the ‘new mainstream’ (p.6) is left to sink or swim.
2.21 Conclusion: research question and aim

The argument presented in this chapter is that the creative economy is a powerful new global force; to participate in this, the New Zealand economy requires greater innovation; and well-intended schemes have so far not delivered significant results. Entrepreneurs play a major role in the economy, and education is both a condition for entrepreneurship and a problem for entrepreneurs.

Therefore, the research question for this project is: ‘How can tertiary education nurture entrepreneurial creativity?’ The research aim is to propose a tertiary curriculum suitable for nurturing entrepreneurial creativity and resourcefulness. Having now identified the problem, the next chapter goes on to examine the design and execution of the research journey towards a possible solution.

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6 The inclusion of ‘resourcefulness’ will be discussed in Chapter Three.
CHAPTER 3: RESEARCH DESIGN

3.1 Introduction

In the previous chapter, the research question (how can tertiary education nurture entrepreneurial creativity?) and the aim of the project (to propose a tertiary curriculum suitable for nurturing entrepreneurial creativity and resourcefulness) were established. The purpose of this chapter is to explain the research journey undertaken to answer the question and develop the proposal.

More specifically, the chapter explains the research design which follows Denzin and Lincoln’s (2000, pp.21-22) account that this should incorporate the broad research question, the purpose of the study, the information that will most appropriately answer specific research questions, and the strategies most effective for obtaining this. They explain it should include flexible guidelines that connect theoretical paradigms to strategies of inquiry and to methods for collecting empirical data, and should also address issues of legitimation.

3.2 The researcher as traveller

As also stated in the previous chapter, this research project is a venture involving the researcher and fourteen New Zealand entrepreneurs and associates. The research is located within the interpretive paradigm and is qualitative in methodology. In-depth interviewing is the research method used.

Kvale (1996) uses two contrasting metaphors to illustrate different theoretical approaches to interview research. In the ‘miner’ metaphor, ‘knowledge is understood as buried metal’ which is ‘waiting in the subjects’ interior to be uncovered, uncontaminated by the miner’ (p.3). The ‘interviewer-traveler,’ on the other hand,
Chapter 3: Research Design

‘wanders through the landscape and enters into conversations with the people encountered’ (p.4). Holstein and Gubrium (2003) also reject the view of the interview as a ‘pipeline for transmitting knowledge’ and instead see the interview as a ‘social encounter in which knowledge is constructed’ (p.68), and Pool (1957) suggests that the interview is an ‘interpersonal drama with a developing plot’ (p.193). Mirroring Kvale’s (1996) contrast between the researcher as traveller rather than as miner, Holstein and Gubrium talk about ‘active interviewing’ in which interviewer and interviewee are ‘necessarily and unavoidably active’ and ‘respondents are not so much repositories of knowledge – treasuries of information awaiting excavation – as they are constructors of knowledge in collaboration with interviewers’ (p.68).

For this project, the notions of a traveller and of social encounters describe well the relationship and mutuality between the researcher and the entrepreneurs who are treated as ‘participants’ rather than ‘subjects’ or ‘informants.’

The concept of a journey is also helpful in a wider sense. The research journey begins at a point that might be called Curiosity, and it ends in a far away location named Thesis. On the way, many places are visited and many people are met. Some places are visited so often that the traveller slowly comes to feel comfortably at home. With some others, only the key landmarks become known, and others again are passed through slowly and without stopping. On this journey I took up residency in Creativity, Learning and Teaching, and Curriculum. I usually went there alone, at first soaking up every sight and event available to me, but later seeking out only those experiences that were likely to be meaningful for my ultimate aim. In the period July to December 2006, I made fourteen exhilarating visits to Entrepreneurship, each time in the company of a different host, and each also involving excursions to Creativity, Business, Learning and Teaching, and Curriculum. I also made several unaccompanied visits to Entrepreneurship. In addition, I spent time in places such as Creative Economy, Chaos, and In-depth Interviewing. Although these are important places in their own right, in the end their role was to enhance my experience and understanding of the main places that I visited. I passed through Business many times but did not
dwell there long as I was more interested in experiencing this place through the voices of my fourteen fellow-travellers.

3.3 The art of travel

Four points made by de Botton (2003) in his book *The art of travel* help develop the traveller metaphor and deepen an understanding of the project’s design. The first lies in Des Esseintes, a character in a Huysman novel published in 1884, who visits Holland to experience life behind the paintings of the great masters, and is disappointed. De Botton explains that:

It was not that the painting had lied, there had been some simplicity and joviality, some nice brick courtyards and a few serving women pouring milk, but these gems were blended in a stew of ordinary images (restaurants, offices, uniform houses and featureless fields) which these Dutch artists had never painted and which made the experience of travelling in the country strangely diluted compared with an afternoon in the Dutch galleries of the Louvre, where the essence of Dutch beauty found itself collected in just a few rooms. (p.16)

In this research project, the experiences of the fourteen entrepreneurs and associates ensure that essences are not rarified beyond the stew of ordinary experience.

The second point lies in the contrast drawn between the scientist Von Humbolt’s early nineteenth century expeditions to South America where ‘[t]he needle of curiosity followed its own magnetic north’ (p.114), and de Botton’s own visit to Madrid where his ‘compass of curiosity […] is spun by the unexpectedly powerful force-field of a small green object by the name of *The Michelin Street-guide to Madrid*’ (p.116). De Botton argues that the traveler has to be curious, and ‘[c]uriosity might be pictured as being made up of chains of small questions extending outwards, sometimes over huge distances, from a central hub composed of a few blunt, large questions’ (p.117). As already stated, the question that both starts and sustains this project is ‘how can tertiary education nurture entrepreneurial creativity?’ and every visit involves small questions that sooner or later return to the hub. The hub also gives coherence to the seven broad questions asked of the fourteen entrepreneurs and associates:
Chapter 3: Research Design

1. What makes you creative?
2. Why are you a successful entrepreneur?
3. What is the connection between creativity and entrepreneurship?
4. What roles have formal and informal education played in your success?
5. What are your views of tertiary education programs that aim to enhance/nurture creativity and entrepreneurship?
6. What improvements or transformation could be made?
7. What role, if any, could you play?

The third point of interest is de Botton’s statement: ‘A danger of travel is that we see things at the wrong time, before we have had a chance to build up the necessary receptivity and when new information is therefore as useless and fugitive as necklace beads without a connecting chain’ (p.124). He suggests, for example, that instead of proceeding from the Palacio Real in Madrid to the nearby Centro de Arte Reina Sofía, a more ‘natural progression’ might be to go directly to other eighteenth century palaces in cities like Prague and St Petersburg. That kind of travel is both desirable and possible in this research project because the places I have visited are not physical locations and because the goal of the thesis is indeed to draw separateness into a meaningful whole. The travel is thus a busy mental and emotional journey of comings and goings that includes false starts, wrong timetables and getting lost, balanced by exciting discoveries and serendipitous encounters, all free of physical constraint but embodied experiences nonetheless.

The fourth point is de Botton’s suggestion that ‘the train journey is perhaps the best aid to thought’ because they ‘offer us brief, inspiring glimpses into private domains, letting us see a woman at the precise moment when she takes a cup from the shelf in her kitchen, then carrying us on to a patio where a man is sleeping and then to a park where a child is catching a ball thrown by a figure we cannot see’ (p.57). He says that on the journey a new ‘coil of thought’ can form and unravel without pressure. De Botton adds that when the traveller eventually returns home, ‘we may feel we have
been returned to ourselves’ but ‘[i]t is not necessarily at home that we best encounter our true selves’ (p.59). Like Tennyson’s Ulysses, indeed, the entrepreneur and the active researcher ‘cannot rest from travel’ because:

How dull it is to pause, to make an end,
To rust unburnish’d, not to shine in use!
As tho’ to breathe were life.  (1954, first published in 1842)

3.4 The interpretive paradigm

Minichiello, Aroni, Timewell and Alexander (1995) explain that ‘the theoretical antecedents of in-depth interviewing coalesce in what is known as the interpretive tradition’ (p.4). Candy (1989) explains that interpretive theorists reject the positivist quest for general laws and argue instead that the social world can only be understood from the standpoint of individual actors. Candy lists assumptions commonly shared by interpretive theorists:

(1) the belief that any event or action is explicable in terms of multiple interacting factors, events and processes, and that ‘causes’ and ‘effects’ are mutually interdependent; (2) an acceptance of the extreme difficulty in attaining complete objectivity, especially in observing human persons who construe, or make sense of, events based on their systems of meaning; (3) the view that the aim of the inquiry is to develop an understanding of individual cases, rather than universal laws or generalisations; (4) the assumption that the world is made up of tangible and intangible multifaceted realities, and that these are best studied as a unified whole, rather than being fragmented into dependent and independent variables (in other words, context makes a difference); and (5) a recognition that inquiry is always value-laden […]. (p.4)

Abercrombie, Hill and Turner (1988) similarly note that social science is not and cannot be ‘objective’ because ‘judgments are subjective, being coloured by the actors’ own experiences’ (p.170). They add that ‘all propositions are limited in their meaning to particular language contexts,’ and ‘all observations are necessarily theory laden.’ Rubin and Rubin (1995) provide a helpful illustration: ‘It matters less whether a chair is 36 inches high and 47 years old than that one person perceives it as an antique and another views it as junk’ (p.35). They explain that interpretive researchers ‘seek thick
and rich descriptions of the cultural and topical arenas they are studying and try to develop an empathetic understanding of the world of others’ (p.11).

### 3.5 Participants

These are the fourteen participants in this research project, together with the fields in which they work and their company names:

<table>
<thead>
<tr>
<th>Name</th>
<th>Field</th>
<th>Company name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrepreneurs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Small/medium enterprises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brigid Hardy</td>
<td>Consumer products</td>
<td>B_E_E_ (Beauty Engineered forever)</td>
</tr>
<tr>
<td>Daniel Batten</td>
<td>Bioinformatics</td>
<td>Biomatters</td>
</tr>
<tr>
<td>Glen Slater</td>
<td>Robotics</td>
<td>Grand Challenge</td>
</tr>
<tr>
<td>Petrena Miller</td>
<td>Fashion</td>
<td>Petrena Miller Design</td>
</tr>
<tr>
<td>Pete Rive</td>
<td>Screen productions</td>
<td>The Original Cut &amp; Launchsite</td>
</tr>
<tr>
<td>Dr Nancy Beck</td>
<td>Horticulture</td>
<td>West Coast Orchids</td>
</tr>
<tr>
<td>b. Large companies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tony Falkenstein</td>
<td>Serial entrepreneur</td>
<td>Red Eaglecorp</td>
</tr>
<tr>
<td>Bill Buckley</td>
<td>Engineering manufacturing</td>
<td>Buckley Systems Ltd</td>
</tr>
<tr>
<td>c. Sole traders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mary Taylor</td>
<td>Food</td>
<td>Foodmatters</td>
</tr>
<tr>
<td>Dr Cam Calder</td>
<td>Health</td>
<td>Boules-to-You</td>
</tr>
<tr>
<td>d. Enterprising individuals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tracey Kirwan</td>
<td>Travel/education</td>
<td>Kirwan Consulting</td>
</tr>
<tr>
<td>Debbie Duis</td>
<td>Fibre</td>
<td>Total Landscape Design</td>
</tr>
</tbody>
</table>

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7 This category is explained in Chapter Four.
Chapter 3: Research Design

e. Associates of entrepreneurs

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<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>John Alldred</td>
<td>Tourism</td>
<td>CEO – Tourism Wanaka</td>
</tr>
<tr>
<td>Dr Robert Franich</td>
<td>Forestry/wood</td>
<td>Principal Scientist – SCION</td>
</tr>
</tbody>
</table>

Number

I originally expected to include up to eight entrepreneurs in the investigation, interviewing each for two hours. In the event, that proved too few. I did not adequately take into account the possibility that participants might become weary after seventy-five to ninety minutes of interviewing, nor the busy schedules of entrepreneurs and the limitations on their availability. The first was palpable in the two pilot interviews I conducted, and the latter became evident when I was attempting to make interview appointments. After six interviews it seemed that eight would be unlikely to provide enough material to develop a thesis that balanced participants’ stories with the literature. I therefore increased the target to between fifteen and twenty entrepreneurs, and later found that fourteen was adequate.

Initial criteria

Criteria on which to base the selection of participants evolved through three iterations. This occurred because the becoming of the project involved investigating experiences and issues in order to discover their colours, shapes and textures, not to confirm what was already known.

I initially expected that participants would be entrepreneurs engaged in the commercialisation of their own innovation/s and contributing to export growth, and that each would work in a field of economic endeavour different to each other participant. However, one of the two entrepreneurs who participated in a pilot interview did not contribute to export growth but had stimulating ideas about creativity and entrepreneurship. It was clear that although export growth is a desirable outcome of education initiatives that support the development of the creative economy, the
export factor was not theoretically critical to this project because the focus of the research question is on capacity building. The contribution to export growth was, therefore, dropped from the initial criteria for participation.

**Selection of participants**

Purposive sampling was adopted to select participants because its aim ‘to gain a deeper understanding of types’ (Neuman, 1997, p.206) matched the purpose of the project. Sarantakos (1998) notes that purposive sampling is also known as ‘judgmental’ sampling because ‘the judgment of the investigator is more important than the obtaining of a probability sample’ (p.152). Minichiello and others (1995) similarly state that ‘the aim is not to strive for a representative sample but to identify purposive cases that represent specific types of a given phenomenon. This sampling strategy allows the researcher to study the range of types rather than determine their distribution or frequency’ (p.13). They later add that ‘informants’ are nonetheless ‘representative in a colloquial sense’ because they ‘illuminate important aspects of people’s ideas and experiences which have general applicability to understanding the social phenomenon under investigation’ (p.168).

Minichiello and others (1995) explain that in qualitative research, one of the most common non-probability sampling techniques used is snowballing which involves the researcher in using informants to identify people within their networks who fit the criteria for the research project, and in turn asking those people about further suitable people. This project began with a snowballing process that used contacts in five organisations: the Centre for Strategic Design, the New Zealand Centre for Innovation and Entrepreneurship, the Entrepreneurs’ Organisation, Enterprise Waitakere, and the Icehouse (International Centre for Entrepreneurship). The intention in the early stage was to find up to six participants. Individuals identified more than once were to be short-listed and, where a strong candidate was identified only once, feedback from at least one other organisation would be sought. In the event, two of the three
entrepreneurs known through more than one organisation turned down an invitation to participate. They were high profile and were too busy to meet with me.

The conversations to select the first six participants resulted in the second iteration of the criteria. The aim was to find a mix with regard to the range of industry sectors, but company size (small, medium and large businesses, and sole trader) and gender emerged as further considerations. Achieving a gender mix had always been an intention but had not been made explicit. It is important to note that no Maori were suggested and I did not prod informants about this as I did not want to compromise the selection process and risk tokenising Maori participation.

The quest for variety also drove the selection of the remaining eight participants. Diversity continued to be sought in relation to fields of endeavour, company size and gender, and through discussions with the contact organisations and the first six participants, the third iteration of the criteria emerged. The first new consideration was company maturity, and this saw the addition of one entrepreneur whose business is over thirty years old, and another whose start-up was at the time based in the Icehouse business incubator. The second was personal experience. In the first interviews it was assumed that experienced entrepreneurs had valid ideas about learning experiences for nascent entrepreneurs, but it emerged that this assumption needed to be tested. This led to the addition of one potential and one emerging entrepreneur, and the inclusion of the start-up entrepreneur also helped address this issue. Finally, several contacts suggested that people such as venture capitalists and marketers who worked closely with entrepreneurs might have helpful perspectives. As a result a marketer was added, and, most unexpectedly, a scientist who worked with and had studied entrepreneurs.

Dealing with suggestions about potential participants and about expanding the criteria for selection was frustrating but also bracing. Paralleling Kvale’s (1996) ‘traveller’ metaphor, Rubin and Rubin (1995) explain that ‘metaphorically, designing a qualitative interview study is like planning a vacation. […] You change plans as new adventures entice you, but you keep the final destination in mind’ (p.42). They go on to
suggest that the design needs to be ‘flexible, iterative and continuous’ (p.43). In the end, the fourteen participants are a credible mix of experienced, new and nascent entrepreneurs and associates, both male and female, who work in companies of varying sizes and ages across a wide range of industry sectors.

Minichiello and others say that ‘saturation’ is achieved when no further data can be found to add to categories being developed and examined (pp.161-162). In the event, however, saturation was a most unhelpful construct because there seemed no end to the novelty that might emerge. In the end, I stopped at fourteen participants because if I included more I risked dishonouring my travel companions by disaggregating their rich stories into quotable nuggets of gold.

Invitation to participate

Potential participants were sent the Plain Language Statement approved by the University’s Ethics Committee – see Appendix One. The statement included general information about the project, and it addressed the ethical and operational responsibilities of the researcher and the expectations of participants. It included the statement:

I wish to use your name in my research because you are an identifiable person and your business has a recognisable profile. If, however, there are particular matters you discuss with me that you wish to be confidential and not used by me, I will respect this. Similarly, if there are confidential matters that I may use but not attribute to you, I will respect this too. You will be able to identify on the written transcript those statements that are not to be used and those that are not for attribution.

The Consent Form is provided as Appendix Two. It is noteworthy that when the transcripts were sent for approval, only one participant requested deletions and all of these concerned the privacy of colleagues.
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3.6 In-depth interviewing

Semi-structured interviews

Mishler (1986) raises concerns that the ‘nature of interviewing as a form of discourse between speakers has been hidden from view by a dense screen of technical procedures’ (p.7). He advocates instead a definition of the interview as ‘a discourse between two speakers and on the ways that the meanings of questions and responses are contextually grounded and jointly constructed by interviewer and respondent’ (p.33). He raises particular concerns about schedules of questions and respondents’ answers to these, and argues instead that ‘meanings emerge, develop, are shaped by and in turn shape the discourse’ (p.138).

In this investigation, Mishler’s concerns were addressed by using a semi-structured interview format. Minichiello and others (1995, pp.63-64) explain that structured interviews are generally used in surveys or opinion polls where a schedule of predominantly closed-ended questions is used to ensure consistency amongst interviewers. Structured interviews generally involve a one-way process in which the interviewer asks questions and the interviewee provides responses. This formality enhances objectivity and reliability but does not encourage the development of a relationship of trust and candour. Focused or semi-structured interviews are guided instead by interest in a broad topic, and the interview guide usually consists of topics rather than specific questions, with no fixed wording or prescribed sequence.

Time and place

The interviews ranged between fifty-six and 122 minutes. Seidman (1991) notes that ‘anything shorter than 90 minutes for each interview seems too short’ (p.13), but it is noteworthy that two comparatively short interviews (sixty-three and sixty-six minutes) were with people who confidently engaged in very full conversations that were fast and fluent. Only one interview was under an hour (fifty-six minutes), and this occurred
because the entrepreneur had forgotten about the appointment and was pressed for time.

The venue was always chosen by the participant. Four interviews took place in the entrepreneurs’ homes which were also their workplaces, three were in their offices, another four were in workplace meeting rooms, and three took place in my office. In one home I was occasionally distracted by the cold and by two roaming dogs, and in my office one interviewee suddenly stopped in the middle of telling me about his chaotic life, looked around, and asked whose office we were in. I said it was mine, and he commented on how tidy it was and asked jokingly if I ever do any work. Apart from these inconsequential occurrences, physical location did not seem to impact negatively on the interviews. What seemed far more important was the relationship that developed through the interviews.

As noted earlier, the fourteen visits took place between July and December 2006. In October 2007, four participants (Nancy Beck, Mary Taylor, Tracey Kirwan, Cam Calder) were briefly visited a second time to clarify points raised and to develop ideas further.

**Questioning**

The semi-structured interview can certainly take on the appearance of a normal conversation, but it always remains tailored to the interviewer’s research interests. Kvale (1996) dichotomises the miner and the traveller who wanders and enters into conversations, but he also notes that it ‘is not a conversation between equal partners, because the researcher defines and controls the situation’ (p.6).

Indeed, my seven key questions (presented earlier in this chapter) provided a broad itinerary. Each of these functioned as an opening to a theme of keen interest to me. Prompts were prepared in case conversations stalled – for example, to explore the broad question ‘what makes you creative?’ the following questions were available:
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a. Tell me about a creative project that currently occupies a lot of your time.
b. Why are you creative?
c. What happens within/to you when you are being creative?
d. What are you driven by?
e. Who/what has influenced your creativity?

In the event, the Michelin Guide was rarely required, and when it was used the questions were asked neither exactly as stated nor in order.

However, in the first pilot interview the broad questions and prompts were inappropriately used as a script to follow. This created a tension between the participant’s stream of consciousness and my attempts to control the flow. Immediately after the interview I realised the irony of attempting to direct the interviewee through a schedule (curriculum) rather than giving him scope to run (currere). The epiphany was liberating, and the second pilot and all fourteen interviews were very relaxed and the participants were much more discursive.

There remained, nonetheless, what MacLure (2003) describes as ‘contradictory desires (or fears) [...] for mastery and surrender’ (p.120). While I became a traveller, I did not allow myself to be led just anywhere. I was attracted to particular things and I probed, gently without using excavation machinery, but my purposeful curiosity about my participants’ experiences and ideas left me lacking in innocence with regard to the notion of mining. I allowed participants to wander, but when I suspected that there were no useful souvenirs, I politely directed them back to the bus.

Recursive questioning, story-telling, and probing

The use of recursive questioning, where each question is related to a previous remark, allowed the interviews to flow like conversational interactions. Schwartz and Jacobs (1979) observe that recursive questioning enables the interviewer to ‘treat people and situations as unique and to alter the research technique in the light of information fed back during the research process itself’ (p.45). A conversational style also provides
opportunities for participants to tell spontaneous stories, with the interviewer providing neutral encouragement that assists the narratives to develop. A question I regularly asked was: ‘Can you tell me a story that illustrates that?’

Like Pink (2005), Seidman (1991) explains that ‘telling stories is essentially a meaning-making process’ (p.1), and Sarup (1996) adds that ‘we construct our identity at the same time as we tell our life-story’ (p.15). Sarup says that:

We are all, rather like Oedipus, detectives looking for clues, little pieces of the jigsaw puzzle (stories, memories, photographs) about our parents and our childhood. The story gradually unfolds. But it does not only unfold; to some extent we construct our story, and hence our identity. (p.16).

There were many occasions where participants responded to questions with statements like ‘I’ve never thought about that before’ and then proceeded to recreate their life-stories. This applied to the participants and their identities as learners, entrepreneurs and social beings, and also to myself as a researcher and educator.

Indeed, the pilot interviews revealed that for the interview to be a social encounter, the curiosity of both the interviewer and the interviewee needs to be satisfied. This meant that the researcher cannot be neutral and also socially credible. I discovered that when discussing, for example, ideas for curriculum change, both pilot interviews stalled and only reverted to being conversations when I contributed ideas for discussion. In the fourteen interviews, therefore, I volunteered at appropriate times, and without prejudice, ideas such as Gonci’s apprenticeship and Gardner’s curriculum based on three themes, and a particularly provocative suggestion was the possibility of a curriculum without prescribed direction, content or outcomes. In addition, I occasionally told my own stories about taking an MBA marketing paper and about my masters’ paper on using literary works to examine change management (see Chapter One). These were used as triggers that enabled me to explore with participants links between curriculum possibilities and themes that had emerged in earlier discussions about their own lives.
Indeed, recursive questioning and probing (although Seidman, 1991, argues ‘explore, don’t probe,’ p.61) enabled me to relate new questions to responses provided in earlier discussions, thereby enhancing the development of an integrated text. Consciously adopting a hermeneutic approach involved interpretation not only after the interview but also within the conversation itself, ‘listening to the multiple horizons of meaning involved in the interviewees’ statements’ (Kvale, p.135). This enabled each interview to become ‘in-depth,’ although Wengraf (2001) notes that Rorty (2000) has raised questions about depth and width. In response, Wengraf offers two definitions: ‘to go into something “in depth” is to get a more detailed knowledge about it, [and] to go into something in depth is to get a sense of how the apparently straight forward is actually more complicated, of how the “surface appearances” may be quite misleading about “depth realities”’ (p.6). My interest has been in both, in putting together existing and creating new jigsaw pieces that enable the crafting of ever bigger pictures, and in developing an understanding of the complexities and vitality in the ways entrepreneurs learn and create.

3.7 Hermeneutics

Classical hermeneutics involved the interpretation of the texts of literature, religion and the law, but the concept of text is now much more widely applied. Kvale (1996) explains that ‘[t]he research interview is a conversation about human life, with the oral discourse transformed into texts to be interpreted’ (p.46). He adds that hermeneutics is relevant for two reasons: ‘first by elucidating the dialogue producing the interview texts to be interpreted, and then by clarifying the subsequent process of interpreting the interview texts produced, which may again be conceived as a dialogue or a conversation with the text’ (p.46). Indeed, just as each interview was a conversation between myself and an entrepreneur, so too did I hear and interpret conversations among the entrepreneurs even though they never met, as well as conversations with and among the various writers I read, and then among the writers and the participants.
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Hermeneutics uses the concept of a circle to describe the process of interpretation that brings these conversations together. In the hermeneutic circle, the understanding of the parts of the text is shaped by an understanding of the whole, which is in turn shaped by an understanding of the parts. As in a circle, there are no starting or finishing points. Schwandt (2000) sees the process as a continuous dialectical tacking between the most local detail and the most global structure in such a way as to bring both into view simultaneously (p.193). Kvale’s notion of a conversation is also inherent in Schwandt’s argument that meaning is ‘negotiated’ rather than ‘assembled’ (p.195). Bernstein’s (1983) discussion of Gadamer’s work explains that interpretation is an on-going, dynamic process in which ‘[m]eaning is always coming into being through the “happening” of understanding’ because:

to understand is always to understand differently. But this does not mean that our interpretations are arbitrary or distortive. We should always aim […] at a correct understanding of what the ‘things themselves’ say. But what the ‘things themselves’ say will be different in light of our changing horizons and the different questions we learn to ask. Such an analysis of the on-going and open character of all understanding and interpretation can be construed as distortive only if we assume that a text possesses some meaning in itself that can be isolated from our prejudgments. (p.139)

My work on this research project has been guided by Kvale’s (1996) ‘seven canons’ of hermeneutic interpretation. These canons are based on the earlier work of Radnitzsky. In the first two canons, interpretation involves a ‘back and forth process between the parts and the whole,’ ‘the possibility of a continuously deepened understanding of meaning,’ and ‘an interpretation of meaning ends when one has reached a “good Gestalt,” an inner unity of the text free of logical contradictions’ (p.48).

These canons of hermeneutic interpretation describe the process used to draw disparate material into a thesis. When transcripts of all the interviews had been completed, I underlined potentially useful phrases, ideas and anecdotes. For each interview, I then produced a summary list of all underlined sections, and numbered these. I decided that directly after introducing participants in Chapter Four, I would write about creativity, largely because this was the focus of the first principal question asked in the
Chapter 3: Research Design

interviews. I also decided that I would attempt two chapters on creativity, one on each of the two most relevant creativity paradigms identified by Sternberg and Lubart (1999) – see Chapter Two. Next, I manually transferred all interview items related to creativity onto small (50 x 50 mm) coloured, sticky-backed pieces of paper, using key words and the number references. I then divided these into four groups: social personality, cognitive, curriculum, and ‘other.’ After that, I undertook the same exercise for all the creativity findings in the literature I had read, using different colours for books, journal articles, media items, and other material. Next, using large pieces of white ‘butcher’ paper, I set about organising into sub-groups all the stickies related to personal and social understandings of creativity. This was, as described by Kvale (1996), a ‘back and forth process’ that provided ‘a continuously deepened understanding of meaning’ (p.48). In Mintzberg's (2004) terms, it involved ‘a good deal of craft ... with a certain amount of art ... and some science’ (p.1). After the mapping exercise produced a ‘good Gestalt’ (Kvale, 1996, p.48), Chapter Five was written directly from pieces of butcher paper.

Chapter Five achieved a balanced blend of literature and participants. When I mapped material for Chapter Six, I discovered that participants had less to say about cognitive aspects of creativity than I had expected. Two decisions were then made: first, to ask questions specifically about this in the second interviews, and secondly, and more importantly, to produce and map all stickies before undertaking any further writing. I wanted to avoid not being able to sustain a literature/participant balance throughout the thesis, and avoid too the risk of heading into culs de sac with no way forward. I had originally expected the chapters to match the interview questions: creativity, business success, formal and informal learning, current curricula, curriculum proposal, and conclusion. In the event, this direction worked well although the curriculum proposal expanded into three chapters. Nonetheless, the mapping exercise was a hugely demanding and often frustrating process as ideas shifted ‘in light of our changing horizons and the different questions we learn to ask’ (Bernstein, 1983, p.139), and for several weeks butcher paper seemed to take over an entire apartment. However, the outcome was very reassuring, and I was able to restart writing with an atlas of maps
stored for future use, although each map was reviewed and modified yet again as I travelled through the writing process.

When adopting a hermeneutic approach to interpretation, meaning can come into being quickly or slowly. For example, the mapping for Chapter Eleven was remarkably straight-forward. The curriculum proposal in this thesis is based on currere, complexity, cosmology, conversation, community and creativity, and the hermeneutic circle provided a process for clustering participants’ stories and the literature around these ideas, simultaneously enabling each of the six Cs to acquire character and validity and allowing a curriculum to form.

An example of the hermeneutic process slowly at work lies in the ways participants’ beliefs about and the literature on business success led to a wide range of ideas that gathered around themes such as business networking and personal resilience. Themes disappeared, merged or grew as more material was found, and they eventually settled and enabled the emergence of an inclusive theme of resourcefulness. This is discussed in Chapter Seven, and for the moment it is sufficient to suggest that the connection between hermeneutics and creativity through the notion of gestalt enables the principle of wholeness to be both part of the research process and the research output. Indeed, the seventh canon requires that interpretations involve ‘innovation and creativity’ because ‘[t]he interpretation goes beyond the immediately given and enriches the understanding by bringing forth new differentiations and interrelations in the text, extending its meaning’ (Kvale, p.50).

3.8 Ethics

The Australian Association for Research in Education (AARE) has published a Code of Ethics (1993) that includes four basic principles: ‘the consequences of a piece of research […] must enhance the general welfare’; ‘researchers should be aware of […] the variety of views of the good life, and the complex relation of education with these […]’; ‘no risk of significant harm to an individual is permissible […]’; and ‘respect for the dignity and worth of persons […] generally takes precedence over the self-interest
of researcher’ (p.2). In this project there are no problems related to these principles, and on 3 July 2006 the Deakin University Human Ethics Research Committee gave ethics approval for a period of three years. However, the Committee was principally concerned with the selection of participants, consent, and the interviews. What was not covered was what was to happen to the stories that were to be gathered. Indeed, the AARE code states that ‘researchers should recognise the uncertainty of all claims of knowledge’ and ‘should keep themselves informed on the methodology of research, including disputes about appropriate methodology’ (p.7). This caution invites a consideration of legitimation.

In-depth interviewing is the sole research method that has been used in this investigation. Minichiello and others (1995) note that triangulation, the combination of data collecting techniques (eg: interviewing plus observation) can be used to enhance consistency, but, as Blaikie (1988) points out, this can ‘abdicate the interpretivist concern for the primacy of meaning in favour of a positivist concern about validity and bias’ (p.11). Rubin and Rubin (1995) also reject validity and reliability and substitute ‘transparency, consistency/coherence and communicability’ (p.85). Kvale (1996) on the other hand holds on to the conventional term ‘validity’ but reconceptualises this as craftsmanship, communication, and action. The ‘craftsman’, he says, checks, questions, and theorises. In order to ‘check,’ the researcher ‘adopts a critical outlook on the analysis, states explicitly his or her perspective on the subject matter studied and the controls applied to counter selective perceptions and biased interpretations’ (p.242). Questioning is important because the rigour in the questions asked of the text determines the validity of the interpretation. For the craftsman researcher, therefore, ‘verifying interpretations is an intrinsic part of the generation of theory’ (p.244). The hermeneutic circle has provided a process for this, and the AARE caution has thus been acknowledged and addressed in so far as this is humanly possible.
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3.9 Conclusion

Barnett and Coate (2005) argue that because the character of the changing world is uncertain, the certainty inherent in designing and then enacting a curriculum has to be abandoned. They argue that ‘the curriculum is not so much being “delivered” as being enacted in a nuanced way, with interplays and imaginative offerings. A curriculum is in part a curriculum-in-action and, therefore, curriculum design is itself design-in-action’ (p.45).

The same can be said of the research design. The study started out with various intentions, but the design evolved. I began, for example, looking for a curriculum to ‘enhance’ creativity, but I later abandoned this term because it suggested quantity whereas ‘nurture’ seemed more suited to the notions of being and becoming that emerged from the literature and interviews. Indeed, shades of meanings and tones of arguments shifted continually because the interviews were indeed ‘an interpersonal drama with a developing plot’ (Pool, 1957, p.193), and also because the investigation involved conversations amongst writers and entrepreneurs, and the landscape became crowded and noisy as the journey went on. Hermeneutics provided a process for the interpretation of conversations and the development of the thesis, but there were also times when it was more appropriate to let go and allow chaos and the principle of self-organisation to take over. As de Botton (2003) points out, ‘the reality of travel is not what we anticipate’ (p.12).

This project fits Candy’s (1989) explanation of interpretive research. There are no general laws to be acquired and applied because the social world can only be understood from the perspective of individual actors. The curriculum that is proposed in this thesis is in large part the outcome of social encounters with fourteen actors. Having now explained the process of engagement, the next chapter goes on to introduce the players.
CHAPTER 4: THE PARTICIPANTS

4.1 Introduction

The previous chapter explained the research process as a journey from initial curiosity to the production of a thesis. The journey was also described as a process of engagement in which the researcher and fourteen experienced or nascent entrepreneurs and associates constructed knowledge through conversation. In this chapter the fourteen are introduced individually because representing interviews as social encounters requires this courtesy. In addition, as Schostak (2006) points out, the interview is ‘a particular case of being towards the other, recognising the otherness of the other and in doing so not reducing this otherness to a sense of “the same”’ (p.11).

This chapter starts with the action factors of entrepreneurs identified by Bolton and Thompson (2000). These provide a simple reference for introducing the participants, although it is left to later chapters to pursue their experiences and ideas about creativity, business success and their own learning, and suggestions about how tertiary education might nurture entrepreneurial creativity. The fourteen are introduced in six groups: three are young, new entrepreneurs who own businesses in industries outside their training backgrounds; three are more experienced entrepreneurs who are also inventors working in fields that have always been their passion; two own large, mature businesses; two are sole traders; two are potential entrepreneurs who are better described as ‘enterprising individuals’; and the final two are associates of entrepreneurs, of whom one is a marketer and the other a scientist. As stated in the previous chapter, the fourteen participants are a mix of experienced, new and nascent entrepreneurs and associates, both male and female, who work in companies of varying sizes and ages across a wide range of industry sectors.
Chapter 4: The Participants

4.2 What entrepreneurs do

The definition of entrepreneurship used in this project is ‘the commercialisation of innovation.’ Bolton and Thompson (2000) define an entrepreneur as ‘a person who habitually creates and innovates to build something of recognized value around perceived opportunities’ (p.5). The phrase ‘of recognized value’ encompasses not only items of commercial value but also enables the inclusion of, for example, social or aesthetic capital. The writers add: ‘The idea behind the opportunity may or may not be original to the entrepreneurs, but the opportunity to exploit the idea is a characteristic of the entrepreneur’ (p.6).

Bolton and Thompson (2000) identify ten key action roles associated with entrepreneurs regardless of context:

1. Entrepreneurs are individuals who make a significant difference.
2. Entrepreneurs are creative and innovative.
3. Entrepreneurs spot and exploit opportunities.
4. Entrepreneurs find the resources required to exploit opportunities.
5. Entrepreneurs are good networkers.
6. Entrepreneurs are determined in the face of adversity.
7. Entrepreneurs manage risk.
8. Entrepreneurs have control of the business.
9. Entrepreneurs put the customer first.
10. Entrepreneurs create capital. (p.22)

They go on to integrate these into a process and provide two models. In the first, motivation is the starting point and the creation of capital is the end, with creativity and innovation ‘the lifeblood of the process’ (p.27). The first step is to spot and exploit an opportunity, and then, as obstacles are encountered, networks, resources, determination and risk management are brought into play. The enterprise is successful because the entrepreneur knows how to control the business and consistently puts the customer first. The outcome is the successful commercialisation of innovation.
In the second model, the process is condensed into two stages. The first belongs to the opportunity spotter, and the second to the project champion. As noted in Chapter Two, ‘the true entrepreneur […] is able to combine and execute both roles successfully’ (Bolton & Thompson, 2000, p.29). The action roles and the two models are provided as a reference for use in this and following chapters.

4.3 New entrepreneurs

A love of new challenges, a fervent sense of vision, and determination to succeed are powerful drivers for Brigid Hardy, Daniel Batten and Glen Slater. They are CEOs and part-owners of companies that were, in 2006, less than five years old. They are adventurous opportunity spotters and project champions working respectively in household products, bioinformatics and robotics. These industry sectors are unconnected to the training backgrounds of these young entrepreneurs.

4.4 Brigid Hardy

As a child, Brigid ‘had this huge dream just to be part of the world, be interconnected and have that whole, like have some means of just being part of the big global thing.’ From Havelock North in the Hawkes Bay, she went to the University of Otago where she graduated with first class honours in law and a degree in English, and she went on to work for eighteen months on the reform of domestic violence legislation. From there she went on a scholarship to Harvard University where she gained a Master of Law, and on her return she was employed as legal private secretary to Sir Douglas Graham, the then Minister of Justice. When Sir Douglas retired, Brigid wanted a taste of big business and went to work for the management consultancy firm McKinsey and Co. Brigid says that at McKinsey ‘I was surrounded by really intelligent, really committed people … [and] I had the local and the international but I didn’t have the cause as much and I didn’t have the creativity as much, and I think I realised that you do even have a creative outlet when you’re looking at ways to promote a cause.’
Chapter 4: The Participants

Brigid says that she was confident ‘in the law firm or the whatever, in the big project, but actually through being made to feel confident in those environments, that enabled me to go okay that’s cool, that’s really interesting, let’s try and do something else.’ So five years before the interview with her, inspired and supported by Stephen Tindall, a well-known New Zealand entrepreneur and philanthropist, she set up her own company called B_E_E – Beauty Engineered forEver. The company makes sensual, eco-friendly household cleaning products, and its website states ‘we’re here because we had an idea – to create beautiful things that make life better and save the big world. A big ask? We don’t think so.’ Through B_E_E, Brigid developed a business opportunity that gave scope for her creativity and for being part of a global cause.

Brigid says that ‘entrepreneurship is about risk-taking, you know, and excitement and threshold for risk.’ She jokes that ‘of the people that have worked with me, the best ones for us are the ones that rather go “God Brig, we can’t do this” and I’m like “Of course we can’t, we can never do anything.”’ In the five year history of B_E_E, many mistakes have been made. As an example, Brigid talks about the shape of one of the bottles: ‘There are all kinds of problems with this thing, but actually I’m still glad we did it, you know, it was a good start.’ Indeed, she describes her business development strategy as ‘Ready, fire, aim!’

4.5 Daniel Batten

Like Brigid, Daniel has a background in English literature. After his MA, he completed a Diploma in Teaching but never took up teaching as a career. He started out instead as an actor, and then in 1996 entered the IT industry as a software developer employed by PSoftware. While there he took on leadership roles, and without any training in management he soon found himself responsible for thirty-six employees. Daniel moved on to several other companies where he worked less on the technology side and more on project management, sales and marketing.

8 http://www.bee.net.nz
Chapter 4: The Participants

When he was made redundant in 2002, Daniel decided that the next company he worked for would be his own. In 2003, with three other founders, he established Biomatters ⁹, a company that develops bioinformatics software that accelerates and simplifies research for molecular biologists and biochemists working in disease research and drug discovery. He says:

I’m either blessed or cursed with a very short boredom threshold and always have been, so if I’m not excited by what I’m doing then I’ll look to create an excitement. And I think that’s probably one of the things that led me to form my own company was that in a larger company it’s sometimes harder to make sure that you can create excitement which also has a gel and a meaning and a purpose for the company you’re creating it for.

There were early setbacks but Daniel:

came to realise that they toughened us up. I think they’re really important. We had an investor who pulled out at the very last minute and we all as a team looked at each other and said, ‘Well, what are we going to do? Are we going to pack up and say well that was good or do we try extra hard?’ We all looked at each other and said ‘Na, we’re going to go for it. If we work for nothing for the next six months, a year, whatever, we’ll still do it. It’s just gonna happen.’

In July 2003, Biomatters graduated from the Icehouse, the University of Auckland’s incubator growth centre for new business ventures. At the time of the interview, Daniel was CEO and the company employed eight people with an additional seven contracted for project work. Daniel started out with ‘a good healthy dose of naïvety which I think was probably a good thing and just a lot of enthusiasm and kind of this quirky personality trait that whenever someone told me that I couldn’t do something, I’d try twice as hard to prove them wrong.’

4.6 Glen Slater

Where Daniel Batten’s company is a graduate of the Icehouse, this was home base for Glen’s start-up robotics company at the time of my interview with him. Glen was thirty-two at the time and has ‘kind of had a bit of a hectic career path’ because ‘I only

⁹ http://www.biomatters.com
take on things that I have no idea how to do.’ He started out in the Navy where he spent five years at sea as an executive officer. He then went to Waikato University to study political science and economics, and while at university he also managed a supermarket. After graduating, he went to Taiwan for two years where he taught English and learned Chinese.

When Glen returned to New Zealand he went to the University of Auckland where he completed a Master of International Business. As part of this program he took a course on ‘Leading and Managing Entrepreneurial Growth,’ and it was here in 2004 that he met Grant Sargent, a fellow student and a technician in the Robotics and Intelligent Systems research laboratory in the University’s School of Engineering. From a meeting of complementary skills, Grand Challenge 10 was launched to develop and commercialise new vehicle automation technologies. Within a year the new company won the Spark Challenge, the University’s annual business plan competition aimed at fostering entrepreneurial growth and value creation – see also Chapter Eleven. At the time of the interview, Grand Challenge had twelve employees who were all also shareholders. Glen was CEO but this has been a leadership, rather than an executive position, with primary functions in strategy and ‘story-telling.’

Glen says that ‘You have to have a vision of what’s possible and then an idea of how you are going to get there. It doesn’t have to be the right idea, because you’ve got people around you to help you get the right idea but you actually have to be able to foresee a different world than what you currently inhabit.’

He adds that being strategic around the opportunity is critical because:

we could see at the beginning of last year that robotics, using the robot to drive a car, well, it will be a good thing for the next five to ten years but beyond that you won’t need the robot anymore because that automation will be built in under the hood of your car, so all we need is the software. Okay, so what are we going to do? Well our job then is to develop the software early enough so that when the robotics goes under the hood, our software is the natural software of choice.

10 http://www.inro.co.nz
Chapter 4: The Participants

4.7 Inventors

Nancy Beck, Pete Rive and Petrena Miller all work in fields related to early passions, and all are inventors as well opportunity spotters. One makes plants, one creates screen productions and virtual worlds, and the other designs clothes. But where the horticulturalist is in the mainstream and has been successful in securing research funding, the creator of intangible IT feels disadvantaged sitting outside the social and cultural norms of New Zealand (see also discussion of GEM research in Chapter Two). Different again, the fashion designer creates new products out of existing materials. Despite differences, all are experienced entrepreneurs who work long hours and continually imagine and research ways to innovate and grow their businesses.

4.8 Nancy Beck

Nancy Beck is American born and has degrees in science from the University of California. She and her husband moved to New Zealand in 1988, and soon after she gained a PhD from the University of Auckland. Nancy has always been interested in creative extension science rather than hard core laboratory work. She has spent time as a tertiary educator and is now growing cymbidium orchids at West Coast Orchids near Auckland, a company she owns with her husband who also has a PhD in science. She says ‘it’s a lot of work. […] I mean an average week for us would be sixty to seventy hours easily […] but] if you really love what you’re doing, then it’s really not necessarily work.’

The passion is strong. Nancy and her husband ‘love growing flowers. […] I think of flowers as food for the soul, it makes people happy. That’s quite heartening for me. I love producing such a beautiful product. […] It’s really fun on our marketing trips where we take products with us and explain it to people and see their reaction and find out how they use it.’
Chapter 4: The Participants

West Coast Orchids has received several grants from the Government’s Foundation for Research, Science and Technology to develop for export a bromeliad they have named the ‘Red Dragon.’ An earlier grant enabled stems to be increased from twelve to seventy centimeters, and a current grant of $517,000 is for exploring ways to diversify the Dragon’s colours and for developing pest control methods to help avoid trade barriers. The company has also received a grant of $50,000 from New Zealand Trade and Enterprise for international marketing initiatives. At the time of the interview, West Coast Orchids was exporting 100,000 stems which is considered significant but not big enough to sell to major buyers. The big question facing Nancy and her husband was whether to focus on niche marketing or to expand by leasing production to other growers.

Nancy includes the inventor in her own concept of the entrepreneur. She says that:

> I suppose anyone can see an opportunity and take advantage of it but the creative part comes when it’s the opportunity that you created yourself that I think would define for me an entrepreneur. You’ve got to be willing to take a risk. You’ve got to be willing to take that jump and say ‘Let’s go for it, because I think it’s a good idea and no one else has thought of it and this is a new nuance on it, a new product,’ so it’s being a risk-taker in a sense.

4.9 Pete Rive

Pete Rive has a business-minded family background and at the age of ten was making short films. He was initially unable to get into television work so he went to the University of Auckland where he graduated with a MA in Political Studies and Postgraduate Diploma in Broadcast Communications. He started out as a ‘gofer’ on television commercial sets in Australia, and for over twenty years he has worked in the film and television industry across a range of roles. In 1993, Pete’s interest in computing and in bringing together artistic endeavour and technology led to the establishment of The Original Cut 11, a post-production facility using Avid technology. Pete is also a member and Deputy Chairman of the Board of Film Auckland Inc.

11 http://www.cut.co.nz
Pete observes that ‘we’re actually going through a hard time now’ with changes affecting the film industry and advertising in particular. He says:

> You have to be well informed about the area that you’re interested in and the bigger picture, so you have to […] be sufficiently aware of shifts in fashion and technology. I mean opportunities arise from changes in everything from governments, co-production treaties with other countries through to, you know, change in technology can be a total change in workflow and business practice.

Pete recently decided to move out of advertising and has established a second business stream called LaunchSite 12 which is a reseller of virtual reality technology and applications, specialising in VR development and integration for education and entertainment purposes. Associated with this, Pete is working towards a PhD in design which involves virtual film-making in virtual worlds.

Pete recalls that ‘when I went to primary school they talked about homogeneity and you know, that was the big social studies term, we’re a very homogenous society, difference in a small society is not trusted […]’ He later comments on ‘an anti-intellectual stream that runs through the country. It’s very interesting to see the attitudes towards tertiary education. I think its changing but it has always been well get a real job. […] There is respect for someone who works hard, as long as […] it isn’t too intellectual, it isn’t too esoteric because people really don’t understand.’ A consequence, Pete believes, is a tendency in New Zealand for investors to fund proven ideas and ‘there seems to be a bias towards physical invention and that’s kind of New Zealand’s mythologizing about the number eight wire kind of thing, whereas I read stuff about futurology.’

### 4.10 Petrena Miller

Petrena Miller has a Southland farming background and was trained in fashion design at the Wellington Polytechnic. When she graduated ‘you think that you know everything and you are going to change the world and blow it all up,’ but she spent her

[^12]: http://www.launchsite.co.nz
first six months selling clothes door-to-door out of the back of a van. She next got a job pattern-making, and from 1982 to 1990 she was the sole designer for Canterbury of New Zealand. Petrena then moved to Auckland and designed the Line 7 Wet Weather collections. After a short time the owner went ‘belly up,’ and then the new owner ‘caught me doing my own label, moonlighting I think they call it, which is the best thing that could have happened.’

The outcome was PM Design 13, Petrena’s own company, which was launched in 1992 and specialised initially in golf and corporate clothing. Petrena now has her own high-fashion label and two international collections are produced each year. She designs her range in New Zealand and has it manufactured in China. My interview with her was during the week after she returned from China:

where I’ve been round all the markets and it’s a lot of fun. This is the part that really gives you the thrill. I mean, choosing the fabrics, doing the design and then seeing the sample come out. Once you’ve seen the sample and then you have to go and sell it, go through all the dramas of manufacturing, the fit, all the things, by the end, before it’s even got to the store, you’re so sick of it. You just don’t care. However, that first little, I guess it’s like a newborn baby, as soon as it’s born it’s like wow and then after that it’s like … [unfinished].

Petrena loves the creative side of her work but is also driven by ‘the need to pay the bills.’ Every day she ‘collects the mail […] so that I can go through it when I’m driving to work so I know all of that stuff that’s coming in and I always check the bank statements, the payables, the receivables, you know, making sure that the finances are in the bank so that we can still continue to operate.’ In five year’s time, when the business is where she wants it to be, Petrena thinks she might take on a partner to run the operations and administration side of the business, leaving her to focus on design and sales. She recognises, however, that some of the excitement can be lost through becoming bigger and losing personal control.

13 http://www.pmd.co.nz
Chapter 4: The Participants

4.11 Mature businessmen

Bill Buckley and Tony Falkenstein were unsuccessful at school but both went on to become wealthy businessmen. Bill’s work has always been in engineering manufacturing but as a serial entrepreneur, Tony has not limited his interest to any one field. A further difference is that Bill’s innovations are products whereas Tony has been innovative around business concepts. Bill has recently withdrawn from the CEO position, and while Tony no longer directly manages any of his businesses, he continues to devote energy to strategy and new opportunities. Both men are deeply involved in community projects.

4.12 Bill Buckley

Bill Buckley is a Waikato farmer’s son. As a child he had to milk cows seven times a week and he developed an early passion for car racing. When he left school with no qualifications, he wanted to build the biggest thing possible. In those days that was a boat, so he took an apprenticeship as a fitter and turner with an Auckland engineering company, and over time he worked for a number of different firms.

A turning point came in 1978. One day his employer:

asked me ‘How the hell are we going to keep this business running?’ and I said ‘I’ve got this big contract, all I need you is to sign the bloody thing,’ and he said ‘I’m not going to sign that, $100,000’ he said. ‘Shit if we cock that up, we’ll go down,’ and I said ‘What do you want to do Jimmy, bloody thousand dollar jobs or something?’ and I said ‘Christ I could do them in my backyard,’ you know.

Bill’s boss went on to say ‘why don’t you go and bloody try?’ so he did.

Bill took the best workers with him, and because he had no money he borrowed from an uncle and a friend. His father advised him against the venture but ‘he always lived in the Depression my old man.’ It is noteworthy that today Bill hates shopping because ‘I always think it’s too dear because you know, I still sort of think I’m getting four
pound two and six a week or something when I started but yeah, I wouldn’t know how much dough I’ve got really.’

Bill started out with four workers but he now has over two hundred employees at Buckley Systems Ltd 14, an engineering manufacturer of precision electromagnets, ion beam physics hardware and high vacuum equipment used in the semiconductor ion implant industry and laboratory research. In 1998 the company won the Tradenz Exporter of the Year award, and annual turnover is over $50 million. Bill owns the company, was CEO until 2005, and he now provides advice to the CEO and occasionally stands in an acting capacity.

Bill also has a range of engineering-related interests. He believes that claims about global warming are exaggerated and in 2005 he and a scientist friend endowed the Buckley-Glavish Chair in Physics for Climate Research at the University of Auckland. He is a former New Zealand motorcycle champion who is currently managing the promotion of the Auckland Speedway at Western Springs. He co-owns and did the engineering design work for Maximus, a super-maxi yacht that competes in international sailing events.

4.13 Tony Falkenstein

Tony Falkenstein says ‘we were no good at school because our brain’s going off in different directions.’ His school reports said ‘can’t concentrate’, that sort of thing’ and he adds that ‘all entrepreneurs probably have that sort of thing.’ Tony says, however, ‘I was very, very confident with myself so I knew I could do things. Just nobody else did. Teachers didn’t.’ In the event, Tony left school to become an apprentice pastry cook, went on part-time to complete a bachelor of commerce degree in accountancy, and before long he was managing companies.

14 http://www.buckleysystems.com
In 1987, within days of the share-market crash, he set up and still is CEO of Red Eagle Corporation which now has an annual turnover in excess of $200 million. At first Red Eagle rented out fax machines to companies and state-owned enterprises burned by the crash. Two years later, the Corporation launched Just Water 15 which supplies chilled drinking water to offices throughout New Zealand and was, at the time of the interview, breaking into the Australian market. Tony sees himself as a serial entrepreneur and explains ‘some people are entrepreneurial and they take their business to a stage and that’s what they focus on, [whereas] a serial entrepreneur tends to like a multitude of things and takes them to various levels.’

Apart from Red Eagle Corporation, which is the holding company, Tony does not manage any of the businesses he owns. He says ‘I am sort of out of debt and so everything’s a game.’ This enables him to distinguish between ‘the entrepreneur (who) works inside the business […] chasing things’ and the entrepreneur who ‘works outside the business and has got more time to conceptualise.’

Tony has also been involved in the development of the Business School at Onehunga High School which started in 2003 and is largely the result of his commitment and investment. He got into this venture because he feels that despite all the talk about an ‘enterprise economy,’ the New Zealand Government is not committed to making business education in schools a reality. Tony likes ‘making things work’ and adds that ‘I want to be in control.’ He says:

I want to get business and entrepreneurship in the national curriculum, that’s sort of my focus, because there was something I thought I could change. I couldn’t see myself being able to change anything in the tertiary. It was too hard. So at secondary I can effect a change. So to me that’s just entrepreneurial. I will get a buzz out of seeing […] what is happening.

Tony’s attempts to bring change to tertiary education are discussed in Chapter Nine.

15 http://www.justwater.co.nz
4.14 Sole Traders

Mary Taylor formerly worked in the corporate world and Cam Calder was once a dentist and then a doctor. Now, in their fifties, both are sole trader entrepreneurs who work from home. Both love the lifestyle of being self-employed and being able to exploit the opportunities they create for making a difference.

4.15 Mary Taylor

Mary Taylor comes from the Waikato and went to the University of Otago where she graduated in 1973 as a Bachelor of Home Science. Her first jobs all involved food-related work in laboratories. Over time she moved into marketing and she has completed a Postgraduate Diploma in International Marketing from the University of Auckland. She has worked for several multi-national corporations including Progressive Enterprises where she was at one time the national manager of the delicatessens in Foodtown supermarkets throughout New Zealand.

Since 1995, Mary has been an independent sole trader. Her company is called Food-Matters and her biggest client is the New Zealand Pork Board. A current challenge involves trying to get the juicy taste of fat back into pork without using chemicals. Mary has worked with scientists to develop a tenderiser from apple juice, but this adds costs that neither the pig farmer nor the retailer is prepared to pay. Despite many setbacks, Mary says ‘I probably won’t give in, that’s the thing.’

As well as her consultancy work, Mary creates and manages events, runs her own bed-and-breakfast, and she regularly takes food tours to Asia. Yet Mary’s biggest recent venture has been ‘Project ORU 100’ which aimed to change the lives of fishermen in southern Sri Lanka affected by the December 2004 tsunami. She led a team of volunteers that raised funds for the purchase of one hundred fishing boats and thereby put a whole community back on its feet. The next step was ‘Project Ice’ which will cut

http://www.foodmatters.co.nz
out the middle man by finding the money to build an ice-plant and buy refrigerated three-wheeler bikes. By the time of the second interview in October 2007, all the required money had been raised and the project had been completed.

Mary is a crusader and she loves the freedom she experiences outside corporate life. She insists that:

For New Zealand for the long term, we probably need to encourage [the] entrepreneur or whatever, because otherwise the only thing that New Zealand’s got going for it is mountains and bush and beaches because the reality is that as a country of four million, we’re unlikely to be able to compete on price and commodity items. […] We can’t compete with the cost of production in our country so therefore we have to be entrepreneurial, we have to be value-added in everything we do and you can only be value added if you’re somehow an entrepreneur.

4.16 Cam Calder

Cam Calder was brought up in Taranaki where his father died when he was six. After leaving school, Cam went to Dunedin where he qualified as a dentist at the University of Otago. While living in Dunedin, he attempted to organise charter flights between Dunedin and Auckland, but the venture failed. He went on to practise dentistry, and when an opportunity arose to study medicine at Cambridge University in the UK, Cam took it. He worked as a doctor for a time but then decided against conventional practice in favour of lifestyle ways to promote public health. He secured an agency for bringing the French game of petanque to New Zealand, and through his company Boules-To-You, he imported and sold several container loads of units.

Cam says that:

Boules filled my life in a sense and why did I become passionate about it? Because I believed that it really was a good thing for people to do and I remember [a friend] talking to me and he said ‘Well Cam, you’re a doctor, why are you doing this?’ ‘Well’ I said, ‘look Murray, I can sit down at a desk and examine people and tell them why they don’t need antibiotics or I can promote something which I know will get people, perhaps a lot of people that have never been out in the fresh air for a long time, especially elderly people, all ages, mums and dads, grandparents, young kids, all playing together, socialising […].’
In 2006 Cam renewed his medical practising certificate to enable him to test a non-invasive treatment for the elderly which involves standing regularly on a vibrating metal plate to reduce the tendency to fall. He believes there is potential to sell between two and four million units.

In addition to his business pursuits, Cam is politically active and is chair of Auckland’s North Shore branch of the National Party, and he regularly writes letters to newspapers and magazines. He is an ‘omnivorous’ reader who loves travelling. He says that:

As a young kid not having a dad, one always had to look, to know that one had to look after oneself you know, and so the whole idea of personal responsibility was ingrained into the family, all the family and whilst one had gone through and done the sort of meal ticket in terms of the professional degree and what have you, there was always, I was always thinking well, this life is more than just sitting in one spot and doing one thing for the whole of one’s life.

4.17 Enterprising individuals

Tracey Kirwan has exciting ideas about opportunities in the travel industry but is currently employed as a teacher. Debbie Duis has developed plans for a Cashgora goat business but for the moment she works as a landscape gardener. Frederick (2004a) explains: ‘Enterprising means “marked by imagination, initiative and readiness to undertake new projects.” Entrepreneurial means “willing to take risks in order to create new value.”’ (p.5) Tracey Kirwan and Debbie Duis have many of the energies and behaviours associated with entrepreneurs but neither has taken the financial risk. They are therefore more appropriately described as enterprising, but as nascent entrepreneurs nonetheless.

4.18 Tracey Kirwan

Tracey Kirwan has spent seventeen years in the travel industry, with roles in retail sales, teaching, and marketing. She has qualifications from the Aviation Travel and Tourism Industry Training Organisation, has completed a certificate in event management, and has passed several university business papers. She has worked as a
sales representative for KLM Royal Dutch Airlines, has been a branch manager for AA Travel and a consultant trainer for Holiday Shoppe. Tracey is currently employed as a teacher and is Program Director of a Certificate in Travel Sales and Automation.

Tracey also has her own company called Kirwan Consulting which provides recruitment, training and event management services. Her latest venture is Campus-Online, an American learning product to which she is adding New Zealand content. Tracey has no formal agreement with the American owner because she is ‘more a shake of the hand person which is crazy in business because it’s burnt me several times.’

Tracey Kirwan says:

I’m a contradiction in that I love to dream the ideas. I want to be successful, but I love making, or help other people to be successful, and that’s usually first […]. I’m ten years behind my own goal of where I should be individually and I’m not knocking it, it’s just the cards were played like that, but it’s time to possibly think a bit more of me and develop me.

Tracey sees herself as a ‘rip, shit and bust, go out and do it’ sort of person, and this involves exploiting opportunities and being innovative. But Tracey also admits that:

I’m a real spender and so therefore again I knew that if I went out by myself I would fail because I don’t have that discipline and it’s the discipline of having to know your books and know a spreadsheet and know all that. I’ve done some accounting papers, I’m not stupid, but I can’t be bothered. I want to get on with what I’m good at and I will leave that to someone else, and that’s the danger.

Tracey recognises her potential to be an entrepreneur but she has never found the learning and development support suitable for turning her enterprising spirit into disciplined, entrepreneurial endeavour.

4.19 Debbie Duis

Debbie Duis left school in 1974 and took up factory work. Her next move was into agriculture as a beef farm manager and as a commercial grower of flowers and
vegetables. In the 1980s she became involved in milking and breeding goats and went on to specialise in Cashgora goats. Debbie is a qualified fibre classer, and for five years she was a regional representative to the New Zealand Cashgora Goat Farmers Association. She has won national awards for Cashgora blend garments and in 1992 produced New Zealand’s first worsted-spun Cashgora yarn.

In 2001, to develop her business ideas, Debbie enrolled at Unitec Institute of Technology in a Master of Business Innovation and Entrepreneurship (MBIE) and graduated with a Postgraduate Certificate. She says she came to:

realise that this was like a game of chess and that if I played it the right way, I would get what I wanted and I also realised quite quickly that the advantage for me was that I could learn to speak another language as such so I would be able to then converse with academics in their speak. So I thought well here’s an advantage here because one day I could see that I would be, not necessarily lecturing, but speaking, so I can reach a wider range of people.

Debbie says she ‘outgrew’ the MBIE because while it ‘opened up a whole new world for me,’ it did not change the ways she thought about practice. She explains that:

They methodise you and process you and you become no longer yourself. You become a clone of what you are being taught. So you can no longer use your own initiative and things. You’ve got to do it that way, and I know because I know stuff and then I’ve had to put it in this method and I’m going look, I know this stuff and yet why can’t I do it […]?

Debbie believes the Cashgora industry in New Zealand has failed to realise its potential. She plans to move to the UK in 2008 to become part of an active industry and to be closer to specialist advice and markets. In 2006, after the interview with me, she enrolled in a Postgraduate Diploma in Design Enterprise and took this as an opportunity to bring together the research and planning required for launching her UK venture. This program does not require or support Debbie to put her plans into practice, but she is nonetheless convinced of ‘the journey that I am about to go on.’ Meanwhile, Debbie supports herself by working as a self-employed landscape gardener.  

17 http://www.totallandscapedesign.co.nz
Chapter 4: The Participants

4.20 Associates of entrepreneurs

Robert Franich and John Alldred work with entrepreneurs and share their enterprising spirit of adventure. Robert has also studied them, and John advises and mentors them. Although not entrepreneurs themselves, they have insights that converge with what entrepreneurs themselves say about their action orientation, creativity and passion.

4.21 Robert Franich

Robert Franich has ‘always been interested in phenomena and things’ and says ‘[my] mother described my first synthesis of combining eggs, flour and coal I think it was at two, and I did some strength testing by sitting in it or something like that.’ In 1970, he gained a PhD in natural products chemistry from the University of Auckland, he went on to Oxford University with scholarships to work on penicillin synthesis, and he returned to New Zealand to work on the fungus diseases that were destroying forests. Robert is now Principal Scientist with SCION, a Crown Research Institute in Rotorua. He loves ‘experimenting with things’ and trying to understand how ‘all the materials we see around us […] are] organised in either natural ways or ways that chemists have put together.’ He also supervises PhD students.

When the economic reforms of the 1980s came, many scientists ‘basically buckled,’ but Robert saw ‘a whole new opportunity’ and began reconceptualising his work as a longitudinal process. He came to see that ‘the business world actually operates through not just communication but chemical reaction as well. There’s a chemistry between people and opportunities and understanding what’s going on around you. It’s chemistry in action.’ Over the last twenty years, therefore, he has developed a keen interest in chemical venture enterprises, and he now looks at science as a process that takes an idea from the lab to the market.

Robert’s current work includes working with Zelam, a small and ‘hungry to grow’ entrepreneurial company, on a wood-hardening process that is based on research that
began twelve years before the leaky-building crisis\textsuperscript{18} occurred. This project was the topic of the thesis he wrote for a Master of Business Innovation and Entrepreneurship which he was awarded in 2005. This is the same program that Debbie Duis was enrolled in, and Robert comments that his fellow students were ‘just wonderful rat bags. They were just undisciplined in many ways but kick-ass, kick-ass people. They wanted to get out there and do something different and […] only certain ones went right through to year three.’ Some, he says, ‘found it quite boring’ whereas back at work ‘on Monday morning I was blathering on to people at morning tea time about it, “Look what I’ve learned.”’ It is striking that the MBIE experience suited Robert well, and that he was more interested in the phenomenon of entrepreneurship rather than in enhancing any ‘propensity’ for practice (see Hannon, 2004).

At the time of the interview, Robert was planning to reduce his employment at SCION to eighty percent and was looking for a business partner to commercialise the recently patented Franich Process which he believes will revolutionise sawmilling throughout the world. He has told his manager that ‘I want to finish my career in one of two ways: a hugely exciting success or a massive catastrophic failure. I don’t want anything in-between. Mediocrity is just not in my vision.’

\textbf{4.22 John Alldred}

John Alldred was brought up in Dunedin and went to the University of Otago where he graduated in 1979 with a BCom. His major was marketing which at the time was a new science and there were only thirteen students in the class. He says:

\begin{quote}
I recognise to this day if I hadn’t done that degree, which by the way I hated doing, I was bored stiff through the whole process, I knew I had to do it and I was right and I guess it’s even more true today. I would never have got the jobs without that bit of paper.
\end{quote}

\textsuperscript{18} New Zealand regulations changes in 1996 enabled ‘chemical free’ timber to be used in building construction. This led to a loss of weather-tightness and resulted in many hundreds of homes and apartment blocks rotting and needing to be rebuilt.
Chapter 4: The Participants

John has worked principally as a marketer, both importing and exporting, and has covered products as diverse as electronics, hotel supplies, fish, cheese, and newspapers. John travels regularly throughout Asia. He has deliberately worked across a range of industries because he believes it is important in business to have six or seven careers. He says: ‘You should, if you have got any brains at all, be able to swap industries quite easily and just flow from one to the other otherwise you get bored, you know, and business people do get bored, good ones. You’ve got to keep stimulating yourself.’

John is currently Chief Executive of Lake Wanaka Tourism which is an incorporated society funded by a subscription levy on all commercial tourism-related businesses in the Wanaka area. He sees his job as marketing a tourism town to the rest of the world. His role includes providing advice to the town and its businesses about innovation and entrepreneurship, and he personally mentors a number of businesspeople in the Wanaka area.

John insists that:

If you’re going to succeed, you’re going to have a very strong point of difference. You’re going to have a new kind of way of marketing it, something that sets you apart from the competition. Now to come up with that today you’ve got to be bloody creative or you will never think of it. If it was easy, everyone will probably have thought of it. So yeah, entrepreneurs have to be super creative.

He later adds that it’s ‘got to be fun […] because you have got to be passionate now to make things work, so if you are not passionate you shouldn’t do it because someone will beat you. There will be someone more passionate or enjoying it more than you and they will do it better.’

4.23 Conclusion

In Age of enterprise: Rediscovering the New Zealand entrepreneur, 1880-1910, Hunter (2007) examines information available on 133 entrepreneurs active during that thirty year period, and of the New Zealand entrepreneur at the time he concludes: ‘he was a
proprietor and risked his talent and abilities in the market, […] and he] was not an actor who rose from rags to riches’ (p.235); ‘his was not a life of constant gain. […] Tenacity and resilience became his faithful allies’ (p.236); ‘he mitigated risk through industry knowledge and experience, and through the use of networks that compensated for those areas in which he had not talent or ability’ (p.236); ‘most generated wealth […] after decades of hard graft and enterprise’ (p.236); and ‘his business strategies were not as much random choices as reflections of personal aptitudes and capabilities’ (p.237). These might equally be applied to the entrepreneurs introduced in this chapter, although what seems missing in Hunter’s account is the passion that John Alldred identifies as critical for entrepreneurial success a century later.

This chapter has established the fourteen participants as excited and exciting adventurers who have an association with the entrepreneurial process of realising opportunities and exploiting these to build something of value. The chapter has involved introductions and broad characterisations. The next chapter will begin looking at the participants’ stories about their creativity and will examine the literature, and it will start to bring these together to establish the characteristics of a curriculum for nurturing entrepreneurial creativity.
CHAPTER 5: THE CREATIVITY OF ENTREPRENEURS – A PERSONAL AND SOCIAL APPROACH

5.1 Introduction

‘The ability to create and innovate is the lifeblood of the [entrepreneurial] process’ (Bolton & Thompson, 2000, p.27), and this chapter is the first of two that examines why entrepreneurs are creative, and how. The purpose is to establish considerations for designing a curriculum for nurturing entrepreneurial creativity.

The chapter begins by locating this project in the wider context of research on creativity. It establishes a link between entrepreneurship and creativity, and then covers creativity drivers such as intrinsic motivation, fun, hard work and risk-taking, with particular attention given to the ways that risk-taking relates to ‘chaos.’ The conditions necessary for creativity are discussed, and, finally, teamwork and personal attributes are addressed, rounding off the argument that creativity is both a personal and social phenomenon.

5.2 Research context

In Chapter Two it was explained that in the research it is not clear whether creativity is a property of people, products or processes, and not clear whether it is a personal or social phenomenon (Mayer, 1999). This investigation has found that creativity can be associated with both people and processes, that it has personal and social dimensions, and that for the most part these are inseparable. The findings are in some measure inevitable because of the purpose of the investigation. The study has not attempted to investigate creativity as a property of products and it has, indeed, benefited from including participants from diverse fields of economic endeavour working with vastly different kinds of products.
Chapter Two also stated that Sternberg and Lubart (1999, pp.4-10) have identified six paradigms within which creativity has been studied. This thesis focuses on two of these, social person and cognitive approaches, the first of which is addressed in this chapter. Sternberg and Lubart add that ‘only a handful of studies’ have investigated both cognitive and social variables, and they also note the tendency of different fields to study creativity in what has been described by Wehner, Csikszentmihalyi and Magyari-Beck (1991) as ‘parochial isolation’ rather than in any integrated way (p.9). Runco and Sakamoto (1999) argue, however, that because of ‘the complex nature of creativity’ (p.62), the findings of experimental research do not ‘fit nicely together in a theoretically comprehensive fashion’ (p.80). Gruber and Wallace (1999) similarly argue that ‘[t]he necessary uniqueness of the creative person argues against efforts to reduce psychological description to a set of dimensions’ (p.93), and they affirm, therefore, understanding uniqueness through a case study approach.

This study is not ‘parochial’ because, as was explained in Chapter Three, the researcher-traveller has visited many places rather than a single parish. The investigation was not organised as a case study in that it was ‘an intensive, holistic description and analysis of a bounded phenomenon’ (Merriam, 1988 – emphasis added), but it does in principle conform to Yin’s (1994) definition of a case study as ‘an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident’ (p.13). This research incorporates both cognitive and social factors because the participants’ stories traversed phenomenon and context in inseparable ways. While it may be true that the findings of experimental research are not conclusive, there is nonetheless substantial convergence within the literature (Baer & Kaufman, 2006) and between the literature and the participants’ stories.

5.3 Entrepreneurs and creativity

Goffee and Jones (2007) propose that for a growing number of companies, ‘competitive advantage lies in the ability to create an economy driven not by cost
efficiencies but by ideas and intellectual know-how’ (p.72), but Hamel (2000) contends that ‘in the age of revolution it is not knowledge that produces new wealth, but insight – insight into opportunities for discontinuous innovation’ (p.12). Hamel adds that ‘in a nonlinear world, only nonlinear ideas will create new wealth’ (p.13), and he claims that the new innovators ‘are neither scientists nor brand managers; they are entrepreneurs’ (p.27). Bolton and Thompson (2000) similarly argue that entrepreneurs ‘disturb the status quo’ and ‘push the cart’ (p.22). Consistent with Hamel and with Bolton and Thompson, every participant in this project identified a positive relationship between entrepreneurship and creativity. Bill Buckley says ‘you’re always looking at it and saying how we can do it better’ because, as John Alldred points out, ‘if you just try and follow the normal route you will end up with the same as everybody else.’

Entrepreneurship has already been defined as the commercialisation of innovation. Nancy Beck points out that the difference between a creative person and an entrepreneur is that ‘it’s not necessarily thinking about the ideas, it’s actually thinking yes, it is a good idea, I should do something about it.’ In *Idealog* 2, Wilding (2006) goes further and argues against handing over ‘a great idea’ to a ‘Business Person’ because ‘[t]he best person to realise an idea is the person who thought it up’ (p.78). The entrepreneur therefore inhabits the worlds of innovation and business in the same way that Cooper and Press (1995) describe design as a phenomenon that ‘lies between the worlds of culture and commerce, between passion and profit’ (p.4). Daniel Batten is explicit about this: ‘I do have two different communities – one is an entrepreneurial one and one’s a creative one.’ He explains that:

> I think the difference is often in the creative community there’s […] a lack of understanding of how money works or a feeling that by taking money you’re somehow tainting your artistic integrity by being more aware of your audience or your market. Whereas an entrepreneur will always be thinking about who the market is, where’s the opportunity and will be tailoring that creativity much more to the buyer or to the market.

Daniel later explains, however, that the entrepreneur has to maintain a fine balance:

> I don’t believe that by being aware of your audience you’re tainting your authenticity at all because really entrepreneurship is just another conversation
that involves financial transaction […] but] the entrepreneur’s trap can be to think so much about the money that the creativity takes a back seat, so that’s the trap of the entrepreneur.

Entrepreneurial creativity is not only about innovative principals. Indeed, Craumer (2002) argues that innovation should be required of all parts of an organisation, and Drucker (2002) says that all the entrepreneurs he has ever met have ‘a commitment to the systematic practice of innovation’ (p.113). Peebles (2002) asked sixteen innovative leaders: ‘What’s the one thing you’ve done that most inspires innovation in your organisation?’ (p.91). Seven addressed the need for innovation to apply to everything the organisation does and not just the next ‘hot’ product. These leaders stressed the need to ‘experiment like crazy’ (p.106) and build a culture in which people are not afraid of the possibility of failure. Another five leaders focused directly on the people themselves and stressed the need for diversity and broad perspectives, a passion for teamwork, and reaching people’s intrinsic motivations. Consistent with Peebles, every participant insisted that everyone in their businesses needs opportunities to be creative, although, as Petrena Miller points out, some things are nonetheless black and white. Nancy Beck also cautions that most of her nursery staff are employed only for their physical labour, although she adds that ‘we do have interesting tea-times every now and then’ where ‘we do get ideas from our staff of how we can do things differently.’ Brigid Hardy recalls the story about the NASA employee whose job was to clean the bathrooms but who describes his work as helping to put the first man on the moon. She says that creativity ‘is all we have’ and adds that ‘you get so, so much more from people when they’re really part of that, and it is a buzz.’

Udall (2001a) says: ‘Discovering and harnessing an organisation’s uniqueness, by aligning the development of its people and processes with the development of its products and services, is fast becoming a central strategy for ensuring survival and moving confidently towards living an organisation’s shared aspirations’ (p.1). Glen Slater also ties together notions of uniqueness, creativity and people:

Everybody wants you to be unique, investors, government agencies, all your funding partners, anybody who wants to have a stake in you or taking a risk with
you, they want you to be absolutely unique – no competitors please, which of course is an impossibility, and you’ve got to have this unique, defendable position. Everything’s about IP. Now, that is really, that’s a dream scenario and the things that make companies truly unique are actually built into the people. So a lot of the creativity is around creating that uniqueness without necessarily trying to go out and patent some secret idea.

Daniel Batten makes a similar point and introduces the notion of ‘the creative organisation’:

If you have a very creative marketing team but then your product development process does not allow for creativity then you won’t have a creative organisation. […] I think the decision-making process has to allow for creativity. A lot of the great ideas in terms of marketing the company come from the developers. So we try not to create hard borders and say ‘Look anyone can contribute.’ And the more you have people who are less employees but more like a member of the family, the more you’ll have just natural contributions rather than you’re the big brother so we’ll ask you when we need to know about this and you’re the software developer so you only know about this.

Participants generally see creativity as a strategic tool and view their staff as a creative resource. This is consistent with Florida’s (2003) discussion of ‘the rise of the creative factory, where factory workers contribute their ideas and intellectual talent as well as their physical labour’ (p.52). Smith, Paradice and Smith (2000) note, however, that while organisations need to nurture creative employees, employees also need to maximise their creative potential to remain employable.

In 2002, the *Harvard Business Review on the innovative enterprise* republished an article originally published in 1963. Levitt (2002) argued that creativity may be ‘more of a millstone than a milestone’ (p.157) because of the shortage of creative people in business. He proposed that ‘the major problem is that so-called creative people […] pass off on others the responsibility for getting down to brass tacks’ (p.159). The article provides an interesting measure of change because it now seems that creativity is desirable if not practised in all parts of entrepreneurial businesses. All participants were unequivocal about the centrality in the business of their own creativity, and they also stated that utilising the creativity of their staff is important. There is an unambiguous connection between entrepreneurship and creativity, and it is clear that a
curriculum that is designed to develop the practice of entrepreneurship needs to acknowledge and accommodate this.

5.4 Everyday, personal creativity

Csikszentmihalyi (1996) says that ‘creativity results from the interaction of a system composed of three elements: a culture that contains symbolic rules, a person who brings novelty into the symbolic domain, and a field of experts who recognize and validate the innovation’ (p.6). He argues that truly creative people ‘have changed our culture in some important respect’ (p.26). Cropley (2000), more generously, contrasts the ‘sublime creativity’ of the greats with ‘everyday creativity’ (p.10). Boden (2004) similarly distinguishes between ‘P-creativity’ that is new to the person and ‘H-creativity’ that has arisen for the first time in human history, and Runco (2004) names the former ‘personal’ creativity. This investigation is largely interested in personal creativity that has a social impact. It is therefore arguable that the creativity that results in products, services and business processes needs nonetheless to satisfy Csikszentmihalyi’s definition, only the ‘field’ is the market within which a business operates rather than some global community of experts.

Several participants were at first reluctant to be recognised as ‘creative.’ Cam Calder does not see himself as ‘tremendously’ creative when he compares himself with ‘people who are vastly more skilled in areas such as art and music.’ Mary Taylor says ‘I don’t think that anything I do is actually creatively different or new’ but then adds ‘[i]t’s just finding pathways to do something.’ Resisting the label suggests that notions of creativity consistent with Csikszentmihalyi’s (1996, 1999) definition prevail, even though participants’ stories demonstrated that personal, everyday creativity occurs constantly. It is noteworthy that Massey (2005) proposes that ‘the myth of the creative genius needs to be unpacked and understood by students’ because it ‘is difficult to challenge, as it is perpetually reinforced in contemporary culture’ (p.27).
Runco (2004) argues that everyone has creative potential and Petrena Miller suggests that everybody is creative only it’s more ‘obvious’ in some people. Daniel Batten says ‘I don’t think it’s a talent that only certain people have,’ and he notes that ‘Picasso said every child is an artist – the challenge is to remain one when we grow up.’ Daniel insists that as a human being it’s impossible not to be creative, and Runco (2004) similarly argues: ‘Transformations are apparent whenever an individual constructs a new understanding. We do not merely absorb experience; we filter and select it’ (p.23). Runco explains that personal creativity is ‘manifested in the intentions and motivation to transform the objective world into original interpretations, coupled with the ability to decide when this is useful and when it is not’ (p.23). More succinctly, Piirto (2004) states: ‘Creativity is a basic human need to make new’ (p.37).

5.5 School and family backgrounds

Tony Falkenstein says ‘you don’t see an uncreative three year old’ but then ‘he goes to school’ and ‘you start becoming one and one equals two.’ The ontological metaphor is striking. Many participants would agree with John Alldred that ‘at school they kept you inside the square,’ although Brigid Hardy remembers a teacher who one day helped the class to write creatively about trees and Brigid recalls ‘I remember just thinking gosh we can really do something amazing and somehow in a really, really gifted way that teacher just created that.’ No other participant acknowledged a school teacher or school experience that had a formative influence on their creativity, and several did not realise their creativity until adult life. Glen Slater, for example, discovered his creativity as an officer in the Navy having ‘to manage a million things at once.’

Some creative entrepreneurs come from families that provided good models while others experienced the opposite. Brigid Hardy, Petrena Miller and Daniel Batten acknowledge creative parents or grandparents, but Mary Taylor’s parents were ‘strict’ and ‘stifled’ creativity, and ‘going to university was the best chance to escape and become myself.’ As a child, Debbie Duis lived in ‘a very toxic household’ and learned to ‘imagine things, different things in my head so I escaped to another place.’ Bill
Buckley says he is creative because ‘I am a bloody fool half the time.’ He suggests that this is because ‘I’ve never been sure of my life and you know, I always worry about where my next feed’s coming from almost and I know I shouldn’t.’

Writing about people who are famously creative, Csikszentmihalyi (1996) found that ‘creative individuals seem to have had either exceptionally supportive childhoods or very deprived and challenging ones. What appears to be missing is the vast middle ground’ (p.171). In addition to the six participants discussed above, some others made neutral comments about family. Nancy Beck, for example, says ‘I don’t remember my parents being particularly positive about being creative. They encouraged me to do the best that I could.’ Others made no connection between family and creativity, and this suggests their backgrounds were not remarkable in a positive or negative way. This may well constitute a middle ground although it is impossible to be sure. What is arguable, however, is that it seems that creativity is important for entrepreneurship, and that being creative is available to everyone regardless of background. Boden (2004) concurs that creativity ‘isn’t confined to a tiny elite: every one of us is creative, to a degree’ (p.1). Daniel Batten would add that the challenge with ‘people who may not feel creative’ is to discover ‘what’s stunted their expression of creativity’ and ‘remove the things that inhibit [them].’

5.6 Motivation

Cropley (2000) observes: ‘A widely accepted position is that creativity is based on intrinsic motivation, the wish to carry out an activity for the sake of the activity itself’ (p.62). Amabile (1983) proposed that creativity lies at the confluence of intrinsic motivation, domain-relevant knowledge and abilities, and creativity-relevant skill. She argued that intrinsic motivation is conducive to creativity whereas extrinsic motivation is unfavorable. Amabile (1996) refined her earlier argument to state that ‘rewards that convey competence information to subjects may not undermine intrinsic motivation’ (p.160), and extrinsic motivators may even increase concentration on and understanding of the task. Nonetheless, as Collins and Amabile (1999) explain,
‘although creativity can arise from a complex interplay of motivational forces, motivation that stems from the individual’s personal involvement in the work – love, if you will – is crucial for high levels of creativity in any domain’ (p.297).

All participants talked with great passion and ‘love’ about their businesses and their creativity, and none talked in any way about financial or other material gains. When asked directly about motivation, Mary Taylor says ‘it’s all internal, yeah, because the external rewards don’t exist really,’ and Debbie comments ‘the biggest buzz for me was creating something […]. The money was never really ever a driver.’ It is perhaps noteworthy that both these participants are self-employed. Daniel Batten is more in the mainstream when he says that:

When you’re starting a company there’s times when you go through peaks and troughs in motivation and to motivate yourself you have to remind yourself what the goal is and so that’s very much an extrinsic thing. ‘Come on, let’s get going again and do this and do that so we can get going.’ But that has to complement an intrinsic joy of what you’re doing.

Eisenberger and Shanock (2003) attribute the tension between intrinsic and extrinsic motivations to ‘the clash between romantic and behaviourist worldviews concerning basic human nature.’ Like Daniel, they argue that ‘[c]reative motivational orientation, enhanced by rewards, strongly affects innovative performance’ (p.121). Intrinsic motivation nonetheless remains the primary driver, and this constitutes a serious challenge to any qualification-related curriculum in which on-going assessment and the notion of ‘passing’ are used to motivate students to engage with prescribed content and activities that are geared towards predetermined outcomes.

5.7 Fun and hard work

Further challenges arise from the participants’ insistence on the importance of fun. Cam Calder says that passion and laughter are essential, and Daniel Batten says that ‘[a]s soon as you lose that sense of fun in a business, that’s when creativity stops.’ For Nancy Beck ‘it’s fun having a new idea and thinking I wonder if that would work or
has anyone thought of that before, or this would be quite a challenge to do.’ These comments match Henderson and Permanante’s (2004) finding that inventors speak ‘repeatedly and consistently about their enjoyment of innovative work’ and they express ‘a profound level of emotional experience as part of their creative process’ (p.293).

Fun seems to occur when the challenges are seriously demanding. As noted in Chapter Four, Daniel Batten says ‘I’m either blessed or cursed with a very short boredom threshold and always have been so if I’m not excited by what I’m doing then I’ll look to create an excitement.’ Similarly, Petrena Miller is a ‘self-starter’ who never allows herself to become bored, and Mary Taylor sets ‘realistic targets’ but adds ‘there’s no point if it’s easy, is it?’ The two enterprising participants require the same degree of challenge: Tracey Kirwan has to have ‘a lot of balls in the air at the one time,’ and Debbie Duis has ‘a fire burning there that never goes away. Every day for me has to be productive.’

All participants seem to work long hours and/or work hard, with the exception of Tony Falkenstein who does not ‘subscribe to the theory that people say find me a successful person that hasn’t worked their guts out, given up lots of parts of life. I’ve always had bubbles in my life whether I worked for someone else or worked for myself.’ It is perhaps noteworthy that Tony is the only serial entrepreneur interviewed for this project and is without a specific product domain, and significant, too, that thirteen hard workers seem to find ‘bubbles’ inside their work.

Florida (2003) insists that while creativity may seem stimulating and glamorous, it is also hard work, and he notes Pasteur’s quip: ‘Chance favours only the prepared mind’ (p.34). Hard work is also inherent in Johansson’s (2006) argument that ‘[t]he strongest correlation for quality of ideas is, in fact, quantity of ideas’ (p.91). Drucker (2002) adds that ‘[i]f diligence, persistence, and commitment are lacking, talent, ingenuity, and knowledge are of no avail’ (p.127).
Chapter 5: The creativity of entrepreneurs – a personal and social approach

Hard work is also associated with knowledge and expertise. Csikszentmihalyi (1996) says that genuine creative accomplishment comes only after years of hard work rather than as sudden insight because the creative person must first learn the rules and content of the domain. Several writers (Weisberg, 1999; Baer & Kaufman, 2006) refer to a ‘ten year rule’ that significant time is required in a discipline before a significant contribution can be made. Such a rule is certainly of interest to this project because some entrepreneurs achieve ‘a genuine creative accomplishment,’ but it needs to be applied flexibly given that entrepreneurial work is far more likely to involve P-creativity in business processes and in the development of products that are novel and useful than H-creativity that results in a first in human history.

Indeed, Cropley (2000) warns that expertise, the result of sustained hard work, does not always facilitate novelty production because too much familiarity with the domain and with existing solutions can pre-organise thinking so it produces only orthodoxy. He tells the story of a German chemist working prior to Fleming’s discovery of penicillin who failed to recognise the same antibiotic even though its effects were literally all over his laboratory. This scientist grew bacteria to kill, found moulds on them each day, and decontaminated the room to enable the bacteria to grow for his experiments (p.46). Finke (1995) similarly shows that if people already have expectations regarding the type of invention or type of problem to be solved, this tends to constrain the structure of the forms and direction of creative exploration.

5.8 Risk

As already noted, Bolton and Thompson (2000) include the management of risk in their ten key action roles of entrepreneurs (p.22). MacGregor (2007b) writes in Idealog 8 about ‘the risk of avoiding risk’ (p.88), and Choe (2006) notes that some researchers have concluded that personality tests measuring ‘sensation seeking,’ which includes adventurousness and risk-taking, can be better predictors of creativity than some creativity tests (p.412).
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Brigid Hardy says ‘I think entrepreneurship is about risk-taking, you know, and excitement and threshold for risk,’ and Nancy Beck explains that the ‘creative process can be quite fraught with anxiety and danger but there still is, at some point you have to say I think this is a really good idea, here is an opportunity, you know. I can see where this may lead in that direction so let’s just give it a go.’ Cam Calder notes the irony that risk-taking lies at the core of being an entrepreneur yet ‘as a society we’re becoming more and more risk averse.’ Pete Rive agrees and highlights an implication for tertiary education when he suggests that ‘it doesn’t hurt when you’re at university’ but there needs to be ‘more opportunity for mistakes’ and ‘there should be a certain amount of pain because that’s when you learn the lesson.’ John Alldred adds that the entrepreneur has ‘got to be prepared to not worry, just enjoy it and when it fails, if it fails, it doesn’t matter.’ The participants’ observations suggest that taking risks is also about working with chaos.

5.9 Chaos and complexity

In Chapter One, Carden’s (2007) account of complexity was outlined briefly. Before discussing the practical implications of chaos and complexity, some further theoretical background is required. Gleick (1998), a gifted scientist who wrote about chaos, says: ‘The irregular side of nature, the discontinuous and erratic side – these have been puzzles to science, or worse, monstrosities’ (p.3). In 1960, however, Lorenz identified the first known instance of chaotic behaviour and discovered a way through disorder. Gleick argues that the trend in science has been toward reductionism, and that chaos now offers possibilities for seeing things whole again. He explains: ‘There has long been a feeling, not always expressed openly, that theoretical physics has strayed far from human intuition about the world. […] But some of those who thought physics might be working its way into a corner now look to chaos as a way out’ (p.6).

Sardar and Abrams (2004) explain that any entity that changes with time is known as a system, and systems have variables. A deterministic system is one that is predictable, stable and completely knowable, and in linear systems, variables are simply and
directly related, and they can easily be shown on a graph. The writers also explain that a period is an interval of time characterised by the occurrence of a certain condition or event, and aperiodic behaviour occurs when no variable affecting the state of the system undergoes a completely regular repetition of values. Unstable, aperiodic behaviour is highly complex. It never repeats itself and continues to show the effects of any small perturbation to the system, and this makes exact predictions impossible. This is epitomised in the notion of the ‘Butterfly Effect’ where a butterfly stirring the air today in Beijing is said to be able to transform storm systems the following month in New York (pp.54-55). Feedback is also a characteristic of systems in which outputs affect inputs. Bringing this together, Sardar and Abrams explain that events never actually repeat themselves exactly, therefore ‘chaos is the occurrence of aperiodic, apparently random events in a deterministic system. In chaos there is order, and in order there lies chaos’ (p.16).

Sadar and Abrams explain that when a system is ‘far from equilibrium’ and enters a chaotic period, it changes into a different level of order ‘spontaneously’ through ‘self-organisation.’ They explain: ‘The flow of energy in these systems allows them spontaneously to self-organise – creating and maintaining a structure in far-from-equilibrium conditions. Such systems also create novel structures and new modes of behaviour. Self-organising systems are thus said to be “creative.”’ (p.77) The writers add that self-organising systems are complex in two ways: first, their parts are so numerous that there is no way in which a causal relationship between them can be established and, secondly, their components are interconnected by a vast network of feedback loops (p.77).

Smitheran (2005) explains that chaos and complexity ‘are not mutually exclusive’ (p.162), and that, put simply, chaos comes from mathematics and is associated with unpredictability, and complexity comes from science and involves ‘studying how parts of a system give rise to the collective behaviours of the system, and how the system interacts with its environment’ (p.163).
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Chaos and complexity have implications for business. Grint’s (1997) point that ‘lifting the lid leads to the self-organizing element of chaos’ (p.2) was discussed in Chapter Two, and Anderla, Dunning and Forge (1997) argue that business needs to embrace chaos through ‘systematic dissent, provocative alternatives and fostering creativity’ (p.174). They suggest that chaotic trends and the principle of self-organisation will erode the power of companies unable to respond quickly to change and will see emerge in their place ‘schools of minnows’ such as virtual communities and ad hoc alliances. They argue that ‘the mechanism of innovation requires a mix of the chaos of creativity in a framework for thinking […]’ (p.176).

Most participants identified a positive relationship between creativity and chaos. Robert Franich, for example, says ‘chaos is part of the creativity and keeping it running, keeping it going, it’s not just start, stop, start, stop.’ Mary Taylor comments that ‘the more rules and things you have at one end, it stifles what happens at the other,’ but a number of other participants also said that rules can be positively designed to enable creativity in the business. Petrena Miller, for example, says ‘I think you need to have the structure so that you can be allowed to do the creative stuff.’ Daniel Batten and Glen Slater arrive at a similar position from opposite starting points. Glen says ‘I am more towards the structured approach and that’s because the structured approach reduces risk and that’s my job,’ and he explains that ‘my purpose is to create the structure so that my really smart guys can have their talents focused and channelled and delivered to customers in creating value.’ Daniel Batten, on the other hand, locates himself ‘towards the chaos end of the spectrum and I’ve had to consciously develop those more sequential routine skills in order so some of those chaotic impulses actually went somewhere.’

It seems that an entrepreneurial business that values creativity requires a system that enables processes and outputs to be useful, but it is clear too that such a system needs to admit complexity, allow randomness and instability, and have trust in the principle of self-organisation. Abrahamson and Freedman (2006) argue indeed that:
there are often significant cost savings in tolerating a certain level of messiness and disorder […] Though it flies in the face of almost universally accepted wisdom, moderately disorganized people, institutions and systems turn out to be more efficient, more resilient, more creative, and in general more effective than highly organized ones. (p.5)

From a different angle, Richards (2000) points out: ‘In chaos theory terms, we already have an energized system (ourselves) that is far from equilibrium, constantly evolving, and seeking new emergent order’ (p.250). She adds: ‘Each of us is an emergent creation in every moment, and we evolve continually while remaining our recognisable and unique selves. […] A primary human role is to change and produce novelty’ (p.250). If the production of useful novelty is the entrepreneur’s core business and a precondition for this a system that allows productive chaos, it seems to follow that a curriculum for entrepreneurs must similarly embrace chaos in order to enable creativity and ‘new emergent order.’

5.10 Relaxation and slow

A number of participants identified relaxation as a further precondition for creativity, and many spoke about the need to be in a special place to permit chaos and enable Richards’ (2000) ‘new emergent order.’ Brigid Hardy says an entrepreneur needs ‘infrastructure in place that enables you not to have to do the accounts’ so she can relax and be creative. She spends a lot of time in a local café ‘with my little book just writing little things.’ People there think she is a design student but she says ‘no, actually I’m trying to run this company, I just play hooky quite a bit.’ Daniel Batten says that to be creative you need ‘to get a space’ and ‘the first thing I do is take the internet cable and I unplug it because it’s impossible to be creative when you’re being bombarded with emails.’ Daniel says that Biomatters:

encourages everyone to have a couple of days a week where they work from home so they’re getting that balance of time with the team and time by themselves ‘cos the developers here are also creating, they’re creating code and that’s also very creative, highly creative process and they need that time when you’re undistracted as well as the time you’re interacting.
Csikszentmihalyi (1996) also notes the importance of a special place tailor-made to comfort and need, and he says that creative individuals ‘give their surroundings a personal pattern that echoes the rhythm of their thoughts and habits of action’ (p.127).

A range of other points were also made about the need to be alone. Debbie Duis says ‘I need a lot of time by myself’ so that ‘it just percolates away.’ Being alone to be creative is, however, not always a conscious choice. Bill Buckley, for example, says ‘I’m a loner I reckon. I don’t really get to know other people very well. I’m very focused on what I do and just do it the best I can.’ In a similar way Tony Falkenstein sees himself as shy and ‘inward,’ and he believes ‘we don’t spend enough time by ourselves.’ He goes for two hour walks ‘with nothing in my brain […] and by the time I come back I’ve got all sorts of [ideas], solved all last week’s problems, solved all next week’s problems and thought of a million different things.’ Mary Taylor and John Alldred also find walking helps their creativity, and Csikszentmihalyi (1996) says that creative people ‘report the highest levels of creativity when walking, driving, or swimming; in other words, when involved in a semiautomatic activity that takes up a certain amount of attention, while leaving some of it free to make connections among ideas below the threshold of conscious intentionality’ (p.138). As further examples of this, Michalko (2001) reports that Goethe, Freud and Rousseau regularly went on a ‘thought walk’ to help them ‘connect the unconnected’ (p.155).

The notion of doing things slowly is related to the participants’ associations of creativity with relaxation, special places and being alone. Claxton (1998) says that the mind has three processing speeds: the fast physical intelligence of the wits; deliberative thinking which he calls ‘d-mode’ because it has become the default mode of thinking; and rumination which is the slowest and is associated with creativity and wisdom. He says that creativity is enhanced when people are forced to slow down and he argues that thinking at the unconscious/conscious border has to be ‘welcoming without being predatory’ because ‘skilled intuiters seem to be able to watch the emergence of their creations without chivvying them, neatening them up or trying to turn them too quickly into words’ (p.80).
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Honore (2004) says that fast and slow are not just rates of change but:

are shorthand for ways of being, or philosophies of life. Fast is busy, controlling, aggressive, hurried, analytical, stressed, superficial, impatient, active, quantity-over-quality. Slow is the opposite: calm, careful, receptive, still, intuitive, unhurried, patient, reflective, quality-over-quantity. It is about making real and meaningful connections – with people, culture, work, food, everything. The paradox is that Slow does not always mean slow. (p.14)

Slow is not a social fad but is, rather, a business imperative. Amabile, Hadley and Kramer (2002) examined nine thousand diary entries of 177 employees in seven US companies to look at how people experience time pressure as they work on projects that require high levels of inventiveness, and at ability to think creatively under such pressure. They found that the more time pressure felt in a day, the less people will think creatively. They noted that people seem remarkably unaware of this. They also discovered that time pressure on one day also means less creative thinking on following days, and they label this the ‘pressure hangover’ (p.10). They conclude that ‘complex cognitive processing takes time and, without some reasonable time for that processing, creativity is almost impossible’ (p.17). The corollary is, as Csikszentmihalyi (1996) bluntly puts it, that ‘people who keep themselves busy all the time are generally not creative’ (p.99).

5.11 Flow

Petrena Miller said that when she is being creative, ‘it works, you know, it’s easy. Everything flows. It’s simple, you know. It’s like feeling fit and going for a great run, you know. Just flows.’ Daniel Batten also says that creativity occurs when:

you feel like you’re in a flow where things just happen very spontaneously and at other times it feels like you’re pushing it and it’s not quite happening for you. So it sounds very kind of ethereal but a lot of it’s really just about surrender and about not pushing something to happen that’s not ready to happen but surrendering to possibility.

The concept of ‘flow’ is well established in the literature. Csikszentmihalyi (1996) titles his book *Creativity: Flow and the psychology of discovery and invention* and he
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argues:

When we think consciously about an issue, our previous training and the effort to arrive at a solution push our ideas in a linear direction, usually along predictable or familiar lines. But intentionality does not work in the unconscious. Free from rational direction, ideas can combine and pursue each other every which way’ (p.102).

Csikszentmihalyi characterizes ‘flow’ as a process that occurs when things are going well and people experience ‘an almost automatic, effortless, yet highly focused state of consciousness’ (p.110).

Goleman (1996) examines the role of the emotions in ‘fluidity’ and explains the relationship between anxiety and performance in terms of an upside-down U (p.84). At the peak of the inverted end is the optimal relationship between anxiety and performance, with a moderate degree of nerves propelling outstanding achievement. Too little anxiety, the first side of the U, brings about apathy or too little motivation to try hard enough to do well, while too much anxiety, the other wide of the U, sabotages any attempt to do well. He concludes: ‘A mildly elated state – hypomania, as it is technically called – seems optimal for writers and others in creative callings that demand fluidity and imaginative diversity of thought; it is somewhere toward the peak of that inverted U’ (p.85). This also seems to be true of entrepreneurial creativity as Schindehutte, Morris and Allen (2006) examined peak performance, peak experience and flow and concluded that ‘entrepreneurship be approached as a vehicle for optimal human experiencing’ (p.349).

Bill Buckley describes his experience of hypomania as ‘an adrenalin rush’ that happens, for example, when he tells people his ideas, gets their feedback, argues with them and tells them they are wrong, then ‘I go away and think about it and think shit, they’ve got a couple of points there, [so I] try and build off it.’ Interestingly, the sequence here matches Stupak and Greisler’s (2003) argument that ‘we must slow down in order to speed up’ (p.1) because ‘[t]he addictive properties of the adrenaline rush via URGENT pace degrades from matters of high importance’ (p.4). Pete Rive explains too that ‘you can try too hard to make things that they’re not’ and ‘you get a
sort of resonance in something when it is happening.’ This ties together the concepts of self-organisation and flow, and it seems that when the entrepreneur is intrinsically motivated to engage with a task, being in a state of flow can enable the creative production of things that are novel and useful. It also appears that slow is associated with flow in that it occurs, to use Daniel Batten’s words, through ‘surrender’ and being ‘spontaneous’ rather than by ‘pushing it.’

5.12 Meditation

Three participants described the ways that meditation helps. Brigid Hardy says that:

Yoga [...] is as important to me, honestly, as eating and sleeping. It is just absolutely a refuge I think, because probably people that are entrepreneurs, it’s constant. You’re never not doing it. [...] To go into that refuge and just concentrate on the breath and just [...] I mean it’s not quite a religion but it definitely is a philosophy and its very much an approach to living and an approach to life and it’s actually very, very different to the determination and the competitiveness and all the harshness of the business world [...] .

Daniel Batten makes the connection between meditation and creativity more overt. He says ‘it’s impossible to be creative if you’re stressed,’ and every morning he meditates ‘so that I can go through each day. [...] There may be pressures during the day but they don’t turn into stresses.’

Writing about the Indian tradition of creativity, Misra, Srivastava and Misra (2006) explain that:

Contrary to deviance, the change and discontinuity emphasized in the West, the Eastern view emphasizes self-fulfillment or self-realization and the development of creative purpose. Thus while innovative products are not disregarded, creativity is often treated as a state of fulfillment or the expression of inner essence. (p.428)

Lubart (1999) comments on the same cultural difference and observes that ‘when we look beyond our own doorstep, we discover how deeply creativity is bound to cultural context’ (p.347). Things seem to be not quite so ‘bound,’ however, for entrepreneurs
(and no doubt others) who engage in Eastern-styled meditation to achieve self-realisation that in turn enables Western creativity that leads to productivity.

Petrena Miller believes in reincarnation and says ‘you keep coming back to perfect what you haven’t learnt in the previous time’ but her beliefs about meditation are more mainstream. She spends:

a lot of time meditating where […] you tap into that source that’s within all of us, whether you want to call it god or universe or whatever, and you access information that you know, is, you wonder sometimes well where did that come from because you know, the quantum level if you put your brain on a plate, you know, it’s just this piece of grey matter, however it’s like where do all these thoughts come from?

Debbie Duis’s answer to this question is intuition. She says ‘I have a highly developed intuition, almost a psychic sense of things simply because I can sense things very, very strongly.’ The relationship between intuition and the mind is indeed central to creativity and will be examined in the next chapter.

A number of Western writers discuss the ways Buddhism offers an approach to flow that involves immersion, unconscious processes and enlightenment (Reber, 1993; Csikszentmihalyi, 1996; Claxton, 1998; Honore, 2004). While it may be important to acknowledge that Eastern ways of knowing highlight the inadequacies of some Western traditions, this is a line of investigation that will not be pursued in this project. It seems sufficient to recognise here that stress and creativity are incompatible, and that for some people the process of achieving another state through meditation has a powerful association with slow and the state of flow that enables creativity.

5.13 Teamwork

Earlier in this chapter, the need for everyone in an entrepreneurial business to be creative was discussed. A related issue raised by all participants is the way teamwork is important to creativity, although Debbie Duis says she gets ‘irritated’ when people say ‘you can’t do anything unless you have the right team.’ Clydesdale (2006) argues that
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The Beatles should not be seen as creative geniuses but as a creative process. He says that behind this process lay a ‘working team that possessed high levels of exchange and complementary blends of expertise and thinking styles,’ as well as healthy ‘rivalry’ (p.129). Hardagon (2003) likewise dismisses the myth that Edison was a ‘lone genius’ (p.5) and he suggests that innovation should instead be viewed from a network perspective. He extends this to argue that ‘entrepreneurs and inventors are no smarter, no more courageous, tenacious, or rebellious than the rest of us – they are simply better connected’ (p.11).

Hardagon’s argument seems an exaggeration, especially regarding tenacity (which is discussed in Chapter Seven), but the point about networking can certainly be supported. All participants would agree with Tracey Kirwan that ‘teamwork is absolutely critical,’ although the team could be the company, a group established for a single short-term purpose, or a loose network. Tony Falkenstein says ‘you put five or six different people together, I mean, it’s amazing what they come up with.’ Mary Taylor and Brigid Hardy attribute their creativity to the teams they work with. Mary says that:

> I’m really into brainstorming all the options because often if you look at all of the options, something will come out as hey that’s a good way of doing it, you know, like, and often it’s, but I often don’t do that on my own. I need other people. I find on my own it’s only my ideas but usually my good ideas I actually pull off other people.

Michalko (2001) notes that while ‘brainstorming’ was systematised in 1941 and is associated with procedures that are often problematic, it belongs to a Greek tradition established by Socrates and his colleagues with principles that ‘allowed thinking to grow as a collective phenomenon’ in which individuals become ‘participants in a pool of common ideas, which are capable of constant development and change’ (p.256). Brigid Hardy and her friends work as such a collective. Brigid explains that ‘you can’t just sort of look up from the spreadsheet or look up from whatever and then you know, “Oh right, what’s our new idea with these?” you know. It doesn’t happen as seamlessly as that.’ Brigid says she likes to get herself into the right space and ‘then get those
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people around because I mean I don’t make it all up. Like all kinds of people and friends and amazingly talented people have helped me at every step of the way.’

Cooper and Jayatilaka (2006) note that extrinsic motivation has conventionally been negatively associated with rewards tied to performance, but they suggest that a more positive form of extrinsic motivation might be obligation to the group (p.153). Glen Slater certainly sees himself as motivated by the team, with positive results. He says that:

I used to like to have some music on, no distractions and then sit down and work my way through whatever it is I was doing, but over the last two years I’ve learnt that the power is in my team and if I say ‘Well what about this?’ they’ll say ‘Well what about that?’ and between us we can usually come up with a lot more. I do have to begin the process, I do have to have a clear idea of what I want to come out of it, but yeah, for me the power is really in the team. Sitting around doing it myself, I’ll get a reasonably good job done. Getting the team involved and pushing back and forth, that comes out fantastic every time.

Glen’s explanation supports Seitz’s (2003a) argument that although standard psychology sees creativity arising from the unique characteristics of individuals rather than the communal basis of creativity, ‘the creator draws his or her creative nourishment from the vitality and richness of the community’ (p.247). Matching Florida’s (2003) argument, Seitz goes on to state that this is why so many ‘creative individuals are drawn to metropolitan and urban centres with their deep and extensive cultural, artistic, entrepreneurial and intellectual resources’ (p.247), although Peck (2005) – see also Chapter Two – argues that ‘[t]he creative cities discourse is both saturated in, and superficially oblivious to, the prevailing market ideology’ (p.767).

Pete Rive not only works collaboratively but has also been working on collaborative creativity. He explains that:

For about the last six or seven years I have been working on an opportunity for a very big project with Saatchi’s back in 2002 and we pitched the idea. It was an audacious idea. It was basically looking at a global business and looking at virtual reality for all their offices and looking at creative collaboration. That very issue of what makes people work together. ‘Why should I tell you my best idea? You’re just going to take it from me.’ So all those issues of creative
collaboration. I think that’s where the real gold is because unless you’re a painter, […] most of where the knowledge economy and the creative economy comes from […] is about solving that, there’s a big issue about solving what will make this creative economy hum, and that’s my personal belief because working together is greater than the sum of the parts.

Pete’s argument takes the discussion from teamwork to organisational creativity. Baer and Kaufman (2006) note that research into organisational creativity has ‘mushroomed’ in recent years (p.18), and Williams and Yang (1999) observe that the effective use of control was traditionally seen as the best way to get the most out of an organisation but control has the effect of minimising employee creativity. They explain that:

In the view of systems theorists, creative individuals are stimulated by elements such as their circle of friends, progress in their field of research, and the dynamics of the society in which they live. Creative products, then, are made possible by this closely intertwined and interacting system of social networks and fields of study or enterprise. (p.379)

Teams of various kinds are clearly essential for both individual and business creativity, and the importance of teamwork supports the argument that creativity is a property of people and processes, with personal and social dimensions. Williams and Yang’s (1999) point that this has implications for both enterprise and study also has clear implications for a curriculum designed for nurturing entrepreneurial creativity.

5.14 Personal attributes

Runco and Charles (1997) admit that when discussing the personal creative type, focusing on sublime creativity is safer because there can be certainty that the individuals are actually creative. They suggest it makes intuitive sense nonetheless to draw on this knowledge, although Cropley (2000) notes that many writers on creativity caution against idealising type (p.70).

Csikszentmihalyi (1996) says that if nothing else distinguishes creative people from others, it is ‘their ability to adapt to almost any situation and to make do with whatever
is at hand to reach their goals’ (p.51). This parallels Bolton and Thompson’s (2000) argument that three of the entrepreneur’s ten action roles are that they ‘spot and exploit opportunities,’ ‘find the resources required to exploit opportunities,’ and ‘are determined in the face of adversity’ (p.22). Csikszentmihalyi also notes that the personalities of creative people are complex because they ‘show tendencies of thought and action that in most people are segregated’ (p.57). He thus describes creative people through ten sets of opposites including the statements that they ‘are very passionate about their work, yet they can be extremely objective about it as well’ (p.72), and they ‘have a great deal of physical energy, but they are also often quiet and at rest’ (p.58). These closely match two of McMullan’s (1978) ‘paradoxical personage’ statements used to describe creative individuals: ‘detached involvement’ and ‘relaxed yet attentive’ (p.267). Both pairs have considerable explanatory power with regard to the participants in this project. A further opposite identified by both Csikszentmihalyi (p.60) and McMullin (p.267) is that creative people demonstrate convergent and divergent thinking. This will be discussed in the next chapter.

Andriopoulos (2003) suggests that paradox also lies at the heart of the management of creativity. He says that ‘[i]nitiating and sustaining creativity in the workplace is a delicate and difficult process and often commercial pressures do not make it any easier’ (p.375). Andriopoulos proposes that success lies in acknowledging the interdependency of six tensions: support employees’ passions but achieve financial goals; challenge employees but build their confidence; encourage personal initiative but maintain a shared vision; encourage diversity but build cohesive workteams; learn from the past but seek new areas of knowledge; take incremental risks but break new ground. Andriopoulos’s advice seems relevant to learning environments too.

As well as action roles, Bolton and Thompson (2000) have produced a profile of entrepreneurs’ talents and temperaments. This profile identifies the talents as creativity, courage, focus, opportunity-spotting, team, networker, advantage orientation, resourcing. The temperament needs are competition, urgency, opportunity-taking, performance orientation, and responsibility; and the temperament drivers are ego drive,
mission, activator, and dedication (p.41). The characteristics listed match the kinds of personal attributes that might be attributed to the fourteen participants. It is interesting to note too that in a meta-analysis of the literature on creativity, Eysenck (1999) concludes that researchers generally emphasise seven broad qualities: autonomy, non-conformity, openness to stimulation, flexibility, tolerance of ambiguity, inner directedness, and ego strength. These qualities are embedded in Bolton and Thompson’s profile, but entrepreneurship demands more. Indeed, the entrepreneur’s commercialisation of innovation places practical business demands on the usefulness of the novelty that is produced by a creative person. What this seems to suggest is that a curriculum for entrepreneurs must indeed nurture creativity, but there are broader dispositions that also require attention. This matter will be discussed in Chapter Seven.

5.15 Ethnic and gender considerations

Baer and Kaufman (2006) provide a meta-analysis of the literature written in English on creativity, including articles published in the Journal of Creative Behavior and the Creativity Research Journal. All the issues they identify are covered in this chapter and the next with the exception of ethnic and gender differences. One cultural issue was introduced in an earlier section in this chapter, but ethnic considerations have not been part of this investigation simply because thirteen participants are Caucasian and one is a Jew but was born in New Zealand and was not raised as Jewish. As noted in Chapter Three, no Maori participated because none was recommended.

The participants are a mix of eight men and six women but no gender issues emerged in the conversations. The only discussion about gender came during the interview with Debbie Duis when an opportunity arose to ask about Kirkwood and Campbell-Hunt’s (2006) finding that men often feel ‘pulled’ towards entrepreneurship while women feel ‘pushed’ by the lack of opportunities within employment. Debbie’s response was: ‘No, I’m not like that. I’ve not been in a situation like that ever.’
5.16 Conclusion

Collins and Amabile (1999) note that ‘research has found that creative people are energized by challenging tasks, a sign of intrinsic motivation’ (p.300), and they argue that ‘the best way to help people to maximize their creative potential is to allow them to do something they love’ (p.305). This provides a compelling guide for a curriculum that aims to nurture entrepreneurial creativity. This chapter has indeed revealed that entrepreneurs are open to and require hard work that is fun, with challenges that are demanding and involve risk. Work that is motivating and challenging also needs to include opportunities for relaxedness and for the flow that leads to the creative production of things that are novel and useful. As well as needing to have their ego strength satisfied, creative entrepreneurs also value being engaged in creative teamwork. The ways that these various characteristics of entrepreneurial creativity can be drawn together to inform a curriculum design will be left for later chapters. For the moment, this chapter has established entrepreneurial creativity as a personal and social phenomenon. The next goes on to take a cognitive approach to understanding creativity.
CHAPTER 6: THE CREATIVITY OF ENTREPRENEURS – A COGNITIVE APPROACH

6.1 Introduction

This chapter takes a cognitive approach to understanding the creativity of entrepreneurs. The goal is ‘to understand the underlying mental representations, processes, and mechanisms that lead to creativity’ (Baer & Kaufman, 2006, p.19). It is argued that the intuitive work of the ‘undermind’ is often discounted yet is essential for creativity, and it is proposed that creativity is based on a dialogue between reason and intuition, and that feelings and emotions play significant roles. The concepts of divergent and convergent thinking are explained, and it is argued that exposure to diversity is important for stimulating the cognitive processes that lead to creativity. Finally, as a conclusion to this and the previous chapter, the characteristics of environments that support and reward creativity are suggested.

6.2 The intellect and the undermind

There is a considerable body of literature grappling with the nature of intelligence. Many writers argue that creativity requires a relationship between the intellect and other elements of intelligence, and that the latter are often under-utilised, ignored and misunderstood.

Claxton (1998) defines intelligence as ‘what enables an organism to pursue its goals and interests as successfully as possible in the whole intricate predicament in which it finds itself’ (p.16). This definition does not limit intelligence to consciousness. Indeed, Claxton states that the unconscious is more robust and resilient than conscious abilities, and that the ability to learn skills for everyday life is independent of intellectual or linguistic facility. He explains that in ‘know-how by osmosis,’ the ‘undermind’
gradually uncovers patterns distilled from the residue of hundreds of specific instances and events. Intuition is thus well suited to ‘shadowy, intricate or ill-defined’ situations (p.3), and Claxton suggests the undermind is ‘a guiding hand’ (p.67) that works quietly below and often ahead of conscious apprehension. Consistent with this, Nancy Beck sees intuition as ‘the ability to put things together in your head without even realising that you’ve done it,’ and Cam Calder adds that intuition includes ‘the collective memory which is the experience of the species over tens of thousands of years.’

Claxton (1998) argues that ‘[s]eeing through an existing, invisible assumption, which is often the key to creativity, requires a mind that is informed but not deformed; channelled but not rutted’ (p.72). His three processing speeds (fast, ‘d-mode’ and slow) were introduced in Chapter Five. He proposes that when deliberative (‘d-mode’) thinkers encounter difficulties, they are likely to seek more and more data, but, according to Claxton, ‘[s]omeone who cannot abide uncertainty is […] unable to provide the womb that creative intuition needs’ (p.75).

Udall (2001b) provides a model that explains the relationship between the conscious intellect and the undermind. He says that ‘creativity relies on a dialogue between the two internal processes of the mind – the intellect and the intuitive. […] Separately they reflect different complementary aspects of the human experience and together give a complete idea of the world’ (p.1). He says that because creativity cannot exist without the interplay between the polar opposites of the intellect and intuition, a 3D representation is required. To this end he makes use of the Möbius Ring, named after a German mathematician, which is constructed with a rectangular strip of paper, with one end given a half twist of 180 degrees and joined to the other end. The twist or flip sets up a living paradox in that the inside and outside become one and the same thing. Any point on the strip can be joined to any other point by a curve lying wholly on the strip and not crossing the bounding edge. The metaphoric potential of the ring lies in its ability to represent simultaneously two modes of thought which are traditionally separated, but in this instance are interconnected. The flip between intellect and
intuition enables the creator to transgress and allows new perspectives for solving problems. In Claxton’s terms, the creator moves seamlessly between the two, whereas the d-mode thinker avoids the flip. Indeed, Nancy Beck observes that:

People who have to do straight line thinking, they’re the ones I see never achieving any great goal at all because everything’s black and white and this is all about greys. [...] It’s like which is black and which is white? Well, there’s no difference between them. [...] It’s shadings of more rational versus more creative.

Mary Taylor similarly suggests that creativity involves ‘a bit of a balancing act between passion and the mind, the emotive side and the rational side.’

Claxton (1998) points out, however, that a limitation of ‘know-how by osmosis’ is that it is relatively inflexible and is not easily transferred across domains. More importantly, because it cannot be articulated, it is not able to be ‘taken apart, reflected upon and put together in novel ways when expertise breaks down or situations change’ (p.44). And because it is not discussed, it cannot be influenced by what others say. The risk is, therefore, that ‘fluent know-how […] will be employed mindlessly (p.44). From the opposite side, Claxton argues that while language liberates it also has ‘snares’:

D-mode creates a superordinate stratum of knowledge that transcends particular contexts, but is, by the same token, more abstract, and liable to become detached from the shifting layers of experience that originally underpinned it. [...] Once this detachment has taken place, know-how can develop pliably in response to new exigencies while knowledge is left unaltered, cast in stone. (p.46)

6.3 Rigidity and the edges

This is the problem of separated explicit and tacit knowledge, and that issue will be discussed further in Chapter Eight. Reber (1993) notes that it was not until the 1970s that it became apparent that people do not typically solve problems, make decisions or reach conclusions using the kinds of standard, conscious, and rational processes that had been assumed. He says that cognitive scientists came to recognise that there is a good deal of epistemic power in implicit systems, and that any sensible theory of mind has to include a rich, cognitive, unconscious processing system. Indeed, Claxton
(2000) points out that ‘only if people buy uncritically into a polarized view of the mind which a priori opposes reason and intuition, or reason and emotion, are they forced to take sides’ (p.34). Instead, Claxton suggests, we might more fruitfully ask ‘what are the kinds of performances for which, and situations in which, non-intellectual ways of knowing seem to be beneficial; and what is the functional relationship between the explicit and the implicit, in such settings? ’ (p.34). He also asks whether there are situations where certain types of intuition and certain kinds of analytical, articulate reason can work productively in tandem.

Mary Taylor tells a relevant story about her consultancy work for the New Zealand Pork Board. She explains that:

We have an issue related to sow stalls which is the size of the stall which the mother pig is kept in. We have the science that proves the area that has been allocated in the welfare code is adequate, but emotionally people can’t handle that especially if you are an animal rights’ person because you put yourself into that situation. […] For me it means it doesn’t matter what the science says, emotionally the consumer can’t wear that. They [the Board] go ‘But the science says,’ and I say ‘Forget the science.’ They say ‘But people are wrong,’ […] but the emotive response is actually stronger than the science. […] I can show the activist the science […] but the activist will say ‘Whatever you say might be right, but I can’t accept that the pig can stay in that situation, so I’m not buying your product.’

Mary’s conclusion provides an answer to Claxton’s questions. She suggests that:

Scientists also need to learn about emotional intelligence otherwise they will be producing product that people won’t buy. I can produce the ultimate pig for taste testing et cetera but, if its conditions of production are not acceptable, those become irrelevant. So, it’s finding out what are the triggers to purchase.

Mary’s story, thus, lends support to Claxton’s (2006) proposition that:

the Enlightenment view of the mind is in need of urgent moderation. Its lopsided adherence to explicit, deliberate, conscious reason as the acme of intelligence is flawed. […] It leads to schools and universities losing sight of wisdom in their pursuit of cleverness, or, worse, mere knowledgeability. […] It leads, in business, to an inability to wait and ponder, and to an epidemic of ‘premature articulation.’ […] It leads to minds that have no time for perplexity, and thus shoot their own creativity in the foot. (p.357)
Nancy Beck would add that:

Rigidity in thinking has its place for sure but most of what we do in life is not developed along lines of rigidity. [...] A blinkered perspective is going to limit a lot of what we do. [...] In an academic environment you have to have things functioning in a particular way, but surely it’s the edges where all the exciting work is actually occurring.

Gladwell (2005) notes that ‘there can be as much value in the blink of an eye as in months of rational analysis’ (p.17). He argues that ‘[s]nap judgements and rapid cognition take place behind a locked door [but] I don’t think we are very good at dealing with the fact of that locked door’ (p.51). He suggests this is because ‘[o]ur world requires that decisions be sourced and footnoted, and if we say how we feel, we must also be prepared to elaborate on why we feel that way’ (p.52). Keeson and Oliver (2002) go further and argue that the Platonic/Enlightenment legacy is ‘skepticism towards, if not rejection of, the significance and importance of the immediately apprehendable world to which our senses and neural meaning-making capacities are inextricably and ultimately connected’ (p.186). They lament that ‘[i]n our quest for certainty […] we have effectively “disenchanted” the world, banishing magic, mystery, and the sacred’ (p.187). Carden (2007), Barnett (2004) and Bauman (1997, 2000, 2005) argue, however, that we are already losing ‘our quest for certainty,’ and it thus seems that dealing with unknown futures requires imagination and whatever other resources might lie behind ‘that locked door.’

6.4 Entrepreneurs and intuition

Atkinson (2000) suggests that ‘intuition is an invitation to go further’ (p.54) that is often declined, but entrepreneurs seem willing to accept the call. Petrena Miller speculates that ‘we use only ten percent of our brain’ and adds ‘there’s truckloads in there that none of us tap into.’ Nancy Beck says that she and her scientist husband:

both tend to be very good at what we call leaps of faith, actually. Most people, you talk to, engineers let’s say. An engineer will go from the question A to the answer F on a logical sequence of A, B, C, D, E, F, okay. We both tend to go A, B, F. So we tend to be intuitive on some of these things and sometimes it works
and sometimes it doesn’t. But I think that’s a crucial part of our makeup that we both tend to ignore a lot of steps in between and if you ignore steps in between it means that you actually can ignore a lot of the constraints that might be in place, you know.

The point about the restrictions imposed by linear sequencing is most salient, and Mary Taylor makes the same point about business when she规格ulates that:

a real problem with the multi-nationals is that every box has to be ticked before it goes to the next stage, right, and that you can research the product to death and by the time you actually launch it the market’s moved on, and that’s why I think so many of the little companies, the private guys, the entrepreneurs if you like, they have the gut feeling and so let’s just get on with it, and then if it doesn’t work, well that’s been our market research if you like. And then if it does work, then you can take it to the next stage.

This ties together intuition, creativity, exploitation of opportunities and risk-taking. It is noteworthy, however, that Mary also dichotomises creativity and intuition when she says that ‘you can create anything, but inside you know if this is something you feel good about.’ Although Mary is demonstrably creative, when she articulates how her creativity works she seems to adopt the polarisation that is problematised by Claxton (2000).

John Alldred, however, is very clear about the connection between creativity and intuition:

I think good creative people are very intuitive. I think that good businesspeople are very intuitive. I think people who are not creative and aren’t very intuitive tend to spend a lot of time writing it down and filling out reports and justifying and trying to minimise risk and so on and so forth. I mean, I pretty much know when I come upon an idea whether it is going to work or not.

The connection John makes between people who are not creative and those who ‘write it down’ matches Gladwell’s (2005) point about explaining feelings (see above) and Claxton’s (2006) disapproval of the ‘urge to make them comprehensible – to domesticate, through words, events that have an uncomfortable whiff of wildness about them’ (p.2).
6.5 Feelings and emotions

Damasio (2000), a neurophysiologist, says that ‘by making feelings be the primitive of consciousness, we are obliged to inquire about the intimate nature of feeling’ (p.314). He states that ‘consciousness begins as a feeling, a special kind of feeling, to be sure, but a feeling nonetheless’ (p.312) and that ‘[c]reativity itself – the ability to generate new ideas and artifacts – requires more than consciousness can ever provide’ (p.315).

Mary Taylor had returned from Vietnam a week before my second interview with her. She explained that:

Everyone said ‘If you do a food tour of Vietnam we’ll come on it,’ and I went with a really positive attitude that this was going to be my next destination, but it didn’t do it for me. The food was fantastic, but all the other stuff that went around it was so not me. […] My feeling is that it wouldn’t work for me. […] It bugged me that I wanted it to work but I’d be going each night ‘Why didn’t I enjoy that?’ […] I did that emotional buy-in, and then it was analysing why. […] At night I’d be going ‘I didn’t get it today, it didn’t do it for me.’ […] Then once I’d worked out why, I went looking for reasons why it wasn’t working and I started to see things other people didn’t see.

Mary’s feelings and emotions contained conclusions that preceded her analysis, and this lends support to the argument of Nussbaum (2001), a philosopher, that ‘it feels like something to have an emotion’ (p.62) and that ‘[e]motions are not just the fuel that powers the psychological mechanism of a reasoning creature, they are parts, highly complex and messy parts, of this creature’s reasoning itself’ (p.3). Nussbaum describes the emotional roller-coaster she experienced when her mother died, and concludes that ‘emotions are forms of evaluative judgment that ascribe to certain things and persons outside a person’s own control great importance for the person’s own flourishing. Emotions are thus, in effect, acknowledgements of neediness and lack of self-sufficiency’ (p.22). She explains that emotions always involve appraisal or evaluation, and are therefore cognitive in the sense they are ‘concerned with receiving and processing information’ (p.23).
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Tracey Kirwan says that ‘sometimes I can be in a bit of a daze just daydreaming, watching, feeling, not thinking. There’s nothing in there [she points to her head], but there is.’ Nussbaum claims, indeed, that emotions can be defined by their thought content and the experience of an emotion usually also contains ‘rich and deep perceptions of the object, which is highly concrete and replete with detail’ (p.65). She points out that:

the experience [of grief] itself involves a storm of memories and concrete perceptions that swarm around the content, but add more than is present in it. The experience of emotion is, then, cognitively laden, or dense, in a way that a propositional-attitude view would not capture. (p.65)

She then concludes that what this means is that ‘the emotions typically have a connection to imagination, and to the concrete picturing of events in imagination, that differentiates them from other, more abstract judgmental states’ (p.65).

Nussbaum makes connections amongst emotions, the richness of the imagination, and propositional consciousness, although it is interesting to note that Policastro and Gardner (1999) propose a confluence model of creativity comprising imagination, a sense of domain relevance, plus ‘intrapersonal intelligence’ that ‘checks illusory and/or emotional interferences in the process of constructing novel but appropriate representation’ (p.217). The elements of creativity and their interrelationships are indeed contested throughout the literature, but what stands above these is unambiguous support for Claxton’s argument for a broadened understanding of intelligence and how it relates to creativity.

6.6 Emotional intelligence

Similar to Claxton (1997, 2000, 2006), Goleman (1996) argues that we have two minds, one that thinks and one that feels, and that these two fundamentally different ways of knowing interact to construct mental life. He says: ‘One, the rational mind, is the mode of comprehension we are typically conscious of [… b]ut alongside that there is another system of knowing: impulsive and powerful, if sometimes illogical – the
emotional mind’ (p.8). Goleman suggests that normally the two minds operate in harmony and he adds that by itself, ‘academic intelligence offers virtually no preparation for the turmoil – or opportunity – life’s vicissitudes bring’ (p.36). Indeed, when asked which of emotional or academic intelligence she would give priority for learning how to be a successful entrepreneur, Debbie Duis replies:

Emotional intelligence, because if you can’t hang in there when people are just throwing muck in your face all the time and saying you will never do it, and they put obstacles in your way, they’ll even go so far as to try and cut you off from contacts, if you can’t hang in there and just keep going when the gale force is at you, you won’t grow, you won’t learn anything, you will never survive.

Cam Calder says that emotional intelligence is ‘huge’ in ‘old-time trade qualifications like dentistry and medicine because so much of it is dealing with patients. It’s all dealing with patients after you get through the pre-clinical study, then invariably you are learning the social skills, [...] your emotional intelligence is being moulded by that.’ Cam draws together emotional intelligence and social skill, and, interestingly, Goleman (2006) has recently moved ‘beyond a one-person psychology – those capacities an individual has within – to a two-person psychology: what transpires as we connect’ (p.5). Goleman explains that ‘social intelligence’ concerns ‘what we sense about others […] and what we do with that awareness’ (p.84), and he argues that this has implications for business and for education.

Gardner (1993) proposed seven separate human intelligences: linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial, interpersonal, and intrapersonal. Six years later, Gardner (1999) evaluated three new candidates and decided to admit naturalist intelligence, dismiss spiritual intelligence, and half admit existential intelligence, thereby conceding ‘8½ intelligences’ (p.66). Gardner argues that the goal of education should be comprehension, rather than the acquisition of content. He sees the development of multiple intelligences as the means to that end. Building on Gardner’s work, Martin (2001) notes that cave dwellers froze on beds of coal and argues that the theory of multiple intelligences provides an opportunity for
organisations to excavate and work the wealth of knowledge, skills, perspectives and experience buried in their staff.

Gardner (1999) does not, however, recognise an ‘emotional intelligence.’ He says that ‘problems arise when we conflate emotional intelligence with a certain recommended pattern of behaviour – a temptation to which David Goleman sometime succumbs in his otherwise admirable Emotional Intelligence’ (p.206). Goleman (1996) explains, however, that

Gardner and those who work with him have not pursued in great detail the role of feeling in these intelligences, focusing more on cognitions about feeling. […] It leaves yet to be plumbed both the sense in which there is intelligence in the emotions and the sense in which intelligence can be brought to emotions. (p.40)

This position seems consistent with both Nussbaum and Claxton.

For the purposes of this investigation, it does not matter whether or not the emotions constitute a separate intelligence. What does matter is that emotions, feelings and intuition are part of intelligence generally and have a role to play in human creativity. All the writers discussed above make it clear that there are elements of intelligence that are marginalised, and it seems that a failure to integrate these resources inevitably means that university education fails to address what Barnett (2002) calls ‘[t]he epistemological gap between formal knowing and acting [that] can only be bridged, if at all, through taking the plunge, through personal commitment to and in presenting situations’ (p.157).

6.7 Generative and exploratory processes

Many writers refer to the classic formulation of scientific creativity as a process that passes through four phases – preparation, incubation, illumination, and verification, and many also associate this with original work by Wallas that was published in 1926 (Claxton, 1998; Nickerson, 1999; Runco & Sakamoto, 1999; Gruber & Wallace, 1999 Piirto, 2004). Claxton (1998) notes that in this model, d-mode thinking and articulation
are central to the preparation and verification phases. He adds that in the incubation and illumination phases, ‘thinking in words can impede non-verbal, more intuitive or imaginative kinds of cognition’ (p.153).

Most writers, however, now seem to bypass the four phase model and focus instead on divergent and convergent thinking. Indeed, Baer and Kaufman (2006) note that since Guilford’s 1950 landmark presidential speech to the American Psychological Association emphasising the importance of ‘divergent production,’ ‘[c]reativity has come to mean divergent thinking’ (p.13). It is noteworthy that Baronet (2003) reports that divergent thinking is more evident in entrepreneurs than in small business owners who in turn show higher levels than corporate managers. However, while Vincent, Decker and Mumford (2002) found that ‘divergent thinking exerted unique effects on creative problem solving that could not be attributed to intelligence or expertise’ (p.163), they report that intelligence and expertise also made a contribution. Indeed, Cropley (2006) argues ‘in praise of convergent thinking’ and explains that ‘knowledge is of particular importance: It is a source of ideas, suggests pathways to solutions, and provides criteria of effectiveness and novelty’ (p.391). He warns that ‘[i]n practical situations, divergent thinking without convergent thinking can cause a variety of problems, including reckless change’ (p.391).

Mary Taylor describes brainstorming that includes the use of divergent and convergent thinking. She says she might:

get six people around the table to brainstorm the issue such as the price of wheat and grain is going up so all protein products will be going up. ‘What are the things we can do?’ Through the brainstorm we work out how to promote the benefits of the product and take it away from price, […] and once we’ve settled on an angle, from there we next deal with the promotional format, so we’d diverge again.

Tracey Kirwan says she, similarly, might have ‘heaps of ideas all spread out,’ and she then asks ‘how can I zoom that in to make it happen?’
Recognising the value of both divergent and convergent thinking now seems to be the standard position. Indeed, Sternberg and Lubart (1999) suggest that cognitive approaches to creativity are ‘perhaps prototypically exemplified’ (p.7) by the ‘Geneplore’ model first proposed in 1992 by Smith, Ward and Finke. Later, Ward, Smith and Finke (1999) explain that in this model, the creative person ‘would alternate between generative and exploratory processes, refining the structures according to the demands or constraints of the particular task’ (p.191). Writing specifically about *Cognition, creativity and entrepreneurship*, Ward (2004) proposes that ideas initially generated may result in ‘preinventive forms’ that can lead to a creative product as they are ‘explored, modified, transformed, extended, or even rejected’ (p.179). He suggests, too, that initial combinations might create the problem that subsequent combinations go on to solve. What is important here is the recognition that creativity requires divergence and convergence, and a dialogic interaction between the two. A simple four-step model defies the complexity of the creative process.

There is an alternative view. Simonton (1995, 2005) uses the Darwinian process to argue that creativity begins with the chance permutation of mental elements. Most of these are too unstable to be useful, but occasionally a specific combination of elements coalesces to form a cohesive whole. Simonton (1995) acknowledges that this ‘raises a lot of eyebrows’ (see, for example, Dasgupta, 2005), but what seems more important than the relationship between blind chance and intuitive insight is Simonton’s principal argument that ‘[m]any of us would like to believe that […] an individual has more conscious and deliberate control over the thoughts that produce breakthroughs’ (p.470). The research refutes such a concept of control. Indeed, recent developments in complexity and chaos theories abandon notions of linearity and recognise instead unstable, aperiodic behaviour, with continuous feedback whereby outputs affect inputs. Nancy Beck supports this by drawing a distinction between experimenting and proving the findings. She says that:

Science is supposed to be about rational, logical, step by-step thinking, right? It’s true in terms of proving your experiments, but to achieve that concept of the theory of what you’re trying to prove to begin with, that’s an intuitive leap. […]
I can’t see why you can’t have the illumination and say ‘Shit what a great idea. How do I get there?’

Udall’s (2001b) use of the Möbius Ring is thus helpful in the way it provides a means for seeing creativity as a dynamic process rather than a sequence of steps.

6.8 Visualising

Ward and others (1999) propose that novelty is produced by generating variability through building new structures and exploring them to discern effective ones. What is not clear is how material for exploration is supplied during the generative process. Sanders (1998) suggests that this happens through visualising, which is ‘the ability to create and interact with images in one's mind’ (p.87). He argues that humans are sentient beings whose primary sense is vision, and the brain is stimulated more by visual cues than by any other sense. He acknowledges in particular the significance of Mandelbrot’s concept of fractal geometry and the way it provides ‘an order, which in the past we have not seen, because in a sense we didn’t know how to see it. It doesn’t fit the classical linear definition of order’ (p.102).

Robert Franich says that when he is generating ideas, ‘I actually think in pictures. Numbers and words don’t kind of appear when I’m doing my thinking. It’s all in pictures. I see them. That’s why I look around. I can see it’s there.’ He goes on to explain the exploratory process in which ‘I can see the end product and then I have to kind of backtrack and then put it into the practical ways of actually getting to what I see. It’s simple re-vision, but I actually do see it but I see it as actually real there.’

Glen Slater says that entrepreneurs must have vision, and his insight ‘usually happens about two o’clock in the morning and so there’s always a pen and paper by my bed so I can roll over and start writing.’ The insight starts out as an image that later ‘might take me ten minutes’ worth of talking in just one image or in a model, so I do think really, really carefully about how do I describe it to them and then they can give it back to me
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and we can roll it back and forth.’ As with Robert, Glen’s visualising generates material for later exploration.

Visualising is also a powerful process in the creativity of the two nascent entrepreneurs. Tracey Kirwan says ‘I’m a very visual person. I have to draw mindmaps and I have to write it all down and I see it as plain as day, black and white, from start to go.’ She adds excitedly that:

a good idea […] adapts into the picture and I change my side, bring it in and usually it is a moving picture because it doesn’t stop. It’s a moving picture […] and I guess that’s also what tires me out, because that picture’s always there. It’s not something I will just pick up the paper and go yeah, I forgot that. It’s in there all the time and moving.

Debbie Duis sees herself inside what she visualises. She says ‘I can visualise another place and I can be in that place. I can go to that place. It’s sort of hard to explain because it’s so much a part of your whole being really. It’s not a conscious thing I always do.’ Debbie says that when, for example, she is undertaking landscape design work:

I sit in that place and I can completely wipe off the image that’s there. It can be just blank. It doesn’t exist, and I can put a completely different landscape over it in a mature form and I can tell you exactly, describe it in quite detail right down to leaf texture what that’s going to look like in twenty years’ time and when I’m designing something, I do it as I kind of go along. I’ve got a sense.

Debbie connects visualising with intuition, and Sanders (1998) explains that for a visual thinker, ‘the ability to see and interact with a problem or question is the key to insight. Visual images activate the deeper levels of awareness and engage the unconscious pre-intellectual mind’ (p.94). He laments that ‘[w]e don’t know how to see or visualize the multiple complexities […] that are creating the dynamics of the real world in which our decisions are being made’ (p.85). A number of entrepreneurs identified visual thinking as an important part of their creativity. This is significant because visualising is a dynamic, liberating process and, as John Alldred insists, ‘a love of thinking outside the square […] is you know, three quarters of being an entrepreneur.’
6.9 Gestalts

Visualising seems to provide a language for Udall’s (2001b) dialogue between the intellect and the intuitive, and the product of this is the creation of something that is novel and effective. Wholeness is also an essential characteristic of the outcome of the dialogue, and a number of writers on creativity draw on Gestalt psychology to explain this. Cropley (2000), for example, points out that:

the essence of thinking lies in the building of ‘gestalts,’ well-rounded, closed ‘wholes’ that are formed by combining ideas. […] Novelty is produced when instead of retaining an existing gestalt new experience is used to form a novel one that is surprising or unexpected. This is referred to as ‘productive’ thinking. (p.33)

Consistent with Sanders’s (1998) interest in ‘visualizing,’ Mayer (1995) says that ‘insight’ is the name used for the process by which a problem-solver moves from a state of not knowing to how to solve a problem. According to Mayer, Gestalt provides five interrelated views of insight: completing a schema by filling a gap in a complex structure; reorganising visual information to see the problem in a new way; reformulating the problem to generate new insights; removing mental blocks; and finding a problem analogue (pp.8-25).

It was noted earlier that both Glen Slater and Tony Falkenstein discussed the way good ideas can occur during sleep. Michalko (2001) suggests that this can happen because fixation fades during sleep, ‘allowing our subconscious minds to freely create new possibilities’ (p.110). Tony Falkenstein also suggests that ‘other people see something for what is there. It’s more black and white. I’m merely looking at something and almost inwardly inside me, I just relate it to something else.’ By way of illustration, he tells the story about an ‘epiphany’ that involved a former employee who ‘sucked me in’ to attending a multi-level marketing event, and an entirely separate meeting with the chief executive of a major pizza company in Australia. Tony says that ‘I came back from that and that’s when I put those two together’ and realised that the Just Water incursion into Australia wouldn’t enable him to dominate the market because it had
been executed traditionally. He proceeded from the epiphany that connected two separate events to develop an entirely different business model that is ‘different from anyone else in the world’ so that now ‘we’re giving away some revenue to get high growth.’ He says that if successful in Australia, ‘we then can take that model to the UK.’

Smith (1995) explains that people can fixate on unwarranted assumptions about a problem, that fixation prevents insight, and that insight will occur quickly if the fixation is removed by facilitating escape from the mental ruts that block insight. He says that if the initial context in which a problem is attempted leads to fixation, then an incubation interval may allow time for the mental context to change to one that will yield a solution. He argues that ‘time away from a fixated problem will encourage insight all the more if you move away from fixated contexts’ (p.249). When Tracey Kirwan experiences a block she ‘gets people involved to see what I can’t see.’ Nancy Beck suggests yet another sort of ‘time away’ when she suggests that:

many creative things are associated with alcohol or drug use because it tends to unhinge that rational just a little bit and you can start to think a bit more fuzzy thinking and you don’t have to be quite so rigid. [...] Drugs or alcohol can take the edge off the rational thought and say open up our minds a wee bit and what can we achieve if we do this, just go on the edge. And I’m not saying that drugs and alcohol are good things to do that with, but I think that in so much of our society we are taught to be rigid in terms of how we look at things, and getting a bit relaxed along the way so that you can let that creative part of your mind flow out a bit more instead of suppressing it.

Differently again, Cam Calder suggests that ‘fixation can be overcome if we are connected and are aware of what is going on elsewhere,’ and this echoes Carden’s (2007) argument for creativity, connectivity and flexibility. Pete Rive similarly believes that:

creativity comes from having diverse influences, so trying to gain as much experience from life as possible, keep your eyes and ears open and what surprises people is when you take something from one totally unrelated area and put it with something else and I think that’s kind of where the nexus of originality comes.
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Pete Rive adds, however, that ‘attitudes towards creativity and originality are kind of a little off’ because ‘the attitude of corporations and media has become such that originality is supposed to be born absolutely.’ He asks ‘where the hell did that come from?’ Pete has a keen interest in copyright law and ‘the creative commons’ because he is committed to the notion of ‘mash-ups where you take your sample sound from one area and you mix it with another sound and the same with pictures.’ ‘Mash-ups’ thrive on the resources available through, for example, the Internet and other media, but Pete explains ‘there’s a huge challenge at the moment because a lot of those areas are ill-defined under copyright law.’ He makes several references to the work of Lessig, in particular The creative commons in which the writer (2001) insists that ‘always and everywhere, free resources have been crucial to innovation and creativity; that without them, creativity is crippled’ (p.14).

The copyright problem is interesting and serious but only tangentially relevant to this project. What is more important is that the issue highlights the way creative people crave access to resources that they can combine with others to create new things. Indeed, the notion of gestalt, Tony’s epiphany and Pete’s ‘mash-ups’ all support Boden’s (2004) argument that creativity happens though novel combinations, exploring conceptual spaces, and transforming the space. Indeed, the entrepreneur, the student and the academic all need to be engaged in a continual creative process of building fresh gestalts to address new gaps, and it is interesting that this is not unlike the hermeneutic circle that was discussed in Chapter Three. Indeed, Kvale’s third canon of hermeneutics (1996) involves the ‘interpretation of meaning ending when one has reached a “good gestalt”, an inner unity [...] free of logical contradiction’ (p.48).

6.10 Diversity

Csikszentmihaly and Sawyer (1995) argue: ‘Creative insights typically involve the integration of perspectives from more than one domain’ (p.359). Entrepreneurs provide fertile ground for this because they have interests in, at least, business and a product
domain. Chia (1996) highlights the importance of working across domains in his advocacy for ‘intellectual entrepreneurship’ as ‘a conscious and deliberate attempt […] to explore the world of ideas boldly and without undue inhibitions of disciplinary restraints’ (p.411). He explains that:

> While the traditional scientific mentality emphasizes the simplification of the complex multiplicity of our experiences into manageable ‘principles,’ ‘axioms,’ etc., literature and the arts have persistently emphasized the task of complexifying our thinking processes and hence sensitized us to the subtle nuances of contemporary modern life. It is this heightened ‘aesthetic consciousness’ that is crucial for the entrepreneurial imagination to flourish. (p.412)

A number of participants identified reading and travel as major sources of their creativity. Cam Calder ‘love[s] reading omnivorously and [when] I do so, one [is] obviously exposed to lots of ideas. I also love travelling and when you travel you’re exposed to lots of influences.’ Petrena Miller also reads and says ‘I think when you travel it just stimulates different parts of your brain and you come back fully charged.’ Piirto (2004) suggests that travel can facilitate the creative process ‘because the novelty of sensory experience is inspirational and a sense of naiveté is easy to maintain’ (p.59). Taking a different approach, John Alldred suggests that ‘dealing with different cultures you have to be creative because they are not going to accept the old Kiwi that’s how it is.’ Robert Franich reads ‘all sorts of things, biographies, murder stories. They’re fun because you can try to work out what’s going on and understand before you get to the end of the book if you can.’ He adds that reading is important because ‘I just collect huge amounts of information.’

This gathering of information from diverse sources seems to be important because when asked how she gets from C to F, Nancy Beck replies ‘I would assume it’s subconscious, just interactions occurring of the mind working away at bits and pieces of data and at some point just saying “Hey these little pieces here fit together,” and they make a picture which is pointing in that direction.’
When asked a similar question about where ideas come from, John Alldred responds ‘I’m buggered if I know,’ but he goes on to say ‘I think it comes back to all of those life experiences that give you a whole bank of knowledge which allows you almost subconsciously to identify the important bits when you get to a problem and you will remember things you’ve never thought about for years and years and years.’

Pete Rive discusses the notion of diversity by referring to Johansson’s (2006) book *The Medici effect*. Johansson’s argument starts in fifteenth century Renaissance Italy where different fields 19 met at a place he calls the ‘intersection,’ and he goes on to propose that stepping into the intersection is ‘the best place to generate and realize extraordinary ideas’ (p.4). Johansson explains that the mind ‘follows the simplest path – a previous association’ (p.39) and that ‘associative barriers are responsible for inhibiting creativity’ (p.40). His conclusion is, therefore, that ‘a person with low associative barriers would find his chains of association taking irregular paths outside a specialised field, rather than predictable ones inside a field’ (p.40). Observations by the participants point to the possibility that reading and travel are two pursuits that have a ‘Medici effect.’ This will be picked up again in later chapters.

The notion of diversity brings together entrepreneurship, the economy, creativity, complexity, the imagination, and the arts. Diversity as a critical cultural quality is highlighted in Florida’s (2005) argument that competition today revolves around a ‘nation’s ability to mobilize, attract, and retain human creative talent’ (p.3) and that ‘[d]iversity is not merely enjoyable; it is essential’ (p.35). He explains that just as diversity is important to healthy ecological systems, so too is tolerance towards difference important to a healthy economic system. Diversity as a desirable characteristic of individual experience is similarly underscored in Hamel’s (2000) argument that a would-be revolutionary needs to ‘be a novelty addict’ (p.114) because ‘[f]amiliarity is the enemy. It slowly turns everything into wallpaper. Travel makes you a stranger. It puts you at odds. It robs you of your prejudices’ (p.135).

19 In Csikszentmihaly’s model, which has been used in several places in this thesis, these ‘fields’ would be named ‘domains.’
It is noteworthy, too, that the significance of diversity is emphasised in Barnett and Coate’s (2005) argument that in a curriculum of engagement the student is given curriculum space instead of being boxed in: ‘A curriculum has to become like so many ultra-modern buildings, full of light and open spaces, different textures, shapes and relationships and arrangements for serendipitous encounters’ (p.129).

6.11 Conclusion: confluence theories

At the start of the previous chapter it was stated that, unlike most studies, this project aims to investigate creativity as both a cognitive and a social personality experience. It is essential, therefore, to draw together the various elements of creativity that many researchers have investigated in isolation. Baer and Kaufman (2006) note that ‘a relatively new area of creativity theory is that of confluence theories’ (p.20). Three such theories have already been mentioned: Amabile’s (1983) consideration of intrinsic motivation, domain-relevant knowledge and abilities, and creativity-relevant skill; Policastro and Gardner’s (1999) mix of imagination, domain relevance, and ‘intrapersonal intelligence’; and Csikszentmihalyi’s (1996) system of individual, domain and field.


creative people are the ones who are prepared to ‘buy low and sell high’ in the realm of ideas. Buying low means pursuing ideas that are unknown or out of favor but that have growth potential. Often when these ideas are first presented, they experience resistance. The creative individual persists in the face of this resistance and eventually sells high, moving on to the next new or unpopular idea. (p.10)

The investment theory also states that creativity requires a ‘confluence’ of six resources: intellectual abilities, knowledge, styles of thinking, personality, motivation, and environment (p.11). This theory is widely acknowledged (including Csikszentmihalyi, 1999; Williams & Yang, 1999; Johansson, 2006; Baer & Kaufman, 2006). Piirto (2004) reports that in an interview in 2002, Sternberg said that ‘[a]fter
working on the investment theory, I realized it did not tell the whole story’ (p.22), but
his subsequent work on a ‘propulsion theory’ that delineates different types of creative
contribution is not helpful for this project.

The investment theory relates metaphorically and directly to the work of entrepreneurs.
Several of the listed resources are uncontroversial: knowledge, but not too much; a
‘legislative’ style of ‘thinking in novel ways of one’s own choosing’ (p.11);
personality; and intrinsic motivation. There are, however, two limitations: one
cognitive and one social.

First, Sternberg and Lubart’s (1999) explanation of ‘intellectual abilities’ is, not
surprisingly, identical to Sternberg and O’Hara’s (1999) definition of ‘intelligence’
which is derived from an analysis of different writers’ views of creativity as a subset of
intelligence, intelligence as a subset of creativity, the two as overlapping sets, as
coincident and as disjoint sets. Sternberg and O’Hara conclude that:

At the very least, creativity seems to involve synthetic, analytical, and practical
aspects of intelligence: synthetic to come up with ideas, analytical to evaluate the
quality of those ideas, and practical to formulate a way of effectively
communicating those ideas and of persuading people of their value. (p.269)

The notions of synthetic and analytical intelligence, as described, do not seem to
capture adequately the creative richness in the dialogues between conscious and
unconscious processes, the intellect and intuition, and generative and exploratory
processes, nor the ways that visualising and the chaotic formation and collapse of
gestalts, and the building of ever newer gestalts, are central to the creative process.

Secondly, Sternberg and Lubart (1999) propose almost tautologically that ‘one needs
an environment that is supportive and rewarding of creative ideas’ (p.11), but while
they identify the purpose of such a place, its characteristics are not examined. This
project can, however, contribute a confluential answer because it has emerged that a
suitable setting will most likely have structure but will also enable chaos; will present
opportunities for experiencing diversity; will stimulate unconscious and conscious
mental processes; will provide scope for hard work that is fun and involves risk, and space for relaxation and for flow; and will enable both individual and purposeful teamwork. If these are indeed the characteristics of environments that are supportive and rewarding of creative ideas, it seems likely they will also be suitable for nurturing creativity. This possibility will be picked up again in Chapter Ten.

This chapter and its predecessor have established the importance of creativity for entrepreneurial endeavour and have examined why and how people are creative. It is important to note, however, that while entrepreneurs are creative and innovative, they also commercialise innovation and therefore being only creative is not enough. Bolton and Thompson (2000) propose that entrepreneurs ‘have control of the business’ and ‘create capital’ (p.22). Chapter Seven, therefore, examines what, in addition to creativity, participants believe to be the core requirements for business success.
CHAPTER 7: BUSINESS SUCCESS

7.1 Introduction

Creativity alone cannot deliver business success, therefore one of the key questions asked of participants was: ‘Why are you a successful entrepreneur?’ (Those who are not entrepreneurs were asked what they considered to be the criteria for success.) The picture that emerges from participants’ stories suggests that while knowledge is important, formally acquired business knowledge is discounted in favour of more intuitive approaches to management, along with business networking to secure advice on specific matters as and when needs arise. Participants also acknowledged that communicating well with their teams and customers is essential. Complementing relationships with others, high value was placed on personal attributes. One set of personal characteristics was variously described as resilience, persistence, toughness and tenacity. Another set focused on the need for being enthusiastic and fresh about a dream or cause, and on the importance of simplicity of focus. It is concluded that what the various elements of business success seem to have in common is that they all concern ways of being resourceful.

As well as discussing participants’ ideas about business success, this chapter also looks at some of the popular business literature, and several recommended book lists are examined. It is concluded that much of the literature is concerned with contexts remote from the lives of New Zealand entrepreneurs, that relevance is a matter of personal taste, and that much seems to be more entertaining and provocative than directly useful.
7.2 Literature

University and mainstream bookshops are crowded with publications on business and success, and various media periodically provide book reviews and recommended reading lists. Three such lists are discussed later in this chapter. In Chapter Three it was noted, however, that as research-traveller I passed through Business many times but did not dwell there as I was more interested to hear about this place through the voices of the fourteen participants. The issues are not only formidability and authenticity, but also that some of the literature is of little value given the focus of this project and much is of questionable quality. Indeed Mintzberg (2004) claims: ‘There are plenty of books that provide soft looks at the hard practice of managing […] but it is too important to be left to most of what appears on the shelves of bookstores. Easy formulas and quick fixes are the problems in management today, not the solutions’ (p.1).

A good and recent example of the ‘quick fix’ literature is Lupan’s (2007) book Why entrepreneurs should eat bananas. Lupan claims to offer ‘101 inspirational ideas for growing your business’ but these are in the main obvious and banal. The meaning of the title is not revealed until the 101st piece of advice:

Experts agree that as a quick source of carbohydrate fuel, bananas are better for you than any other fruit. […] The essential qualities of a banana should be synonymous with those of a successful business builder: they are good for you, and they are value for money. OK, so this is a pretty weak link with the contents of this book, but if the title played even a small part of your decision to pick up or buy this book, then it was an idea that worked. (p.150)

Marginally better is Harari’s (2007) book Break from the pack: How to compete in a copycat economy. The final section offers a ‘recovery program’ with advice about how to ‘take a risk on risk’ (p.256), ‘believe that customers are more important than investors and employees’ (p.261), ‘unleash talented maniacs’ (p.263), and ‘team up aliens’ (p.273). However, the advice is far more ordinary than the catchy titles suggest, and, like Lupan (2007), the overall approach is reductionist as it condenses the complexity of business into slogans and lists.
The problem may be more serious than superficiality. Furusten (1999) examines popular management books written in Swedish and in English and finds a tendency towards standardisation. He argues that the content of texts tends to be ideological and that authors used:

personal experiences as empirical data and supported their arguments with metaphors, platitudes, myths and conventional wisdom. Even though other studies may be quoted, they are mainly used as arguments to support their conclusions. This means that no new ground is broken; instead the authors are likely to travel mainstream on paths well beaten by others. (p.131)

Furusten goes on to propose that ‘tendencies to standardisation may be of considerable importance in processes of uncertainty-avoidance’ (p.141). He suggests that when difficulties arise in a business, it is likely that ‘someone will search for knowledge of how to solve the problems’ and ‘will probably turn to prominent voices in the popular discourse’ where they are ‘likely to encounter uniform suggestions, which will reduce uncertainty’ (p.141).

Not surprisingly, therefore, Drucker (1985) challenges the usefulness of the popular literature by noting that enterprises in identical lines of business will define their work in quite different ways, therefore ‘[t]he key activities are not to be found in books. They emerge from analysis of the specific enterprise’ (p.199). Christensen and Raynor (2003) adopt a similar position in their acclaimed book *The innovator’s solution* where they observe that executives often:

discount the value of management theory because it is associated with the word *theoretical*, which connotes *impractical* […] but managers are in reality voracious consumers of theory. […] The problem is that managers are rarely aware of the theories they are using – and they often use the wrong theories for the situation they are in. It is the absence of conscious, trustworthy theories of cause and effect that makes success in building new businesses seem random. (p.12)

On this basis, Christensen and Raynor propose that managers can be helped to build solid theory and create growth by analysing the forces that act upon individuals involved in building a specific business. They model ways to identify the key decisions to be made and work through a three-step process that enables obstacles to be
overcome. The process starts with a description of the phenomenon to be understood; ‘researchers can then begin the second stage, which is to classify the phenomenon into categories’; and finally ‘researchers articulate a theory that asserts what causes the phenomenon to occur, and why’ (p.13). The writers then apply their model to a number of key issues such as: ‘Who are the best customers for our products?’ (p.101), and ‘Getting the scope of the business right’ (p.125). However, while the work is robust and seems useful, it is also arguable that the approach makes science out of something that could be handled in a much less ordered way.

Indeed, Mintzberg (2004) argues that effective management is a mix of science, art and craft – see also Chapter Two. He explains that:

Art encourages creativity, resulting in ‘insights’ and ‘vision.’ Science provides order, through systematic analyses and assessments. And craft makes connections, building on tangible experiences. Accordingly, art tends to be inductive, from specific events to the broad overview; science deductive, from general concepts to specified applications; and craft is iterative, back and forth between the specific and the general. This is expressed most evidently in how each approaches strategy: as a process of visioning in art, planning in science, venturing in craft. (p.92)

The interviews with the participants in this project suggest that the business work of entrepreneurs is largely a mix of craft and art, with a lesser role played by science. It is based on personal capabilities and has nothing to do with quick fix formulae.

7.3 Knowledge

*The portable MBA in entrepreneurship* (Bygrave, 1996) was written ‘for would-be entrepreneurs, people who have started small firms and want to improve their entrepreneurial skills, and others who are interested in entrepreneurship’ (p.xv) and it includes chapters on topics such as Entry Strategies, Business Planning, Venture Capital, Financial Projections, Debt, Legal and Tax Issues, and Intellectual Property. Addressing the stated purpose of the book, Kirby (2002) points out, however, that while principles and practices are important, ‘knowing about them will not, *per se,*
equip the student “to meet the challenges of the entrepreneurial business climate of the 1990s and beyond”’ (p.12). The same might be said of Frederick, Kuratko and Hodgett’s (2006) text *Entrepreneurship: Theory, process and practice* which was written for a vast audience of ‘nascent entrepreneurs, founders of new ventures, owners of growth businesses, policymakers, social and governmental entrepreneurs and corporate leaders’ (p.xiii). Tracey Kirwan, herself a ‘nascent entrepreneur,’ says the book is ‘mechanical’ and ‘takes away the feeling, takes away the edge, the sexiness – it takes away everything.’

Bolton and Thompson (2000) report on research that found that relatively few entrepreneurs have ever taken business courses before they form their companies (p.20) and they explain that entrepreneurs instead seek ‘focused knowledge’ that is ‘prioritised’ and ‘relevant’ (p.12). It is not surprising, therefore, that Brigid Hardy says ‘a lot of people regard [entrepreneurship] as “Oh, that big area where you have to like just make stuff up.”’ Indeed, Robert Franich speculates that ‘scientists keep hammering away at the science until you’ve got data that is 95 percent confidence level or greater’ whereas ‘people in the business world will operate on the eighty-twenty rule, or worse, fifty-fifty, the coin.’ This is exemplified in several participants’ attitudes towards business planning and market research. Petrena Miller says business plans are ‘really long-winded and drawn-out’ and suggests ‘you could summarise it in bullet points.’ Cam Calder confesses ‘I never ever created a business plan ever,’ and John Alldred says that ‘a ten year plan I think shouldn’t be more than about four A4 pages’ and it ‘should take you no more than about two weeks work at most to write.’ Tony Falkenstein insists ‘I do not believe in any market research for a new product, that you just can’t, I mean there’s a lot of people didn’t know they wanted it until I told them and I said “Hey this is what you need,”’ and they said “Oh yeah.”’ He explains that ‘over the last hundred years, every new beverage concept, not one has come from a big company. They’ve all come from entrepreneurs.’ He adds that it’s ‘typical of a big company to then buy them out once they know it’s worked.’ This might not be surprising because, as noted in the previous chapter, Mary Taylor argues that multi-
nationals ‘can research the product to death’ and ‘by the time you actually launch it the market’s moved on.’

It seems that formally acquired and applied knowledge is not a significant requirement for business success. Indeed Tony Falkenstein ‘did a BCom at University and I didn’t really get too much from that’ and John Alldred ‘hated’ doing his BCom. Debbie Duis dropped out of the Master of Business Innovation and Entrepreneurship while Robert Franich graduated yet still does not have his own business. Pete Rive says that he picked up ‘a certain business sense through osmosis with your family,’ but he also took some business courses through the Open Polytechnic. He recalls courses on accounting and law and one other paper, but he cannot remember the discipline covered by the third. About the qualification itself he says ‘I should have finished it but you know, you get too busy.’ Pete has been ‘stung two, three times maybe’ and has now informally acquired ‘enough about contract law to sort of protect ourselves with what that is.’ For Pete having formal knowledge about business practice matters is much less important than being ‘well informed about the area that you’re interested in and the bigger picture, so you have to […] be sufficiently aware of shifts in fashion and technology.’

Nancy Beck has ‘no training whatsoever in business.’ She and her husband have:

   talked quite a few times that one of us at least should take some kind of a business course because I am sure there are heaps of things that we’ve recreated unnecessarily but at the same time that doesn’t mean that recreating things on your own doesn’t mean it’s good or bad. It just means you may be wasting time but it may mean that you are creating things the way you need it, not the way someone else has figured out it needs to be done.

Nancy’s creativity applies, therefore, not only to her work as a scientist but to her business practice as well. She argues that her lack of business knowledge poses no risk because she has ‘a very good accountant, a chartered accountant, who helps us quite a bit too so we bounce a lot of things off him.’
7.4 Business networking

Davidsson and Honig (2003) investigated why many people who start a new business fail to achieve their goal while others are successful. They found that ‘being a member of a business network had a statistically positive effect’ (p.301). Indeed, networking seems to be used widely to access the knowledge required as the need arises. Glen Slater has a Master of International Business but considers himself ‘light’ on business skills, so ‘I have to just be brave enough to know what I don’t know and go out and ask somebody.’ Like Glen, Daniel Batten says:

I think you have to be incredibly self-aware. And when I say that, I mean aware of your weaknesses primarily and your strengths. So honour your strengths and really push them, but also know your weaknesses and be prepared to listen and do a whole lot of listening and be very humble because there’s a lot of people out there who actually really want to help, who get a big kick out of helping.

He adds that ‘one of the things I do now is I actually do mentor other young entrepreneurs.’

Petrenà also affirms that the key processes are ‘learning on the run,’ ‘listening, and ‘knowing the right questions to ask.’ She adds that the internet is ‘fantastic,’ and it is interesting to note Weinberg’s (2002) observation that ‘the Web is a hodgepodge of ideas that violates every rule of epistemological etiquette’ (p.139) but it also ‘returns knowledge to its roots’ as conversations that can take many different forms (p.140).

Less self-assured than many other participants, Brigid Hardy says ‘I’m constantly sort of struggling […] to make myself very pragmatic and just, right, how shall we sell this very simply and how, you know, all that sort of stuff,’ but she adds that ‘now I’ve got this team with me who are very much into “No Brigid you need to, otherwise you won’t be special and unique.”’ She explains that ‘you need to just stay hanging out with those people and stay doing that stuff and “we’ll come in and do that bit” and that’s their model and that’s, I love that.’ Drucker (1985) agrees that founders of new ventures always need to seek advice from people outside the enterprise (p.205).
Bolton and Thompson (2000) suggest that ‘[e]ntrepreneurs are not put off by not having the resources they need’ (p.23) and they are ‘quick to build up networks of people they know can help them’ (p.24). Networking need not be limited to management and operational matters. As mentioned in Chapter Five, Hardagon (2003) argues that innovation should be viewed from a network perspective because ‘[t]he raw materials for the future are already here; they’re just unevenly distributed. […] They are certainly not in a nice big box with a big label, a plastic window, and assembly instructions’ (p.208). The challenge, he says, is to build new networks so that ‘firms are in a better position to see when the people, ideas and objects of one world can be combined in new ways to solve the problems of another’ (p.13). Wolpert (2002) similarly advocates bridge-building. He says that innovation is usually undertaken within an organisation and consequently leaves ‘a trail of orphans’ (p.52). He argues that ‘as counterintuitive as this may sound, innovation must become part of the ongoing commerce that takes place among companies’ (p.52).

7.5 Staff and customers

Daniel Batten says that people need hard skills to be in business but adds ‘there’s a whole lot of other skills which I call soft skills which I don’t think are well taught at all or even the importance of them is understood in this country.’ He includes here matters such as:

How well you manage your team when there’s different expectations, the balance between the expectations of shareholders and customers, staff and peers. And a lot of people who think they’re getting into business because they don’t want to report to anyone. Actually you end up reporting to more people than you ever reported to in your life.

In a similar way John Alldred says: ‘I mean it’s just people in the end, business. It’s about being honest, it’s about being ethical, about being creative.’ Where John emphasises people and creativity, Debbie Duis, a nascent entrepreneur, highlights product and people. She says ‘you obviously need to have a sound knowledge of your product and I think you also need to have a good insight into the people that you are
working with and that you are dealing with. You need to understand people, you need
to be able to understand or put yourself in the other person’s shoes.’

This issue here is relationships, and the previous section identified the way that
networking with business peers and mentors is part of this set of soft skills.
Relationships with staff and customers are also essential. Glen Slater says that ‘one of
the things that is the biggest challenge with a start-up of our nature is keeping the team
together.’ He explains that:

Most of the time, because they’re all smarter than me, they don’t really need me
to tell them what to do or anything like that, but when we do go through hard
times then my role becomes critical, because when we go through hard times,
I’m the one that drives through and says ‘Right, that’s what’s happening on the
other side of this hard time, this is how we’re going to get there’ and draw an
incredibly detailed road map and then they just have to go through the steps and
then they come out of it again and they’re all keen and motivated again.

For Petrena Miller, the relationships issue has required her rather than her team having
to change. She says that:

When I first started I know I used to motor through the staff. I was very focused
and you know, I used to get very frustrated with them messing up, you know,
costing me money. […] Like now I understand that people are people and it’s
like they don’t do it on purpose you know, so I’m a lot more relaxed in that
department. […] I know for a long time I struggled against the tide because you
know, I didn’t have my staff on board and then realising I needed to change, not
them, so once I made that decision that I needed to change, then things started to
flow and I’ve got you know, great people working for me. We still have our odd
little hiccup but it’s not, you know, it’s all resolvable through communication.

Petrena’s understanding fits Goleman’s (2006) definition of “social intelligence” as a
shorthand term for being intelligent not just about our relationships but also in them’
(p.11).

Glen Slater brings the importance of relationships with the team and with customers
into a single concept. He explains that:

One, the innovation is who we are and what we do, […] and two, our
innovations and our opportunities come from our customers and engaging with
our customers requires structure. It’s not a free space, and so if we can continue to bring that opportunity in from our customers, that’s where our innovation is going to come from. Innovation in a box just doesn’t work for us.

Glen’s formula seems science, but the practice points to a complex mix of art and craft.

John Alldred spent his first three months in Wanaka walking the streets and listening to his customers: ‘I didn’t even go in the office. I just went out there and I spoke to priests and kids and businesspeople and farmers and a whole raft of people and I just listened for three months.’ Writing in *Idealog 5*, Tim Brown (2006), CEO of Ideo, similarly suggests that listening to diverse voices is essential. He says that product design companies need to ‘hit the streets to gain insights’ because ‘[f]resh original insights about your customers come only when you observe aspects of behaviour in the real world. Design thinking relies less on data than upon insight gathered from multiple sources’ (p.30). Christensen (2000), however, adds a caution in *The innovator’s dilemma* by showing that in many industries the companies that fail are those closest to their customers. He argues that an unquestioning, customer focus can lead to failure to predict where the next disruptive technology or a new market might emerge.

All participants nonetheless talked in various ways about the primacy of relationships with customers. Cam Calder, for example, says ‘it is fundamental you know, treat people with courtesy and respect and say “Thank you”’ and Bill Buckley has won contracts in the US because he personalises his company’s guarantees. He recalls:

I said ‘It’s bang on.’ They said ‘How are you going to guarantee that?’ I says ‘Here’s the order book. If any magnets turn up here wrong, get them fixed at my expense. Here’s an open cheque. You just get that and send me the bloody bill if something’s wrong.’ They said ‘Shit, are you prepared to do that?’ I said ‘Course I am.’ I said ‘You don’t want anything unless it’s right so I’ve got to make it bloody right.’

Relationships with staff, customers and external advisers are critical. Brigid Hardy says ‘I think to pull people in and just keep the thing rolling you’re often dealing in so many different levels […]’ and Debbie Duis similarly notes that ‘you need to be able to speak quite a few different languages.’ Indeed, in *The tipping point*, Gladwell (2002)
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observes that ‘some ideas and trends and messages “tip” and others don’t’ (p.32) because of special factors such as the ‘law of the few’ (p.33). Gladwell’s ‘few’ are ‘connectors’ who ‘have a special gift for bringing the world together’ (p.38), ‘mavens’ who ‘accumulate knowledge’ (p.60), and salesman ‘with skills to persuade us’ (p.70). It is arguable that entrepreneurs try to work in all three ‘different languages,’ and where they lack a particular capacity they readily find someone to fill that for them.

7.6 Persistence and patience

Networking with peers and communicating with staff and customers are regarded as imperatives, and extending his list of soft skills Daniel Batten contends that ‘the thing that really determines your success is the way you respond to failure.’ He says that ‘early setbacks […] toughened us up,’ and several times in the conversation with him he refers to the need for ‘toughness.’ He also makes the point that becoming tough happens ‘the hard way,’ not in the classroom. Brigid Hardy similarly sees dealing with setbacks as the central challenge. She says she regularly asks ““how do we get around the fact that we can’t do this?”’ and so it’s that, you know, that tenaciousness and resilience and flexibility and it also involves the constant cut of problem-solving and finding a way to get around it and all that.’ She goes on to rate tenacity above all other factors: ‘Business is a funny, funny thing. It doesn’t necessarily instantly reward with money I don’t think, creativity or innovation or ethics or any of those things. Often I think it rewards tenaciousness and you know, hard core negotiation.’ Brigid also argues that ‘I think that part of the thing that enables you to be resilient is if you really believe in it yourself, you really have a cause and it means much more to you than the money.’ Harrison (2005), a cell biologist turned entrepreneur, goes further and says ‘[y]ou have to embrace the fact you’re going to have rejections […] and use them to make you more passionate about what you’re doing’ (p.124).

Daniel’s toughness and Brigid’s tenacity and resilience are matched by Bill Buckley’s need for ‘strength’ and ‘will power’ and Petrena Miller’s insistence on ‘persistence.’ Petrena says ‘number one, really, to survive in the clothing industry you just have to
hang in there, you know.’ For Mary Taylor this involves taking ‘the knocks.’ She says:

> I guess it’s like the entrepreneur is taking the idea and then making it happen despite the knocks, and everybody wants your product to fail. […] In New Zealand a lot of people want you to fail. I work with a lot of food writers, they are real bitches. They all want everybody else’s recipe to collapse you know, like, they don’t want someone to have a successful thing. It’s very competitive, and you know […] working in the pork industry, everybody wants to knock the chicken or knock the beef and lamb, you know, within our industry, and then you go to a meat retailers’ conference and the chicken guys want to knock the beef, you know, like everybody’s in the same protein market but like yeah, they’re knockers, you know.

In *Blue ocean strategy*, Kim and Mauborgne (2005) argue that business people should abandon red oceans where the competition is bloody and fierce, and enter blue oceans ‘defined by untapped market space, demand creation, and the opportunity for highly profitable growth’ (p.4). Mary’s story seems to provide a warning that blue and red oceans can nonetheless leak into each other.

John Alldred suggests that persistence is part of an entrepreneurial pathology:

> The never give up attitude because you know, that’s one of the key things about being an entrepreneur. Even when the bank’s hounding them and the overdraft’s over the limit and they’re being threatened with foreclosure and they keep bloody going. They keep looking under rocks for another solution. They keep thinking and thinking and thinking.

Pearson (2002) similarly observes that innovative companies require a champion who ‘will keep pushing ahead no matter what the roadblocks’ (p.35), and Collins and Porras (1996) report that ‘visionary companies display a remarkable resiliency, an ability to bounce back from adversity’ (p.4)

Two participants also pointed out that patience often needs to sit alongside persistence. Daniel Batten affirms the need to ‘defer gratification because when you become an entrepreneur the first thing that happens is your pay goes down immensely and will do for some time because you’re looking at deferring that gratification.’ He suggests that ‘you’ve actually got [to have] the fortitude to be able to put things off that, if you worked for a company, you might be able to get more today, but not in five year’s
time.’ Mary Taylor similarly suggests that businesses that want a quick return lack the necessary patience and resilience for achieving superior gains. She says that ‘a lot of those businesses don’t get out of it what they want to in a quick time, you know, like that quick return is often not there, so people get out. They haven’t done their homework.’ Doing the homework is indeed part of the required persistence and hard work, and Goleman (1996) reports on research that found that children ‘who had waited patiently at four were far superior as students to those who acted on whim’ (p.82). He goes on to propose that ‘“goal-directed self-imposed delay of gratification” is perhaps the essence of emotional self-regulation: the ability to deny impulse in the service of a goal, whether it be building a business, solving an algebraic problem, or pursuing the Stanley Cup 20’ (p.83).

7.7 Enthusiasm and a dream

Bolton and Thompson (2000) note that entrepreneurs are motivated to succeed and ‘possess determination and self-belief’ (p.24), and Harrison (2005) adds that ‘[b]efore you dare, you have to dream’ (p.43). Cam Calder agrees ‘you’ve got to have a dream’ to which Petrena Miller adds the need for ‘internal beliefs’ and ‘an intention to make it work.’ For Nancy Beck this means ‘we don’t want to produce dross, we want to produce something that is quite valuable.’ Daniel Batten insists on the importance of ‘enthusiasm which, even as you gain more knowledge and experience, you have to make sure not to lose.’ Glen Slater likewise believes his ‘job is to keep the drive and the enthusiasm high.’

Brigid Hardy admits:

I’ve gone through periods of being petrified being bankrupt and stuff like that and your energy becomes like quite negative and I think at that time you just have to get, you know, how to dodge, really fast for a little while because otherwise you could put that negative energy into other people.

20 North American ice hockey trophy.
For Brigid, the counter to these down times is having ‘something that’s really positive and that’s really, it’s got a special energy around it.’ She adds that ‘I hear all the time you know, from the markets, the competitors sort of saying “Oh god that Brigid Hardy, you know, she wouldn’t have a clue,” and I think that’s actually been our biggest asset in a lot of ways, because you’re totally fresh.’ The energy and freshness of the product and of the business help to keep Brigid buoyant, and these qualities match others’ insistence on the need to have a dream and to have enthusiasm and drive to make products of value.

There is also a singularity of focus in each participant’s account of their product and their passion because, as Daniel Batten suggests, the test is to ‘look at something and interpret it in many different ways and find a story in it.’ Pink (2005) observes that ‘[s]tory … is becoming a key way for individuals and entrepreneurs to distinguish their goods and services in a crowded marketplace’ (p.107) and Pete Rive adds that because ‘there is a clamour of noise and chaos out there, trying to pitch your story amongst all that is a challenge.’

7.8 Simplicity

The simplicity and clarity in participants’ stories about their enthusiasm, determination and goals relate to the main thesis in Collins’s (2001) iconic book *Good to great* which is a study of companies that made the leap from ‘good’ to ‘great’ results and sustained this for fifteen years. Collins and his researchers set out to ‘discover the essential and distinguishing factors at work’ (p.3) and found: ‘Greatness is not a function of circumstance. Greatness, it turns out, is largely a matter of conscious choice’ (p.11).

To explain this, Collins makes considerable use of Isaiah Berlin’s (1993) essay *The hedgehog and the fox* which is based on a Greek parable. Collins explains that:

Foxes pursue many ends at the same time and see the world in all its complexity. They are ‘scattered or diffused, moving on many levels,’ says Berlin, never integrating their thinking into one overall concept or unifying vision. Hedgehogs,
on the other hand, simplify a complex world into a single organizing idea, a basic principle or concept that unifies and guides everything. (p.91)

Collins thus proposes that good-to-great companies have:

a simple, crystalline concept that flows from deep understanding about the intersection of the following three circles: 1. What you can be the best in the world at [...]; 2. What drives your economic engine [...]; 3. What you are deeply passionate about. (pp.95-96).

Collins argues that the research findings show that good-to-great companies are hedgehogs and that great discipline is required to avoid becoming a fox. Throughout the book he emphasises the need for discipline and says that ‘[w]hen you put these two complementary forces together – a culture of discipline with an ethic of entrepreneurship – you get magical alchemy of superior performance and sustained results’ (p.121). (The hedgehog and the fox will be discussed further in Chapter Twelve.)

While interviews with participants did not touch on the financial factors that fuel their economic engines, Collins’s first and third questions were addressed, and a ‘simple, crystalline concept’ about product and passion emerged in participants’ stories. It is noteworthy that Drucker (1985) too argues that ‘[a]n innovation, to be effective, has to be simple and it has to be focused’ (p.135). He adds that ‘[e]ffective innovation starts small’ (p.135), and some would argue that it needs to remain small, or at least simple. Debbie Duis, for example, says ‘you don’t need to get bigger to get better because [...] you need to stick to the core things and not get out here too much.’ John Alldred insists that simplicity must also characterise the organisation itself because:

business is a fast moving animal and the people who are good at it are the people who are nimble on their feet but generally that’s because they have also leaner and meaner machines around them and not overburdened big companies with far too, you know, they’re able to make decisions and they also allow their people to make decisions.

This is the very reason why Christensen and Raynor (2003) argue that ‘[a]n organization’s capabilities become its disabilities when disruption is afoot’ (p.24).
While all the entrepreneur participants are enthusiastic about their own business development and success, Glen Slater argues that New Zealanders value a lifestyle simplicity that is at odds with economic growth. He says:

I think what we need is more desire to be huge. We need more … what’s the word that I heard the other day – ‘aspiration.’ 21 Right now most Kiwis aspire to a house in the city and a bach 22 at the beach and a boat and a BMW and once they’ve got that, well then their business becomes really income substitution and that’s about it. […] I mean I can attest we’ve got plenty of creative people, we’ve got plenty of smart people, but we kill anybody who aspires to be global. We kill anybody who aspires to be too big.

This resonates with a study set in Western Australia in which Walker and Brown (2004) found that ‘[f]inancial criteria are usually considered to be the most appropriate measure of business success, yet many small business owners are motivated to start a business on the basis of lifestyle or personal factors’ (p.577). Writing about New Zealand’s economic outlook, Oram (2007b) also suggests that ‘[t]he only thing holding us back is our relative lack of ambition’ but he goes on to explain that ‘a fast-growing cohort of highly entrepreneurial companies […] is showing us how to do it. They’re pioneering new business models and skills for devising brilliant products and services, collaborating with whoever they need, and connecting with customers’(p.64).

This description fits the entrepreneurs who have participated in this project. Their aspirations may not be ‘huge,’ although by New Zealand standards Tony Falkenstein’s and Bill Buckley’s companies clearly are large, but their commitment to and energy for their products and for the people they work with and serve do seem to be ‘showing us how to do it’ (Oram, 2007b, p.64). There is, indeed, an elegant and even inspirational simplicity in Daniel Batten’s explanation that:

When you’re in business you’re always networking, you’re always communicating, you’re always establishing relationships and if you’re not good at establishing relationships then you can’t be good at business. And what makes you good at forming relationships is the quality of the interactions you have, your personality, your dynamism, your vision, your levels of innovation, the passion that people can feel when they’re in your presence.

21 Glen requested that this be attributed to Keith Pine.
22 A holiday house.
Daniel seems to set the benchmark high, but in reality he is only weaving together the key threads that have emerged from participants’ stories and that personalise entrepreneurs as ‘the new alchemists’ (Handy, quoted in Hamel, 2000, p.27).

### 7.9 Recommended reading

On 4 June 2007, *The New Zealand Herald* published an article titled *Top titles* (pp.B8-11) that identified the ‘best business books of all time.’ Each of fourteen American business leaders, including business school deans, writers, corporate executives and entrepreneurs, was invited to identify five texts. In a separate article, titled *An appetite for greatness* (p.B11), a further five New Zealand business leaders were each asked to name one or two. Of the seventy-six items identified, Jim Collins appeared five times (*Good to great* four times and *Built to last* once), Katherine Graham’s *Personal history* received two mentions, Ayn Rand is named for two different novels, Peter Drucker for three separate books, and C.K. Prahalad for two different books, one of which, *Competing for the future*, was co-written with Gary Hamel. All other items were mentioned only once. It is noteworthy, too, that fifteen titles are twenty-first century business/technology publications, thirty-five are twentieth century business books, the earliest of which was published in 1932, ten are non-business histories/biographies, three are novels, two were written in ancient Greece, three are economics texts, six come from science, the titles of which indicate interest in the natural world and in randomness, one is spiritual, and one, *Dilbert*, is a comic. The diversity here might create the impression of a Renaissance Florence but there is also a warning inherent in Johansson’s (2006) point that the mind is also ‘a place where different cultures, domains, and disciplines stream together toward a central point’ (p.2). In terms of chaos theory and the sciences of complexity, this means that because taste is highly personalised and the individual is the attractor around which diverse experiences self-organise, then the efficacy of engaging with texts designed to be useful is heavily contingent upon the individual reader’s personality, orientation and circumstance.
Chapter 7: Business Success

The BetterbyDesign website recommends forty books, of which thirty-four are about design, design strategy, design project management and design in business, and five are about general business. Four of the five have already been referred to: Hamel’s (2000) *Leading the revolution*, Collins’s (2001) *Good to great*, Hardagon’s (2003) *How breakthroughs occur*, and Christensen and Raynor’s (2003) *The innovators’ solution*. The fifth is Collins and Porras’s (1996) *Built to last* and it is interesting to note that Collins (2001) recalls a conversation with a CEO who said “‘You know Jim, we love *Built to Last* around here. […] Unfortunately it’s useless. […] The companies you wrote about were, for the most part, always great’” (p.1).


In *Idealog* 8, MacGregor (2007a) reports ‘I read a lot of business books. […] Every so often I read one that makes my palms sweat. […] *Mavericks at work: Why the most original minds in business win* is very nearly one of those books’ (p.86). The authors of this book, Taylor and LaBarre (2006), explain that “‘playing it safe’ is no longer playing it smart’” (p.xiv) and that:

> a new wave of strategic innovation is being built around disruptive *points of view*. Maverick leaders don’t just strive to build high-performance companies. […] They present a fresh take on the world that clicks with customers, energizes employees, and shapes their business, from the markets to the customers they serve and the messages they send. (p.53)
In a chapter on ‘reinventing innovation,’ the writers argue the need to ‘keep the focus narrow and tightly defined’ (p.118) and ‘keep it fun’ (p.121). They add that ‘[c]reativity is as much about emotion as invention. Human beings revel in the thrill of victory and the agony of defeat’ (p.121). There are ideas here that resonate with the experiences and ideas of the participants in this project. It is, however, perhaps more interesting to note that in his review, MacGregor (2007a) also wrote: ‘This is a business book of the best kind. It’s utterly readable, yet it took me forever to read as I kept being distracted by having ideas. But, dammit, that’s the measure of a good book! They’re not supposed to tell you what to think, but to get you to think’ (p.86).

The point is well made, because it is arguable that the well-regarded popular literature has two functions: to entertain and to provoke. Each book tends to be a collection of stories organised around an integrated set of themes. The stories entertain, and the themes provoke. In the end, therefore, it might be that readers’ responses to many of these books will be like the CEO’s reaction to *Built to last*: they are to be ‘loved’ but are ‘useless’ in that they are more for personal stimulation than for application. This possibility fits what has emerged in the participants’ stories about their business success: it is less about what they know and do, and more about how they are – their dreams and enthusiasm, their relationships and resilience, and the simplicity of their quest. It also matches Kirby’s (2002) argument that:

> the successful entrepreneur has a set of personal skills attributes and behaviour that go beyond the purely commercial. It is these attributes, this way of thinking and behaving, which need to be developed in students if their entrepreneurial capabilities are to be enhanced. (p.12).

### 7.10 Conclusion

In *The art of travel*, de Botton (2003) contrasts von Humboldt’s journey around South America, captured in *Journey to the equinoctial regions of the New Continent*, with De Maistre’s *Journey around my bedroom*. De Botton points out that the first journey required all kinds of equipment but the second required only ‘a pair of pink and blue cotton pyjamas’ (p.244). Shortly after publication, De Maistre’s brother wrote that it
was not his brother’s ‘intention to cast aspersions on the heroic deeds of the great travellers of the past’ but rather to discover ‘a way of travelling that might be infinitely more practical to those neither as brave nor as wealthy as they’ (p.245). The traveller himself ‘particularly recommended room-travel to the poor and to those afraid of storms, robberies and high cliffs’ (p.245). De Botton concludes by making the point that:

the pleasure we derive from journeys is perhaps dependent more on the mindset with which we travel than on the destination we travel to. If only we could apply a traveling mindset to our own locales, we might find these places becoming no less interesting than the high mountain passes and butterfly-filled jungles of Humboldt’s South America. (p.246)

The businesses that are discussed in the popular literature are usually big and/or well-known or are quirky companies and brands. They are Barbados or the Andes rather than a bedroom at home. With regard to size, it is noteworthy that Drucker (1985) exclaims keen interest in the entrepreneurship demonstrated in the one hundred fastest-growing ‘mid-size’ companies, and that these have ‘revenues of between $25 million and $1 billion’ (p.9 – note these are 1985 figures). With the exception of Bill Buckley and Tony Falkenstein, all participants in this project who are in business have companies that currently have fewer than twenty employees. It is important to note that in February 2005, 96 percent of New Zealand enterprises were categorised as SMEs with fewer than twenty employees, 87 percent of enterprises employed five or fewer people, 63 percent have no employees, and SMEs accounted for 39 percent of the economy’s total output (Ministry of Economic Development, 2006d). It is also noteworthy that in the period 2000 to 2005, SMEs accounted for 57 percent of all net new jobs in the economy. This is significant because, as Heeringa (2007b) notes in Idealog 10, the SME sector is widely regarded as ‘the sleeping giant in the [New Zealand] economy’ and ‘a small improvement in each firm creates a multiplier effect’ (p.74).

If ‘we […] apply a travelling mindset to our own locales’ (de Botton, 2003, p.246), we find that the participants in this project ‘find the resources required to exploit
opportunities,’ ‘are good networkers,’ ‘are determined in the face of adversity,’ and ‘have control of the business’ (Bolton & Thompson, 2001, p.22). Their success is not about knowledge, nor about skill, but rather about ways of being resourceful. This is, in Mintzberg’s terms, craft and art more than science. What is also of major importance here is that people do not acquire creativity as knowledge for application or as skill. Rather, both creativity and resourcefulness are about being and becoming. There is a remarkable simplicity to this, and it has deeply serious implications for curriculum design.
8.1 Introduction

The three previous chapters explored the literature on, and participants’ views and stories about, creativity and business success, and this and coming chapters consider the implications for tertiary education. This chapter looks specifically at learning processes, the next at business education, and the following chapters attend to the curriculum proposal that lies at the heart of the thesis.

The chapter starts with the participants’ experiences of schooling and then looks at adult learning through three perspectives. In the first perspective, learning is viewed as an acquisitional process, and this is rejected where it is associated with transmission teaching and it compromises the development of the student as a self-sufficient sense-maker. The second sees learning as a practice-based community process, and this is favoured by participants and various writers, particularly because it rejects the separation of tacit from explicit knowledge. The third perspective treats learning as a process of reflection, and it is concluded that entrepreneurs continually reflect on and respond to their environments, even though they seem to prefer more idiosyncratic ways of making sense.

8.2 Schooling

Mayer (1996) uses three metaphors to characterise learning in the twentieth century – response strengthening, information processing, and knowledge construction. Brigid Hardy was the only participant who spoke about a school experience that in any way approached the sense-making of knowledge construction (see Chapter Five). Others’ stories related more to the punishments and rewards associated with response strengthening. For example, Petrena Miller, Bill Buckley and Tony Falkenstein all
talked about the fact they failed at school. Petrena ‘hated school actually’ and says that what was learned ‘goes in one ear and out the other because it’s not relevant to the day.’ She says of herself and her siblings that ‘we all thought that we were a little bit dumb,’ and her confidence to succeed came not from school but because ‘mum had the vision for us to all get out and do our [own thing and] we could be whoever we wanted.’ Bill Buckley says that ‘school was only secondary to me […] and I never really enjoyed it. Didn’t bloody understand it.’ More generally, Tony Falkenstein says entrepreneurs ‘want to play and we don’t really listen and the whole thing’s really going over our heads. We were no good at school because our brain’s going off in different directions.’ In the response strengthening model, school environments tend to be controlling and students chose to participate for extrinsic reasons (Bruning, Schraw and Renning, 1995, p.146), whereas creative people seek autonomy and are motivated by tasks that are intrinsically satisfying (see also Chapter Five). Cam Calder is particularly critical of secondary school and says that ‘education can be quite stultifying.’ He ‘can vividly remember the transition from primary school’ and how ‘one’s imagination and one’s spontaneity was actually being curbed by what one was doing each day.’

Mary Taylor contrasts her own experience of schooling with a television program she had recently seen in which a New Zealand field scholar went to a school in New York where:

there were like ten people, ten students together and the way they have their classes was they sit around a table and talk and for her initially it was like well no-one’s teaching me anything. But at the end of the year she got so far ahead of where she was. So for a lot of us we haven’t learnt that way. We’ve had it all spelt out for us. But I think for creativity and entrepreneurship it has to be about not how you get there but opening yourself up to lots of ways of getting there.

Having it ‘spelt out for us’ fits Pratt’s (1998) transmission model for teaching which focuses on the delivery of knowledge (p.38) whereas the field scholar experienced teaching as a nurturing process concerned with ‘facilitating personal agency’ (p.48). In the former the dominant elements are content and the teacher, whereas the goal of the latter is to help students develop self-efficacy and self-sufficiency (p.49).
8.3 The goals of learning

Ramsden (1992) acknowledges Whitehead’s (1929) argument that a university education should lead students to ‘the imaginative acquisition of knowledge’ (p.19) and Ashby’s (1973) proposal that the university mission should be ‘to help people develop from critical acceptance of orthodoxy to creative dissent’ (p.19). These are solemn goals. Ramsden laments, however, that many students seem to be learning ‘an imitation of at least some of the disciplines they are studying, a counterfeit amalgam of terminology, algorithms, unrelated facts, “right answers,” and manipulative skills that enables them to survive the process of assessment’ (p.37). It is noteworthy that Rowntree (1987) suggests that ‘if we wish to know the truth about an educational system, we must look no further than its assessment procedures’ (p.1).

Ramsden conceptualises learning as ‘a sort of relation between a person and a phenomenon’ (p.40) and Dahlgren (1984) adds that ‘what is pivotal to understanding is the grasp of the relationships between a phenomenon and its context’ (p.37). Ramsden goes on to distinguish between deep and surface learning. Deep learning relates previous to new knowledge, relates theory to everyday practices, distinguishes between evidence and argument, and organises content into a whole. Surface learning, on the other hand, focuses on unrelated parts of the task, memorising information for assessment, examples rather than principles, and knowledge separate from practice. For entrepreneurs, there are obviously day-to-day tasks for which surface learning is entirely appropriate, but being creative and resourceful clearly demands deep learning too.

In their ‘SOLO’ taxonomy (‘structure of the observed learning outcome’), Biggs and Collis (1982) demonstrate more clearly the differences between deep and surface learning. In a different approach, Marton, Dall’Alba and Beaty (1993) look at relationships between deep and shallow learning and student conceptions of learning and, building on earlier work by Säljö, they identify six levels. Whitehead and Ashby emphasise the importance of the imagination and creativity, and education for
entrepreneurs must clearly match these ideals. When presented with challenges, they need to produce ‘extended abstract’ responses that are transformational and envision opportunities for exploration and exploitation. It seems unlikely that successful entrepreneurs would not also conceptualise their own learning as something that enables them to be agents rather than objects of change (Marton and others, 1993, p.293). These represent the top levels of achievement on the two taxonomies, but if Mintzberg (2004) is right in his assertion that ‘[i]n a world rich with experiences, in a world of sights and sounds and smells, our business schools keep the boys and girls talking, and analyzing, and deciding’ (p.66, see also Chapter 2), then entrepreneurs are likely to associate the university with an imitation of the world that invites shallow learning and does not deliver self-efficacy and self-sufficiency, and is, therefore, irrelevant to their needs.

Because deep learning clearly is a central teaching goal, consideration needs to be given to how to enable students achieve this. Fenwick and Tennant (2004) provide four helpful perspectives on adult learning: learning as an acquisitional process, as a practice-based community process, as a process of reflection, and as an embodied co-emergent process. Each of these will now be examined.

8.4 Learning as an acquisitional process

Fenwick and Tennant (2004) explain that theories of learning as an acquisitional process examine ‘how mental information processing occurs, how cognitive structures develop and change, and how a repertoire of new behaviours is acquired and used as practical intelligence or expertise’ (p.57). They point out that as well as acquiring knowledge, strategies for developing new knowledge and capacities for dealing with the unexpected are also acquired. The writers warn, however, that while acquisition theories have some explanatory power, they ‘tend to imply a fundamentally additive conception of learning’ (p.60) and they note that many critics refute any notion of knowledge as something substantive that antedates the consuming learner.
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Through her science training, Nancy Beck acquired ‘small “d” discipline’ and a sense of how ‘you need to do things properly,’ and John Alldred notes that although he was ‘bored stiff’ doing his marketing degree, it nonetheless gave him ‘some ability to structure what you do.’ These acquisitions of strategies and capacities do not seem controversial. The delivery of content knowledge through an acquisitional process is, however, problematic when it is associated with Pratt’s (1998) transmission model of teaching. This is exemplified in Mary Taylor’s story about an ‘expensive’ time management course she took at a university. She says it was ‘very polished’ but she did not like ‘being told these are the twelve things you could do’ and ‘having it pushed at me.’ The result was the course made no difference to her practice so she asked for and got her money back.

Tracey Kirwan, one of the two nascent entrepreneurs participating in the project, provides a more detailed account of transmission teaching and acquisitional learning in her story about a university marketing course she took four years ago. She ‘had such a run in with the lecturer, I failed the course. […] It wasn’t for me. I couldn’t sit there.’ The lecturer was ‘a wine buff’ and in one class he argued “no-one will buy alcohol with screw tops,” and I said “Mate you’re joking.” An exchange of views took place and then ‘we had this bloody argument in front of eighty people and I said whatever, you know, I just disagree that’s all, and then blow me down like the next week or something we had this one on colour hair dye of all things.’ This time the issue concerned ‘why they place products in certain positions to encourage you’ to buy and the lecturer argued:

you’ll always see them at the back of the shop because they’ll get them in through other means to get them into the chemist and really they want hair products at the back of the shop, and I said to this guy ‘What planet are you on? At the back of the shop are the bloody prescriptions and the things you can’t get to and you’re not allowed to have the drugs so they’re all at the back of the shop.’ I said ‘Hair dye’s at the front of the shop.’ Hair dye is always really somewhere fairly prominent because females dye their hair all the time, because I dye my hair all the time and this frigging guy is bald and I said ‘What would you know anyway? What do you know about hair products?’ Well the class roared and everything, and then he was talking about fruit and vegies, you know, at some other place in the supermarket and I’m going you’re wrong again.
Chapter 8: Learning Processes

Tracey concludes ‘this is a complete waste of time’ and says she failed the course because:

we were talking about leadership and people are mentors and New Zealand leaders and we had picked our four or five leaders throughout the semester who I thought were, they were very, very good, fantastic case studies on certain leaders and different industries, but then when it came time for the exam I had to quote leaders from the text, well no, they didn’t say I had to quote leaders from the textbook but it was leaders from the textbook.

The result was that ‘he completely gave me a zero because I didn’t quote it from a book.’ She adds that ‘I didn’t believe in what they said so I didn’t quote them, and I couldn’t do it.’ Tracey recognises that ‘I’m too damn bolshie and I should have just sat there and shut up. I guess that I need to play the game. That’s what I was told you know. […] You need to play the game and I couldn’t. I could not play the game.’

Foley (2004) contrasts the paradigm of education as science with the interpretive paradigm. In the former, knowledge is objective and is capable of being discovered empirically by following a set of procedures: identify problem, pose hypothesis, determine method, collect data, analyse data, interpret, and reformulate hypothesis (p.12). The difficulty Tracey faced was that for her the shopping problem was wrongly conceived, and she could not accept the method for dealing with the leadership issue, nor, therefore, the favoured hypotheses. In effect, she was expected to ‘play the game’ as a shallow learner acquiring the partial knowledge provided by the lecturer and the chosen text and returning as if she were merely a processor of information (Mayer, 1996). She was exposed to an ‘imitation’ of the subject and the ‘bolshie’ spirit that is her entrepreneurial asset prevented her from engaging with the game. She refused to be part of a relationship that involved ‘a narrating Subject (the teacher) and patient, listening objects (the students)’ (Freire, 1984, p.57).

It seems that education as science, when associated with transmission teaching and acquisitional learning, will be singularly unproductive in meeting the learning and development needs of entrepreneurs. There seems to be much more potential in Foley’s (2004) account of the interpretive paradigm in which knowledge is viewed as
‘subjective and socially constructed; its fundamental assumption is that different individuals understand the world differently’ (p.13). Robert Franich sums up the choice when he states his own preference for ‘dialogue between the coach and the learners and trust [rather] than the standard I present, you absorb.’

8.5 Learning as a practice-based community process

Fenwick and Tennant’s (2004) second perspective sees adult learning as a practice-based community process. Situative theorists conceptualise learning as something rooted in a situation, not the head of the person. Lave and Wenger (1991) argue that individuals learn as they participate by interacting with the community and its history and assumptions, cultural values and patterns of relationship, the tools at hand (objects, technology, languages, images, and the moment’s activity), purposes, norms, and practical challenges. Knowing is interwoven with doing. In a later book on communities of practice, Wenger (1998) argues:

Learning cannot be designed. Ultimately it belongs to the realm of experience and practice. It follows the negotiation of meaning; it moves on its own terms. It slips through the cracks; creates its own cracks. Learning happens, design or no design. (p.225).

This perspective has serious implications for education. Robert Franich says that ‘if we are just left in the laboratory I think we can become narrow-minded, stifled, too theoretical, though it’s intellectually fun.’ He adds ‘I’ve just done a nitro desopropylation. The molecules did exactly as I wanted them to do. Exciting, but so what?’ He adds that the things that matter only begin to happen ‘when you start engaging with people.’ Daniel Batten says that entrepreneurs need some sort of program that ‘teaches people the hard skills you need in order to be a business. You know, how to do competitor analysis, […] doing the cash flows, doing the profit projections, creating product, branding it, taking it to market.’ He says, however, that instead of learning about these on an MBA, he learned ‘on the job’ and acquired knowledge and skills ‘as and when I needed to do them.’ He explains that for his learning, the Icehouse provided an ideal ‘incubating environment’ and it is arguable
that the MBA can be like Robert’s laboratory whereas the Icehouse is a community of practice comprised of start-up and experienced entrepreneurs and advisers. Indeed, Wenger (1998) explains that:

> deep transformative experiences that involve new dimensions of identification and negotiability, new forms of membership, multimembership, and ownership of meaning – even in one specific or narrowly defined domain – are likely to be more widely significant in terms of the long term ramifications of learning than extensive coverage of a broad, but abstractly general, curriculum. (p.268)

Grabinger and Dunlap (1995) add that ‘knowledge learned and not explicitly related to relevant problem-solving remains inert’ (p.7). Pete Rive says that ‘you only learn stuff by repetition and looking at it from different angles, so if the professor taught that in the class and then you know two years later if you’re lucky, you get put in a situation where that is actually applicable, then you might remember what to do but the chances are you won’t.’ Grabinger and Dunlap thus argue for ‘rich environments for active learning’ which ‘promote […] investigation within authentic contexts, […] encourage the growth of student responsibility, initiative, decision-making and intentional learning, […] and utilize dynamic, interdisciplinary, generative learning activities’ (p.5). John Alldred would add that these generative activities should be ‘the real world, the real problems where it’s an imperfect situation, you don’t have all the resources, you probably haven’t got all the amount of money you need, your staff aren’t perfect, all that, and it’s all evolving around you.’

Brown, Collins and Duguid (1989) point out that ‘by ignoring the situated nature of cognition, education defeats its own goal of providing useable, robust knowledge’ (p.32), and on this basis they argue for ‘cognitive apprenticeships’ as a means of enculturation that promotes ‘learning within the nexus of activity, tools and culture’ (p.40). In a later book, Brown and Duguid (2000) say there is much talk about an emerging electronic worldwide university but they argue that ‘envisioning change […] will not be fruitful until people look beyond the simplicities of information to the complexities of learning, knowledge, judgments, communities, organisations, and institutions’ (p.213). They contend that the delivery view sees education technology as
a sort of ‘intellectual forklift’ and overlooks the process of ‘learning to be’ (p.219). For John Alldred, ‘learning to be’ equates to being able to ‘hit the ground running when they hit a company rather than spending two years being bloody useless, learning the skills you know.’ He says he has met:

people with fantastic degrees but they’re almost useless because they have no practical skills because they’ve just, it’s all been about study. It’s never been about out there in the engine room and doing it and failing and succeeding and failing and succeeding and learning about tenacity.

Tenacity has already been identified as one of the critical capabilities for being a successful entrepreneur (see Chapter Seven), and just as swimming cannot be taught in a classroom (Shor & Freire, 1987, p.90), it is arguable that learning to be in the engine room requires what Brown and others (1989) call ‘enculturation’ – ‘engaging with communities of practice and of concepts’ (p.220).

Brown and others (1989) also argue that the university is at a great advantage if it can put learners in touch with communities that they don’t know about or would find hard to access. The challenge looks deceptively simple. It also raises questions about the kinds of knowledge produced in the university and in the workplace, and their interrelationships.

8.6 ‘The tycoon’ and the university

On 21 February 2005, The New Zealand Herald ran the headline: TYCOON GIVES $7.5M TO UNIVERSITY. The article explains that Owen Glenn, aged sixty-five, left school at the age of fifteen and made ‘a fortune’ in logistics and freight-forwarding. His donation was for a new Business School at the University of Auckland. Glenn is reported in the article as saying he has thought in recent years about the benefits of a university education. He states that in the university ‘there are progressive minds, people who think through things – it’s refreshing. In business you often just deal with people that are in your business, you’re not often challenged mentally.’ The article goes on to quote Professor Barry Spicer, Dean of the Business School, as saying that
Glenn had ‘operated in an uncertain, complex globally connected world,’ and that his ‘success shows that anything is possible with intelligence, imagination, innovation, perseverance and drive.’ He adds that ‘it is fitting that the name of a New Zealander who has succeeded in business internationally should grace the new building.’

Both Glenn and Spicer attribute inspiration for success to each other’s world. This sets up a dichotomy between the university business school and business itself. While this dichotomy may characterise many current interrelationships, it is both unnecessary and unproductive.

### 8.7 Mode 1 and mode 2 knowledge

Foley (2004) distinguishes between education that is formal, non-formal, informal, and incidental. Quoting Usher (1989), he explains: ‘Formal theory is “organised (and) codified bodies of knowledge – embodied in disciplines and expressed in academic discourse.” Informal theory is the understanding that emerges from and guides practice’ (p.10). Quoting Usher and Bryant (1989), he adds: ‘The question for the practitioner is not “what rules should I apply” but “how ought I to act in this particular situation”’ (p.10). Petrena Miller enjoyed Design School where she learned the rules for ‘creating these beautiful clothes that we wanted to wear’ but she was completely unprepared for how to be ‘when we got into the industry. It’s like all of a sudden you’re stuck behind these machines and you’ve got to do this and it’s very unglamorous.’ In different ways, Petrena and Foley are discussing the separated worlds of Glenn and Spicer.

Schön (1995) distinguishes between the high ground where ‘manageable problems lend themselves to solutions through research-based theory and technique’ and the swampy lowlands where ‘problems are messy and confusing and incapable of technical solution’ (p.28). The former is the natural home to mode 1, discipline-based knowledge, whereas mode 2 socially-distributed knowledge belongs to the swampy lowlands. Schön points out that the problems of the high ground tend to be of little use
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to society at large, whereas the problems of the lowland are important because the practitioner ‘cannot be rigorous in any way he knows how to describe’ (p.28). John Alldred believes those who occupy the high ground are:

a bit self-serving because I think there are a lot of people who want to believe [...] the big things they’re dealing with are [...] complicated and I don’t think things are, I think business is quite a simple thing. I think it’s quite intuitive. I think you can over-research most things, you can overly rely on statistics and I see that all the time. People, they get into research often because it sort of gives them an excuse not to grapple with the problem. They can delay dealing with the issue.

Debbie holds a similar view and provides a story from her masters program where someone had a problem at ‘the eleventh hour getting models for this lingerie show or something like that, and [one of the students] said well if that was me I would have made them sign a contract you know, like six months ago blah, blah, blah.’ Debbie argued that ‘human nature being what it is, things happen at the eleventh hour that no-one could foresee and you could get them to sign all the bloody papers in the world and it still won’t make any difference. If they don’t turn up then they don’t turn up, and he just didn’t get it.’ Debbie’s example of the contract and John’s point about research exemplify what for them constitutes the high ground and illustrates its limitations for dealing with the day-to-day realities of the swampy lowlands.

8.8 ‘The accelerating organisation’

Ennals (2007) suggests that ‘[s]ilence resides in the gaps between the known islands of explicit knowledge’ (p.625), and this is why Maira and Scott-Morgan (1996) bring formal and informal learning together into a single frame. They explain that within ‘accelerating organisations’ there is a complex learning cycle that involves four learning processes. First, there is the transfer of explicit knowledge that takes place through reading texts and attending seminars. Secondly, the reader or listener internalises the explicit knowledge and develops a tacit skill through adaptation or conversion. Thirdly, tacit knowledge is shared amongst a community through practice without being made explicit. In this third stage coaching and mentoring are often used
to compensate for the absence of explicit knowledge. Fourthly, tacit knowledge is codified, thereby becoming explicit and enabling the cycle to begin again.

While the model describes possible interrelationships, it is an oversimplification. It assumes that the individual learns and practices within a single, narrow domain, and Duguid (2005) rejects any notion of representing ‘tacit knowledge as mere uncodified explicit knowledge’ (p.109). Pete Rive also asks ‘how do you translate that tacit information into something that people can read? It’s well known that you can only go so far and you won’t achieve it necessarily.’ He illustrates the problem through a story about his work as a young man in the film industry. The crew was close to running out of film and ‘that’s sort of pretty bad,’ and because they were out of phone range, Pete had to drive to phone the production manager to send more film. The matter was urgent but at the other end of the phone the production manager asked how much film was left, and when Pete said he didn’t know and that it wasn’t relevant, she:

        took umbrage to the way I was sort of talking back to her. She said go back to the set, find out. So I had another twenty minute drive back to tell her what, and they couldn’t believe it, go back and tell her, and I thought that is lack of experience on the set that that person had gone through. Now the whole point of that anecdote is basically that whole thing of what you tacitly are informed about, by working your way up through the set you know things have to be done in a certain speed and a certain time and that there is a huge pressure. On the phone you can’t get the impression that the whole production is going to come to a grinding halt at huge cost and it’s your responsibility if you hadn’t gone through that.

Pete extends this disconnect to argue that the university is also not engaged with practice, and he argues that ‘if you are savvy to the university behaviour, modus operandi, you can give them a narrative that they will believe. It’s never going to be tested, and that’s why I’m quite keen to do the practical [for his PhD].’ Pete sees the university as standing separated from practical knowledge and it is noteworthy that Maira and Scott-Morgan’s model assigns no role to the university in relation to explicit knowledge. It is striking too that Wolpert (2002) argues that because the university avoids networking with other producers of knowledge, ‘looking for new ideas in academia is like fishing for marlin in a trout stream’ (p.57).
8.9 A false dichotomy

The essence of Maira and Scott-Morgan’s (1996) simple model is supported by cognitive science. Reber (1993) defines implicit learning as ‘the acquisition of knowledge that takes place largely independently of conscious attempts to learn and largely in the absence of explicit knowledge about what was acquired’ (p.5). He undermines the autonomy of the high ground by arguing that ‘intelligent behaviours, long associated with the overt and conscious domain of cognitive functioning, are better seen as the result of both implicit and explicit capacities’ (p.9). This point also supports the argument that creativity is based on a dialogue between reason and intuition – see Chapter Five. Indeed, Reber warns of the need to avoid the ‘polarity fallacy’ (p.23) in which consciousness and unconsciousness are treated as completely separate and independent processes. He argues they should be properly viewed as interactive components or cooperative processes. He also celebrates the importance of the swampy lowlands by emphasising ‘the primacy of the implicit’ because ‘implicit learning is the default mode for the acquisition of complex information about the environment’ (p.25). It is for this reason that Pete Rive argues that ‘most courses are fairly useless at preparing you for a job’ and states a preference for learning through observation and participation. John Alldred similarly says that ‘people that come from university need to be out there more with the businesses than in the classroom’ and he recommends that ‘rather than read a book, get it from the people.’

Tony Falkenstein has in part adopted this kind of approach for his Onehunga High School project (see also Chapter Four) where students in pairs are adopted by local companies which they visit every Friday. Tony explains that:

If they learn about pricing on a Monday, the theory of it, they then on the Wednesday would sit in groups and they work out a hundred questions. They’re going back to their textbooks, but in their brains, they’re thinking of their company. So if their company is down the road making orange juice, then really they’re thinking these questions but thinking about their company and they’re getting the ideas from the group from the other people so it’s reinforcing the theory and then they go out on the Friday and they ask the questions and you know, they find out what reality is which really enforces the theory even more.
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Tony says that during the Friday visits they ‘see their company and they’re asking those questions and they’ve got a good grasp on pricing, even though a lot of it’s “Oh shit, I don’t do it that way, I see what the market will take or just add this on or […]”’ The result has been, Tony says, that in the Monday classes ‘these guys are always thinking about their company even when they’re hearing the theory.’ In contrast, it is interesting to note that Nancy Beck explains that:

If you talk about biochemical power plays, as a scientist I was taught over many years and many courses various components of pathways, and I relearned them and I relearned them, and it wasn’t until graduate school that finally the big light bulb went on, and I said ‘Oh, that’s how it all connects,’ because I finally had enough of the building blocks in place to be able to do that.

For Tony’s students at Onehunga, however, the ‘light bulb’ goes on all the time because their study bridges the high ground of theory and the lowland of practice and in effect this provides an integrated knowledge management process that enables them to engage in deep, sense-making learning.

Some tertiary educators have picked up the ideas emerging from cognitive science and advocated bold possibilities. Gonczi (2004) argues that ‘the way most people think about learning is wrong’ (p.19) because for over two thousand years it has been assumed that learning is concerned with the process of individual minds being provided with ideas and that these ideas are the basis of individual competence. This conception, Gonczi argues, rests on a false dichotomy about the mind and body. He argues that the best way to prepare people for occupations and professional practice, as well as for life generally, is through some form of apprenticeship which he defines as:

an educational process in which the exercise of judgment and the ability to act in the world emerge out of the complex of interactions to be found in a community of practice. The interactions combine cognitive, emotional and bodily processes in the social and cultural setting of the workplace or other social settings. (p.21)

This notion of apprenticeships offers a serious possibility for entrepreneurs, and this will be taken up in later chapters. For the moment, however, it is noteworthy that Pete Rive has little confidence in the university to engage purposefully with lowlands’ practice because:
you can study German expressionist film-making, you can study the history of feminist film-making. They’re kind of important, they should have a place but it seemed to me that academia has this unfortunate, especially in the arts, has this unfortunate art historical perspective because you know, it’s easy to build up scholarship and literature from what has gone in the past rather than looking at what is happening and going [to happen] in the future.

Gonczi also observes that the university sector views the development of mode 2 knowledge with suspicion, and notes that governments and industry are equally suspicious that mode 1 knowledge does not serve the wider society. He argues that universities in Australia have addressed the need to prepare students for work through introducing key competencies but have done these things ‘without altering their assumptions about the primacy of universal and timeless knowledge (foundational-disciplinary knowledge) and that the minds of students are formed, in essence, by the inculcation of this kind of knowledge’ (p.24). The possibility that this might also be said of courses for entrepreneurs offered by New Zealand’s business schools is considered in the next chapter.

8.10 Order versus chaos

Gonczi (2004) argues there is often a lack of coherence in professional courses, where on the one hand there is an increase in the amount of practical experience students undertake but a stubborn insistence, on the other, of the importance of the teaching of disciplinary knowledge — most often by transmission methods and assessed by formal examinations. This seems a clumsy and inauthentic way to try to bring together the worlds of Spicer and Glenn.

Maira and Scott-Morgan (1996) note that, since Newton, scientists have pictured a world governed by regularity and order, and much of management is underpinned by the principles of science. The same might be said of discipline-based education as science located within the university and separated from socially distributed knowledge. However, Maira and Scott-Morgan also point out that as scientists turn to study ‘systems that learn, change and survive in competitive environments –
biological, ecological and immunological environments – they are learning that these systems don’t work by the Newtonian rules that apply to mechanistic systems’ (p.230). They go on to argue that ‘[t]o be most innovative, it must operate on the edge of chaos, where novelty is most possible, yet without compromising the order needed to accomplish day-to-day tasks’ (p.231).

The contrast has relevance for the university and its role in education for entrepreneurs, and Bill Buckley explains the challenge by way of analogy. He says:

Kids soon learn they’ve got to watch where their feet are going or they fall over. You know when you’re little you fall over and you just get up again but when you’re as tall as me and you fall over, it bloody hurts. It’s a long way down, so you’ve got to have learned when you’re little, and the same thing with everything. If you don’t bloody learn, you don’t go anywhere. Learning by mistakes, it’s good to catch people on the early stages of it. They make little mistakes but, if everything’s run on a corporation, nobody bloody really takes the risk, you know […]. An entrepreneur is really a guy that’s, well a successful one anyway, is one that sort of starts his own business and builds it up and not just goes through the corporate bloody ranks and after the corporate stuff you don’t get the chance to exercise your little falls when you’re little. You just walk into a great big thing and a whole set of rules to work by.

The university might also be ‘a great big thing and a whole set of rules to work by’ whereas nascent and start-up entrepreneurs are likely to learn better about how to be creative and resourceful by participation in a learning community where falling over is part of the modus operandi yet there is also order for accomplishing day-to-day tasks. Such a place might be like John Alldred’s office where people ‘get a buzz from the chaos’ because ‘I like creating that atmosphere of people coming in all directions’ where ‘people are not frightened to have a go.’ John proudly explains that this is not a place for those people who ‘just want to get it all down and never fail and make sure that the annual report and all that sort of stuff’ gets done. It is instead a learning community where someone like Tracey Kirwan is not silenced and where members ‘develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems – in short a shared practice’ (Wenger, n.d.). Nonetheless, it would be improper to assert ‘shared practice’ is a panacea for all. Indeed, Wallgren and Dahlgren (2007) examined industrial postgraduate ‘students’
histories, participation and ways of belonging to different communities of practice, and their aspirations’ and found ‘huge variations in the learning trajectories of students’ (p.195).

8.11 Learning as a reflective process

In Fenwick and Tennant’s (2004) third perspective, learning is a process of reflection which:

casts the learner as a central actor in a drama of personal ‘meaning making.’ As learners reflect on lived experience, they actively interpret what they see and hear, emphasising aspects of greatest personal interest or familiarity, and so construct and transform their own unique knowledge. (p.60)

The central belief is that through reflection, the learner constructs a personal understanding of relevant structures of meaning derived from actions in the world.

When asked about whether their day-to-day work involves using some kind of reflective process, John Alldred said ‘how my mind works is so unstructured, but somehow my brain brings it together, but I can’t tell you what that process is.’ Several others ventured suggestions but these tended to be more descriptive than explanatory. Cam Calder, for example, said ‘it is very much seat of the pants stuff’ and ‘it’s like seeing how things are working and adapting and rolling with something as it develops.’ Tracey Kirwan similarly said ‘I will create it in my head first and I will create what I want at the end of that and then it’s like a jigsaw and then if something’s not right, I will change the pieces and I just keep moving things around until it goes still.’ Nancy Beck suggested that ‘I suppose having the vigorous, some kind of a strenuous training early on, where you learn how to have a lot of data and to correlate it,’ but for her too the process of reflection that she uses is intuitive, rather than conscious.

Kolb (1984) points out that not everyone learns from experience and that this only happens when there is a reflective thought and internal processing that actively makes sense of an experience and links it to previous learning. He argues that ‘the challenge
of lifelong learning is above all a challenge of integrative development’ (p.209). Schön (1983) focuses this directly onto the workplace and says people learn by noticing and framing problems in particular ways, then experimenting with solutions. When unique problems or situations containing some element of surprise are encountered, people are prompted to reflect-in-action, and then later to reflect-on-action, examining what was done, how it was done, and what alternatives there were. Kolb and Schön both argue that procedural and propositional knowledge is learned through reflecting on experiences, and Mary Taylor adds that ‘it doesn’t come naturally because you just want to keep zooming away up there. It is quite hard sometimes to stop and reflect. It almost has to be quite disciplined, that you have to stop and sort of think my god, is this the right way?’

Mary later reflects on what she said earlier and adds: ‘I believe in having time out from everyday panic-mode of work – the retreat – to reflect and make decisions on “change.” New ways, alternatives, what’s positive or negative about what we’ve done and where we’re at.’ It is noteworthy that Mary argues for rigorous reflection but this does not go as far as the concept of ‘critical reflection’ that involves questioning how a problem is framed in the first place. Debbie Duis provides an example that illustrates. She says that:

so it’s not so easy anymore to just oh yeah, A plus B equals C. […] A plus B may never equal anything unless you have Z over here and X over there and only part of a Y in there and the skill is in being able to do that successfully.

Critical reflection would involve examining not only Z, X and Y, but also interrogating A and B to question the validity of the questions themselves.

Brookfield (1995), indeed, argues that ‘unexamined common sense is a notoriously unreliable guide to action’ (p.4) because it validates ‘the conspiracy of the normal’ (p.15). He says that when people reflect on experience with ‘skeptical questioning’ and ‘imaginative speculation,’ they refine, deepen or correct their knowledge constructions. Mezirow (1990) provides a simple process for this in his theory of ‘transformative
learning’ which is based on content (what happened?), process (how did it happen?), and premises (what’s wrong with how I am seeing what happened and how?). The last of these leads to transformation of world views:

Reflection on premises involves a critical review of distorted presuppositions that may be epistemic, sociocultural or psychic. Meaning schemes that are not viable are transformed through critical reflection. *Reflection on one’s own premises can lead to transformative learning.* (p.18)

No participant articulated ideas suggestive of the processes promoted by Mezirow and Brookfield, but this is not to say that they do not intuitively practise critical reflection. The role of the entrepreneur is, after all, to examine current practice and the environment and to create and commercialise novelty that outsmarts existing products and business processes. The concept of learning as a reflective process therefore has considerable explanatory power for the work of entrepreneurs, even though only Mary provided specific advocacy for this. Frames and probes like those used by Schön and Mezirow could provide productive tools for those with coaching or mentoring roles within a practice-based community process. This matter will be taken up again in Chapter Eleven.

### 8.12 Embodied co-emergent processes

In the previous section, several references were made to reflection on experience and it thus seems that the notion of ‘experiential learning’ might have some relevance. Jarvis (2006) points out, however, that ‘almost all learning is experiential, the only exception being pre-conscious learning’ (p.184). The exception is challengeable – see Chapter Six, but Jarvis’s remaining argument seems sound. He explains that before qualitative research acquired a place in the social sciences, learning tended to be studied within the paradigm of science. He suggests that ‘experiential theories’ were advocated particularly in the 1980s as alternatives to the mainstream in which learning was studied ‘objectively’ and ‘scientifically’ (p.184) and that they are thus ‘a sign of the times’ (p.193).
‘Experiential learning’ loses its generalness and comes into focus when it is viewed as a practice-based community process and as a process of reflection. These two processes work well for a contemporary curriculum, particularly when joined by Fenwick and Tennant’s (2004) fourth perspective in which learning is considered as an embodied co-emergent process. The writers note that practice-based views of learning often draw on disciplines such as complexity theory, ecology theory, cybernetics and technocultural theory, and these represent a miscellany of alternatives to the ‘rational brain-centred view of learning’ (p.65). Complexity and chaos were introduced in Chapters One and Five, and chaos has again been visited in this chapter and an association has been made between chaotic systems and ecological environments. Chaos and complexity will be pursued again in Chapters Ten, Eleven and Twelve where curriculum possibilities are examined. ‘Co-emergence’ itself will also be discussed in Chapter Eleven in relation to Fenwick’s (2001) concept of ‘work knowing on the fly.’

8.13 Conclusion

In Chapter Two it was noted that Hannon (2004) and his research team reported to the UK National Council for Graduate Entrepreneurship that ‘increasing desirability (I want to do it) and feasibility (I can do it) will then enhance propensity (I will do it)’ (p.15). Hannon, Collins and Smith (2005) argue that ‘traditional pedagogical approaches in business and management as applied to entrepreneurship education may be limiting the opportunities for students to develop entrepreneurial skills, knowledge and behaviour.’ On the basis of a successful collaborative pilot involving students from a range of disciplines, local entrepreneurs and educators, they propose ‘a co-learning approach’ (p.11).

The findings outlined in this chapter also endorse a co-learning approach. The becoming of the creative and resourceful entrepreneur requires learning processes that will be effective for that purpose and will suit the orientations and preferences of participants. It has been shown that transmission teaching and acquisitional learning
are inappropriate for enhancing the creativity and relationships that lie at the heart of the entrepreneurial enterprise. The preference is instead for deep learning within an interpretive paradigm and through engagement with some sort of community of practice where intuitive and conscious thinking and tacit and explicit knowledge are equally valued. Robert Franich says ‘it’s not just the intellectual side of it, it’s actually the emotional engagement, so if you’re learning something and you can feel your heart start to race, it’s cemented into your neurons much faster than just absorbing it like a sponge.’ There is also a case for encouraging the conscious use of reflective processes, even though this was supported by only one participant.

Possibilities for co-learning will be explored further in the coming chapters. For the moment it is important to note Cox’s (2005) caution that the term ‘communities of practice’ is now ‘potentially confusing’ because it has come to mean many things: ‘the socialization of newcomers into knowledge by a form of apprenticeship,’ ‘informal relations and understandings that develop in mutual engagement on an appropriated joint enterprise,’ and ‘heavily individualized and tightly managed work’ where firms set up ‘informal horizontal groups across organizational boundaries’ (p.527). The interest of this thesis lies principally in the second interpretation. The first is of serious interest too, but Cox’s wording suggests that the apprentice is inducted into existing knowledge and structures whereas the mutuality in the second implies more authentic ‘co-learning.’ Cox’s concern that the third ‘marks a distinct shift towards a managerialist stance’ (p.527) is not at all relevant.
CHAPTER 9: BUSINESS EDUCATION

9.1 Introduction

This chapter looks at business education from several angles. First, participants’ views of the university and of business programs are canvassed, and these range from critical to cynical. Secondly, one journal, the *Journal of Education for Business*, is closely scrutinised and useful pockets of writing on innovation are discussed. This journal was chosen because it arose most frequently in electronic literature searches. Thirdly, the provision within New Zealand of business education for entrepreneurs is examined, and it is found that the focus seems to be on the study rather than the experience of entrepreneurship. Fourthly, I report on some of the papers presented at the International Entrepreneurship Research Exchange held in Auckland in January 2006. Finally, the participants are heard again, and their insistence on ‘a swampy business school’ where experiences are authentic and involve learning through risk-taking is noted.

9.2 The university

An MBA program is offered at each of New Zealand’s eight universities. Glen Slater says they are ‘for people in corporates. It’s the ticket to the next level in their pay rise.’ He explains that MBAs are:

> terribly branded and terribly marketed as an end rather than a beginning, so they market it as do this and your life is sorted. I also think that most MBAs, masters’ programs, postgraduate diplomas, especially from up the road[^23], are totally misrepresentational in their marketing. I know that from my own experience. I read the material for my own master’s degree, what was published before I did my master’s degree, [and] what's just been recently published. I know for a fact that they haven’t changed anything in the last nine years, so the competition for students amongst the universities means the market has just gone crazy and they don’t let you anywhere near what they promise, or what they charge for.

[^23]: The University of Auckland
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Glen goes on to argue that:

Teaching is not the primary duty or the primary reason why people work there, and I mean I guess this is true of any university around the world. A great number of people who may be teaching classes really think it’s a pain in the arse, don’t want to be there, don’t want to teach a class. They want to get on with their own research.

Tony Falkenstein would agree. He was Chair of the Brand Committee for the redesign of the University of Auckland’s Business School that was renamed the Graduate School of Enterprise and that, in 2007, moved into the new Owen G. Glenn Building (see also previous chapter). Tony says that in addition to people from business:

we had all these academics on this committee and so I roll up to the first meeting and said ‘[…] if every decision we make, if we just focus, “is this going to produce a better student?” we’ll be going in the right direction […],’ and so I got howled at. ’What do you mean, what are you talking about? This is a research-led university, a research-led university, we focus on bloody lecturers and the academics.’

From his perspective as a recent graduate, Glen Slater adds that ‘the people who are running the school are more interested in the study of entrepreneurship themselves than necessarily imparting the tools.’

This is a manifestation of the tension between the high ground and the swampy lowlands, and it is noteworthy that Nowotny, Scott and Gibbons (2001) argue that ‘the future university will need to be more of a synergistic institution’ and ‘will have to acquiesce in a process of de-institutionalisation, because, in a mode 2 “society,” the boundaries between “inside” and “outside” make no better sense than those between research and teaching’ (p.91). Pete Rive, however, is likely to consider this as a pipedream. He says: ‘When you see universities fighting between each other […] and internally between schools, the concept of multi-disciplinary, I mean you don’t even really want to call it a discipline because it has to be far more about free flow.’ Pete sees the university as ‘slow,’ ‘unresponsive’ and ‘skeptical.’ He adds ‘there’s nothing wrong with skepticism but […] it can be a self-defense mechanism.’
Bauman (1997) concurs when he observes that ‘[t]he opening of the information superhighway revealed […] how the] authority of the teachers used to rest on the collective monopoly of the sources of knowledge and the no-appeal-allowed policing of all roads leading to such sources’ (p.22). He becomes defensive, however, when he argues testily that ‘[w]ith those once exclusive property rights now deregulated, privatised, floated on the publicity stock exchange and up for grabs, the claim of academia to be the only and the natural seat for those “in pursuit of higher learning” sounds increasingly hollow to everyone’s ears but those who voice it’ (p.23).

Less defensively, Bridges (2000) argues that ‘[o]ver the last two decades almost every one of the boundaries which gave definition to a university and to students’ experiences of it has been removed’ (p.38). He notes, for example, ‘a shift from the formal knowledge production […] to locally centred, contextually applied, transdisciplinary, highly reflexive, experience-based knowledge’ (p.47). Quoting Scott (1997), he describes this as ‘an open system in which “producers,” “users,” “brokers,” and others mingle promiscuously’ (p.47). It is noteworthy that while Bridges provides lists of questions about this and other matters, he offers no answers and concludes with a question: ‘how do we manage all this when, in truth, we may confidently predict some radical changes ahead but only guess at the form in which they will be realised?’ (p.53). This would doubtless frustrate Tony Falkenstein who says that businesspeople say ‘there’s a hurdle there, let’s go around it’ whereas ‘educators generally tend to say […] “Let’s have a conference, let’s have a meeting and let’s talk about it.”’ Tony believes, therefore, that in twenty-five years’ time the university will be ‘not much further on and I don’t think that’s just a problem here. I think it’s a problem internationally.’

9.3 Criticism of business education programs

In Chapter Two, several writers who are critical of business education were introduced (Gardner, 1999; Mintzberg, 2004; Gregory, 2000) along with several others who identify a mismatch between business programs and the chaos and pace of
entrepreneurial life (Birch in Aronsson, 2004; Meyer, 2001; Grint, 1997; Hindle 2005). Massey (2005) argues that ‘[c]reativity has replaced quality as a measure of success of teamwork, processes and organizations’ (p.17) but Pete Rive believes that business schools ‘haven’t been too good on developing the creative mind.’ Glen Slater goes further and suggests the university is the wrong environment:

Now if you are trying to run courses in entrepreneurship or if you were trying to impart skills, then that’s absolutely the wrong environment to be in, and yet they advertise and attract students, telling people that they will impart those skills, they will give you those skills. [...] You can’t just stand there and tell it and you certainly can’t stand back and say ‘Oh well here it is, learn it yourself [...]’

Hindle (2005), however, notes the tendency to conclude that the business school may be the wrong place but he insists that place is a second order issue and that the primary issue is ‘experiential teaching methods and milieus’ (p.6). Hindle’s view was explained in more detail in Chapter Two.

A number of participants expressed a disregard for university business programs because they themselves have been creative and successful without them. Cam Calder says ‘I’ve always had a healthy disrespect for business actually. Funny, because I’ve never done any formal training in business at all and a lot of it seems to be jargon-loaded.’ Nancy Beck suggests that:

I think if you’re a creative person and if you are intelligent enough to get your own business going [...] a lot of the little things, I mean, you can just work out. It’s just a matter of ‘Woops, we’re getting into a messy situation, how do we get out of it okay?’ or ‘Whoops, I’m not going to do that again.’ Be prepared for it next time.

Brigid Hardy’s critique is more revealing. She confesses ‘I’m a tiny bit cynical of teaching business at all’ and says that ‘as a student I was probably a bit too idealistic to study business. It didn’t really interest me.’ She adds that ‘I saw it as a little bit being taught as opposed to being encouraged to think.’ Brigid contrasts education for business with the study of law:

Law is really a certain type of thinking that enables you to get through. You’re never going to know all the legislation. You’re never going to know all the cases.
It’s just, yeah, how do you think in that way? How do you argue? How do you, you know, put it all together like that? It teaches you, you know, rigour and precision and discipline and you know, skills with language. I think I can draw the same analysis with you know, same analogy for law in a way and yeah, I think that process it gives you, it gives you practice, and it gives you a love and appreciation of certain things and so that you can enjoy it more as you do it because you can see how it fits together and things so it must be true with business. I have really felt uncomfortable and really struggled when I first started at McKinsey. I remember just thinking oh god, I’ve got to write this macro and this excel thing and I don’t even know, I hardly ever worked powerpoints and I didn’t know, you know, all these silly skills like that. I didn’t really have the underlying confidence that actually it’s really just about building something.

Brigid’s contrast between knowing all the legislation and acquiring a way of thinking is paralleled in Lachs and Lachs’s (2002) argument that:

There are two different ways of storing knowledge. We safeguard the information we develop by writing it down, publishing it in books, or putting it on the Internet. We also stockpile knowledge in living human beings in the form of experience and the products of reflection. The information contained in books is inert; it does not reorganize itself as does knowledge in persons. […] What is stored in persons, by contrast is living knowledge constantly in the process of transformation. (p.223)

Indeed, the benefits in studying law that Brigid identifies reflect the transforming power that is required of her object of criticism. Thus, for business education, the law’s ‘way of thinking’ could instead be a way of being ‘that enables you to get through,’ and the ‘rigour and precision and discipline’ and ‘skills with language’ might instead be ‘passion and hard work and tenacity’ and ‘skills in networking and communication.’ The key indeed is developing ‘underlying confidence […] about building something,’ which in this case is an entrepreneurial business.

Kirby (2002) reports, however, on a study of seventy-six MBA students at the University of Surrey that measured propensity to take risks, creative tendency, need for autonomy, need for achievement, and internal locus of control. The research ‘discovered that when compared with a similarly sized sample of business owners/managers, the students had lower performance scores on all of the measures, revealing a somewhat lower propensity to be entrepreneurial’ (p.18).
This is seriously at odds with the report to the UK National Council for Graduate Entrepreneurship in which Hannon (2004) argues for business education to increase desirability and feasibility for entrepreneurship and, thereby, enhance propensity – see also Chapter Two. It seems possible that Kirby’s ‘lower propensity’ may arise, in part, because students are induced into passivity through the learning processes with which they engage. Indeed, Tony Falkenstein reports that:

I sometimes talk up at Auckland and I go into some of the lectures prior to their coming in and nothing’s changed since I was at university. I mean they’re just so boring except that it’s even worse because they have, they’re able to use you know, whiteboard projectors up on the whiteboard and kids are trying to get this down and before at least they had to write on the whiteboard so people could take it down. Now they’re going from here to there and everywhere and next slide and, it’s not very exciting.

Tony finds no sign of Birch’s (in Aronsson, 2004, p.289) education for gazelles rather than mice, nor of Meyer’s (2001) notion of education as ‘the lighting of a fire’ rather than ‘the filling of a pail’ (p.2).

9.4 Collaborative work

Tony Falkenstein sees business programs in terms of Pratt’s (1998) transmission model of teaching which focuses on the delivery of knowledge (p.38), but a close examination of the Journal of Education for Business over the period January 2002 to August 2007 leads to a different understanding of business education. Richards-Wilson (2002) sets the scene by claiming that ‘[a]mbiguity and uncertainty are replacing stability as the status quo’ and proposing that the ‘[b]usiness schools must look forward and prepare MBA graduates for this new world’ (p.299). Huber (2003) also stresses the importance of students developing a ‘tolerance for ambiguity’ (p.52).

Cannon, Klein, Koste and Magal (2004) note criticism of the delivery of business education through function-focused individual courses because ‘students obtain a relatively narrow perspective of the organization and are not well equipped to handle crossfunctional problems’ (p.93). They list various efforts to achieve curriculum
integration including team-teaching and multidisciplinary case studies but they argue that these have been introduced in an ad hoc way rather than through curriculum design. They propose, therefore, an integrated strategy combining multidisciplinary cases with enterprise resource planning (ERP) software to provide students with ‘multidisciplinary exposures to a single company’ (p.100). Helms, Alvis and Willis (2005) also write about the need to ‘integrate seemingly disparate functional disciplines’ (p.29), and they report on the success of a case study that combined production and operations processes and manufacturing strategy from a management perspective with product-costing techniques from an accounting perspective. They conclude that the ‘team teaching concept makes both practical and intuitive sense. It is a way to replicate business processes in practice and supports the move to participative management and team decisionmaking’ (p.33).

Both of these articles propose innovative types of case study that involve collaborative work, but McCarthy and McCarthy (2006) point out that ‘case studies cannot substitute for learning that occurs from a direct, personal encounter with the phenomenon being investigated’ (p.201). They report on a project where ‘job-shadowing’ boosted confidence levels beyond what was achieved through case studies, and they go on to argue that because the most important influence on self-efficacy is personal experience, business programs should introduce job-shadowing. The argument for experience is sound, but the solution is unconvincing. It is hard to imagine nascent entrepreneurs remaining in the shadow for very long. An internship of some kind would be more fitting, and Rothman (2007) reports on suggestions from 345 interns about how their employers could improve the experience for future interns. The findings are collapsed into eight lessons: provide a clear understanding of what is to be accomplished; clearly communicate expectations right from the start; provide challenging assignments; provide a reasonable timeframe; provide meaningful feedback; be available for guidance; expose the intern to other parts of the business; and treat the interns with respect (p.143). If the education and development needs of entrepreneurs are to be satisfied through some form a community-based learning process (see previous chapter) and an apprenticeship/internship is a possible means for this, then Rothman’s
findings provide useful pointers. The interns’ development would be enhanced further if, as well as learning within a community of practice, appropriate tools are provided for reflecting on the experience. To this end, Sidle and Warzynski (2003) argue that ‘ANT [actor-network theory] provides a fresh perspective on the importance of relationships between human and physical actors’ (p.44).

Akan (2005) highlights the importance of groups over individuals, ‘elevates becoming over the modern ontology of being’ (p.214), and stresses the importance of conversation, and Stone and Bailey (2007) argue that teamwork enhances self-efficacy. Three other writers emphasise the importance and benefits of teamwork, although their arguments almost end in bathos. Ashraf (2004) looks at group projects only to warn in the end that ‘unless there is a reward for industrious students for carrying the less motivated ones along, the industrious student will be short-changed in terms of grades’ (p.216). Yazici (2004) similarly argues that ‘business education should prepare learners not only for technical excellence but also for effective collaboration’ (p.110) but her suggestions for consideration include collaborative exams, lab exercises and class practices. More exciting is Leo and Tai’s (2004) account of a cooperative learning strategy based on a consulting project that involved three teams: students, faculty, and field study contacts. However, the success of the project is somewhat diminished by the conclusion: ‘The question that remains is whether the benefits justify the costs associated with implementing the process’ (p.293).

There are two ways to interpret the articles discussed so far. On the one hand, they represent only islands of novelty. On the other hand, however, there is a potency that emerges when their themes are brought together: the need for the curriculum to be designed and not improvised, based on collaboration and conversation, multidisciplinary and integrative, enable becoming, require challenging work, involve personal encounters with the phenomenon being investigated, and prepare students for ambiguity and uncertainty. These align well with the requirements for nurturing creativity and resourcefulness already covered in Chapters Five to Seven, and they are
a far cry from Tony Falkenstein’s caricature of the unexciting lecturer and the powerpoint presentation.

9.5 Pockets of innovation

The *Journal of Education for Business* also includes useful articles on critical thinking, multiple intelligences, and learning styles. Braun (2004) examines common approaches to developing critical thinking and concludes that further work is needed to expand learning opportunities across disciplinary boundaries and prepare graduates ‘to handle the information volumes and fast-paced decision making environments of the workplace’ (p.235), and Page and Mukherjee (2007) report on a successful course on business negotiations with ‘the dual purpose of teaching students to negotiate and sharpen their critical thinking skills’ (p.251). While critical thinking involves linguistic and logical intelligences, some other writers acknowledge the work of Gardner and Goleman (see Chapter Six) and take a wider look at intelligence. Ashkanasy and Dasborough (2003), for example, report on a work in an Australian university where they found that ‘teaching about emotions and emotional intelligence in leadership courses can [positively] affect team performance’ (p.21), and Muncy (2006) proposes ‘the development of the full spectrum of intelligences that marketing graduates need to compete’ (p.305).

Loo (2002) discovered that Kolb’s learning styles (divergent, assimilator, converger, accommodator) were not evenly distributed across the population of business students and recommends that ‘educators encourage students to use all four learning styles appropriately’ (p.255). It remains, however, that some styles simply do not suit some students. More helpful is Ulrich’s (2005) study in which he identified twenty-five different pedagogical strategies and queried their suitability for students in four different business majors. He found some similarities across all majors but otherwise discovered ‘a decrease in person orientation and increase in thing orientation as one moves from marketing to management, then to finance, and, finally, to accounting’
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(p.273). It seems reasonable to assume that entrepreneurs would be at the person-orientation end.

In contrast to these items, articles on the use of electronic technologies are pedestrian and do not advance practice towards the development of more capable graduates. Driver (2002) reports on a survey of students that examined the benefits of ‘web-centric’ learning environments and found that ‘students seemed to benefit positively from the instructional methods used’ (p.236), and Wynne and Filante (2004) provide guidelines for the design of an international finance field study course and the application of digital technologies to assist in content delivery. Burkey (2007) observes that ‘[e]lectronic commerce is changing the business world dramatically’ (p.276). She conducted a survey of a hundred colleges and universities offering e-commerce courses in undergraduate and graduate programs, found that course titles do not always relate to content, and concluded that some graduates will not have adequate knowledge and skill to work in e-commerce. This may be noteworthy, but the concern is with competence rather than with broader capability and becoming. It is significant that apart from using the web for finding information, the use of electronic technologies did not rate in the interviews with participants, and Daniel Batten argued, indeed, that emails ‘distract and there’s been some scientific proof of this that they actually lower your, well, not only your creativity but actually your IQ generally.’

Peterson (2006) proposes that ‘futurism’ has a role to play in MBA programs. He states that ‘the general orientation of futurists is to overcome the typical resistance to looking and thinking ahead’ (p.335). While most of the articles from the *Journal of Education for Business* discussed in this chapter describe innovative pockets of pedagogical practice, a collection of pockets does not make a whole curriculum garment, and what seem missing are futurists’ perspectives and any departure from the curriculum conventions of last century. A revealing insight into business school mentalities lies in an article by Hazeldine and Miles (2007) that reports that ‘many deans would like their [business] schools to become somehow more entrepreneurial, and that these same deans recognize that much of the burden of cultural change will fall on them’ (p.237).
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Amongst the main issues deans identified as critical in encouraging entrepreneurship were re-evaluating the school’s mission, the role of the dean to nourish an entrepreneurial capability, and top management linking entrepreneurship with the school’s strategy (p.238). These are lukewarm levers, and are a far cry from Heames and Service’s (2003) argument that “[t]he motto of a truly innovative leader or teacher should be, “If it ain’t broke, break it and start again’” (p.122). It is perhaps not surprising that Levenberg, Lane and Schwarz (2006) ask: ‘Should teaching entrepreneurship be the exclusive domain of business school faculty, or should interdisciplinary faculty teams be created to lead curriculum initiatives?’ (p.280). It is significant that at the end of his interview, Cam Calder concluded that what is required for entrepreneurs is a ‘MA (Entrepreneurship).’

9.6 University provision in New Zealand

The previous two sections examined a general business education journal but it is arguable that entrepreneurship is a phenomenon separate from mainstream business programs. In New Zealand universities, however, entrepreneurship is deeply embedded within business school contexts.

The University of Otago is now the only institution that offers a degree specifically for entrepreneurs. The Master of Entrepreneurship ‘caters for recent graduates and professionals who aspire to become entrepreneurs and wish to put a new venture into practice’ (University of Otago, 2006a, p.29). The program is comprised of eight papers, seven of which are conventional courses (‘Finance for Entrepreneurs’ and ‘Feasibility Analysis,’ for example) and the eighth is titled ‘Report on Business Incubation’ and is worth 36 percent of the total program credits. Although the program is locked into the traditional model of course delivery, the incubation course seems useful because its stated purpose is ‘to develop a new venture that is ready to attract external equity’ (University of Otago, 2006b, p.149). Authenticity may be in doubt, however, because the practical project that leads to the report can be ‘based around the student’s or a local entrepreneur’s new venture’ (University of Otago, 2006a, p.29).
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This university also offers six undergraduate courses on Management and Innovation. One is titled ‘Entrepreneurship’ and the course descriptor states it is:

A survey of the major topics in entrepreneurship and the skills generally needed for success in an entrepreneurial venture, with many sessions covered by entrepreneurs from all fields. The paper will be structured around a new venture case, and will develop understandings of the issues related to starting a new business. (University of Otago, 2006b, p.177.)

This may well be an interesting and well taught course, but it is a study of others’, rather than an immersion in, experiences of becoming an entrepreneur.

The University of Canterbury offers one undergraduate paper on ‘Entrepreneurship and Small Business Development’ and the MBA includes a paper also titled ‘Entrepreneurship and Small Business Development.’ The aim of the latter is ‘to enable students to develop the insights and confidence to act on their own or advise others on […] identification, evaluation and development of new ventures; growth and development of SMEs, including finance; issues linked to maturity and succession in family businesses; and how to develop an effective business plan’ (University of Canterbury, 2007). Again, the emphasis is on analysis and writing, and the course seems pitched at a level of generality where the passion and creativity that distinguish the entrepreneur from the small businessperson are given no special place.

As part of its MBA, Victoria University of Wellington also offers one paper on ‘Innovation and Entrepreneurship’ (Victoria University of Wellington, 2007). The course assessments are: 10 percent for answering questions on Richard Branson from the course textbook; 20 percent for a presentation to the Wellington Chamber of Commerce on ‘Enhancing creativity and entrepreneurial DNA: A kiwi blueprint for action’; 50 percent for a plan in the form of an ‘idea tracking case’ or a feasibility plan; and 20 percent for a weekly report folder. Some of these activities seem innovative, but it is significant that at the point where the students have produced their feasibility plans, they have still not necessarily descended to the swampy lowlands amidst mode 2 knowledge and chaos.
Waikato University offers a Postgraduate Diploma in Entrepreneurship and Innovation comprised of a course on ‘Entrepreneurship Theory and Practice’ and five general business courses (University of Waikato, 2006, p.39), and the MBA of the University of Auckland’s Graduate School of Enterprise includes an optional ‘Entrepreneurship and Consulting Project.’ This ‘hands-on project […] gives exposure to the realities of developing a business,’ and ‘syndicate groups might work directly with developing companies to give advice on specific business problems’ (University of Auckland, 2006, p.13). This course is assigned only 12.5 percent of the credits earned in the second year of the program, therefore only 6.25 percent of total program credits. Massey University and the Auckland University of Technology seem to fit the pattern of provision already established in this section, and Lincoln University offers no courses that focus on entrepreneurship. Until 2007, Unitec Institute of Technology, the largest polytechnic in New Zealand, offered a Master of Business Innovation and Entrepreneurship, but this has been cancelled due to a lack of demand. Four participants in this project have had an association with this master’s program: Tracey Kirwan read the prospectus but was not interested in inquiring because it ‘looked very theory-based, and I didn’t even understand some of the course titles’; Nancy Beck enrolled but withdrew when she was not allowed to start the first course because an unexpected overseas marketing trip prevented her from attending the orientation session; Debbie Duis completed the postgraduate certificate and did not go further because ‘I outgrew it’; and Robert Franich completed all the papers, produced a thesis and graduated, but is still not an entrepreneur.

Mintzberg (2004) notes that starting in 2000, Harvard University required all first year business students to take a course titled ‘The entrepreneurial manager’ and the university also offered entrepreneurial electives. He says that the 2003 Harvard website stated that the entrepreneurship curriculum enables ‘the student to test their business ideas in a risk-free environment.’ Mintzberg asks ‘[b]ut is it entrepreneurship if it is risk free?’ and he adds that:

True entrepreneurs often have an artistic bent – they are visionaries with frequent insights. As such […] many ignore MBA programs. These are individualists

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intent on breaking away from the crowd, while MBAs more commonly want to be in the middle of it. (p.131)

Mintzberg’s critique seems to apply equally well to university business education programs in New Zealand. There are few signs of a match between current provision and the talents and temperaments of the nascent, start-up and experienced entrepreneurs participating in this project. It even seems questionable whether entrepreneurs themselves genuinely are a target market given that course information about the MBA entrepreneurship courses at both Auckland and Canterbury state that graduates will be able to provide entrepreneurs with advice.


So far this chapter has looked at entrepreneurship in the contexts of the business education literature and provision within the business schools of New Zealand’s tertiary institutions. A further, local lens is the AGSE International Entrepreneurship Research Exchange which has been held annually since 2004. The sponsor is the Australian Graduate School of Entrepreneurship (AGSE) at Swinburne University of Technology, and its partners are five other Australian universities, two institutions in New Zealand and one in Singapore. I attended the 2006 conference in Auckland. A conference paper on motivation and gender (Kirkwood & Campbell-Hunt, 2006) has already been referred to in Chapter Five.

Eleven papers were presented in the Entrepreneurial Education section of the conference but only three were published in full in the conference proceedings. The award for Best Paper went to O’Connor, Cherry and Buckley (2006) who explain that over time an area of study within a university setting comes to be considered as a ‘discipline,’ but ‘some complex areas of activity […] are better considered in a postmodern social construction whereby the area of practice is not framed as cross-disciplinary or even multi-disciplinary but rather post-disciplinary’ (p.138). They argue that entrepreneurship is better viewed as a ‘domain of practice’ than as a discipline because it is ‘multi-layered and multi-dimensional’ and ‘attracts popular as well as
academic interest’ (p.138), and its complexity ‘defies simple or reductionist framing’ (p.139). They argue, thus, for ‘cooperative inquiry’ to enable policy-making to draw on the breadth and depth of a variety of ‘equally valid and worthwhile disciplinary voices’ (p.141). Using this method, the researchers investigated socially embedded differences within the entrepreneurial domain of practice in Australia and found that:

The use of words in the data represented a bounded view of discipline in that it was considered to be limiting and constraining and inconsistent with entrepreneurship. Whereas when the reference group responded to the question about entrepreneurship as a domain of practice, they expressed a sense of energy, movement and freedom. (p.152)

While the conclusion is aimed at researchers and policy-makers, it also seems valid to infer that treating entrepreneurship as a domain of practice for curriculum design opens the possibility, if not the need, for disestablishing boundaries between discipline-based courses so all the voices of the domain can be heard at the same time. Such a possibility extends the bilateral arrangements proposed (above) by Cannon and others (2004) and Helms and others (2005) to something far more global.

The other two published papers are much less inspiring. Jones (2006) suggests that ‘the designers of contemporary entrepreneurship curriculum (sic) will themselves be entrepreneurs’ (p.684) but the learning and assessment tasks (student presentations, workshop game, case study discussion, reflective journal, major assignment and exam) are very prescriptive and do not at all match the writer’s opening argument that the curriculum should be ‘an evolving process without a starting or ending point’ (p.684). Cooper and Lucas (2006) report on the UK ‘Enterprisers Programme,’ a five day interactive, residential leadership event that increased students’ entrepreneurial capabilities and intent. They report that six months later the levels of self-confidence remained high but ‘the programme did not do much to change the active intention of the participants to start a company’ (p.680). The problem may be that the students did not get to take steps towards actually starting a new company because ‘[t]he emphasis of the program is on helping participants to unlock their entrepreneurial spirit […] within a “safe” environment […]’ (p.672). It is noteworthy that in Cooper, Ward, Lucas and Cave (2006), a paper presented in the Entrepreneurship Theory and Practice
section of the conference and not published in the proceedings, the same writers along with two others argue that ‘it seems probable that the single, largest source of venturing self-efficacy is industry work experience’ (p.10) but they add that ‘watching and learning from successful and innovative employees is the most important experience students will have before they become full-time employees’ (p.10). This is very similar to McCarthy and McCarthy’s (2006) argument for job-shadowing, and it is equally unconvincing.

9.8 ‘A swampy business school’

Tony Falkenstein has invested a lot of personal time and money into tertiary business education and I discussed with him Schön’s images of the high ground and the messy lowlands. Tony says of entrepreneurship:

> It’s possibly not really a university subject […] It’s practical, it’s like doing woodworking or something. […] It’s a practical subject rather than a theoretical subject and so it’s very hard being brought up in that whole academic institution to change what’s there, but if you’re starting from scratch now, yeah, you could say okay let’s you know, let’s start with a swampy business school.

Debbie Duis would concur. Through her experience of studying for the MBIE she:

> realised that academics were people with qualifications and while I respect their achievements they are not overly practical and some of them are so overeducated they seem to have completely lost the plot, and I realise that this was like a game of chess and that if I played it the right way, I would get what I wanted.

As nascent entrepreneurs, Debbie and Tracey Kirwan provide important insights into the desirable characteristics of a program aimed at enhancing entrepreneurial capability. For Tracey, ‘it would be interactive and it would be real. It would be totally real.’ It would have ‘theory embedded in order to get the point across’ but ‘it will be where possible always using live or something where I can put my hands on it.’ Debbie’s version of ‘real’ means ‘take away the comfort zone. Pull it out from under them.’
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The other participants generally agree. Bill Buckley explains by way of analogy that:

Guys don’t win gold medals in the Olympics and things like that just because they’re physically strong. They’ve got to have strength, they’ve got to have bloody knowledge, they’ve got to have willpower, they’ve got have everything don’t they? So, those guys that can make it [...] a lot of sports are like that. It’s the guys that would make good entrepreneurs, they show signs quite early I think.

For those who ‘show signs,’ John Alldred advocates education that involves:

empowering people from quite early on, identifying the people that have got the smarts and then giving them, you can’t give it to everybody, give those people the power early on to make real decisions and they’ll soon quickly learn if they’re going down the right track because they’ll fail, you know, or they won’t fail.

Bill Buckley also stresses the importance of learning by mistakes (see Chapter Eight), and Robert Franich emphasises ‘helping people to learn the discipline of being experimental’ and he discusses the importance of ‘allowing failure as part of that learning process, and not failure to make them feel the failure. The failure is being also an exciting part.’ He adds that:

In some aspects of our life in New Zealand we do punch above our weight. Sport is one of them. There have been some businesses that have done that like the Hamilton jet boat and things like that. They’ve been clever, successful, lots and lots of them. The big question is: ‘Has the university, actually the education system, actually dumbed us down too much that we’ve become a little perhaps obese and content?’

If Debbie Duis is right, and chess is the game that is played, then the answer to Robert’s question may well be ‘yes.’

9.9 Conclusion

Gibb (2002) argues that:

The pursuit of entrepreneurial behaviour is seen as a function of the degree of uncertainty and complexity in the task and broader environment and/or the desire of an individual, in pursuit of an opportunity or problem solution, to create it. (p.233)
He contends that a new paradigm is required for entrepreneurship education and he doubts this will come from university business schools. Kirby (2002) is more hopeful. He asks ‘[c]an business schools meet the challenge?’ and argues that ‘the successful entrepreneur has a set of personal skills, attributes and behaviour that go beyond the purely commercial. It is these attributes, this way of thinking and behaving, which needs (sic) to be developed in students’ (p.12).

As already stated in Chapter Five, Bolton and Thompson (2000) have produced a profile of entrepreneurs’ talents and temperaments. This profile identifies talents focused on creativity, courage, focus, opportunity-spotting, teamwork, networking, advantage orientation and resourcing, and the temperaments are considered to involve competition, urgency, opportunity-taking, performance orientation, responsibility, ego drive, mission, activation, and dedication (p.41). Bolton and Thompson have also provided a model for entrepreneurship education that starts with rather than ignores inborn talents and temperaments, and that nurtures these and ‘imparts’ technique seamlessly through structured and unstructured learning experiences aimed at excellence (p.34). The model is helpful because it allows Kirby’s (2002) concerns about the need for the ‘attributes’ of entrepreneurs and their ways of thinking and behaving to be addressed. However, there are three questions to answer: How is seamlessness achieved? How is an appropriate balance between structured and unstructured experiences established? How are techniques imparted?

The answers are self-evident. First, it is significant that throughout this chapter various writers have stated the importance of inter-disciplinarity, multi-disciplinarity or cross-disciplinarity. O’Connor and others (2006) go further and propose the notion of post-disciplinarity and this fits Pete Rive’s point that ‘it has to be far more about free flow.’ It is arguable, therefore, that the seamlessness that Bolton and Thompson identify as the key characteristic of the excellence that is to be achieved must also apply throughout the learning experience and that the concept of a post-disciplinary domain of practice is therefore useful for curriculum design. Secondly, it seems that while the literature tends towards advocacy for innovative but nonetheless structured learning
and experiences, the participants in this project have argued more for authenticity and
learning through taking genuine risks. It seems, therefore, that the balance must be in
favour of unstructured and chaotic experiences. Thirdly, it seems that the imparting of
technique is better viewed as the becoming of the capable entrepreneur through
participation in practice-based community processes. This was argued in the previous
chapter and is supported by much of the literature examined in this chapter. Having
now worked through key issues related to learning processes and to business education,
the argument is now at a point where a proposal for a curriculum theory can be started.
CHAPTER 10: CURRICULUM PROPOSAL – THEORY

10.1 Introduction

So far a link between entrepreneurship and creativity has been established, and it has been argued that entrepreneurs are intrinsically motivated by challenging work that is fun and involves risk-taking. It has also been argued that exposure to diversity and chaos is important for stimulating the cognitive processes that lead to creativity. Because creativity alone cannot deliver entrepreneurial accomplishment, the qualities of the resourcefulness necessary for business success have also been identified. It was explained that this involves business networking and relationships with staff and customers, and vision, enthusiasm and persistence, and that these characteristics are concerned with ways of being rather than knowledge and skill. The nurturing of entrepreneurial creativity thus requires a curriculum that provides a process for becoming. For this purpose, the suitability of treating learning as a practice-based community process has been established, and it has been argued that the focus of current university programs tends towards the study of entrepreneurship rather than enabling the becoming of the individual entrepreneur.

On this basis, the next three chapters propose a curriculum vision that is founded on the literature and on the stories and views of the fourteen participants. Chapter Ten provides a theoretical foundation through an examination of two contemporary writers, William E. Doll Jr and Ronald Barnett. These two were chosen because both have exciting ideas about the problem under consideration. Further, Doll is American and Barnett is British, and neither has ever referenced the other’s work. Despite differences, there is a remarkable convergence, and this suggests that, in the English-speaking world at least, there is common ground on which to design a suitable curriculum space.
Chapter 10: Curriculum Proposal – Theory

The key ideas presented in this chapter include Barnett’s (2004) argument that in an age of supercomplexity, the educational task is ontological rather than epistemological, and Barnett and Coate’s (2005) subsequent proposal for a curriculum for engagement. Close consideration is also given to Doll’s (1993) advocacy for a curriculum based on a matrix of 4Rs – richness, recursion, relations and rigour, and his (2002) argument for 5Cs – currere, complexity, cosmology, conversation and community. It is proposed that the cosmology of twenty-first century life requires that creativity be added as a sixth C, that creativity will have a generative impact on the five other Cs, and that this mix will enable a potent curriculum for nurturing the becoming of the entrepreneur.

After establishing a theoretical foundation in this chapter, Chapter Eleven will go on to translate the broad vision into a possible practice, and Chapter Twelve will then look at this practice through the lens of each of the six Cs.

10.2 What is curriculum?

Barnett and Coate (2005) observe that ‘[a]ll around the world, higher education is expanding rapidly’ but ‘there is very little talk about curriculum’ (p.1). They suggest that ‘curriculum design has too readily been understood as tasks of filling of various kinds (filling spaces, time and modules, not to mention minds)’ rather than ‘the imaginative design of spaces’ (p.3). Roberts (2003) also notes that in New Zealand: ‘Considerable energy is expended in university discussions over degree requirements, prerequisites, co-requisites, cross-crediting, and other regulatory matters, but deeper questions about knowledge, culture, intellectual inquiry, and the aims of higher education often never make it to the debating table’ (p.506).

Barnett and Coate (2005) note that within the UK, considerations of curriculum matters are usually ‘contained within a discussion more oriented towards improving teaching’ (p.15). A decade earlier, Pinar, Reynolds, Slattery and Taubman (1995) observed that amidst the ‘cacophony of voices’ (p.xi) of curriculum theorists, ‘the field no longer sees the problems of curriculum and teaching as technical problems, that is, problems
of “how to.” The contemporary field regards the problems of curriculum and teaching as a “why” problem’ (p.8). Nonetheless, a decade later Pinar (2004) notes that in the US, many teachers continue to understand curriculum as the content they are required to cover, and he reiterates an earlier argument (Pinar and others, 1995) for seeing curriculum instead as ‘an extraordinary complicated conversation’ (p.186). Quoting Oakshott (1959), Pinar (2004) adds that:

Conversation ‘is impossible in the absence of a diversity of voices: in it different universes of discourse meet, acknowledge each other and enjoy an oblique relationship in which neither requires nor forecasts their being assimilated to one another.’ (p.188)

In like vein, Kinchloe, Slattery and Steinberg (2000) note in T.S. Eliot’s (1934) poem *Choruses from ‘The rock,’* ‘his critique of the ‘rational obsessions’ of the modern world where he asks:

Where is the life we have lost in living?  
Where is the wisdom we have lost in knowledge?  
Where is the knowledge we have lost in information? (p.302)

In answering, they argue for a ‘holistic model’ (p.301) in which ‘communities constantly ask questions, initiate dialogue and seek wisdom’ (p.302).

Notions of conversation and community are thus central to a ‘why’ approach to understanding curriculum. In more practical terms, as noted in Chapter One, Barnett and Coate (2005) suggest that ‘[c]rudely, we might state that a curriculum is a set of educational experiences organized more or less deliberately and that pedagogy is concerned with the acts of teaching that bring off that curriculum’ (p.5). The difference is indeed crude but it helps make the point that curriculum is about code rather than method (Hamilton & Weiner, 2003), about architecture rather than construction.

It is noteworthy that in his book *The architecture of happiness,* de Botton (2006) explains that:

buildings are not simply visual objects without any connection to concepts which we can analyse and then evaluate. Buildings speak – and on topics which can be readily discerned. They speak of democracy or aristocracy, openness or
arrogance, welcome or threat, a sympathy for the future or a hankering for the past. (p.71)

If curriculum is concerned with conversation and buildings speak, the principal question for the curriculum architect does indeed concern ‘the imaginative design of spaces.’

10.3 William E. Doll Jr

Pinar and others (1995) acknowledge Doll as a major postmodern curriculum theorist, and Slattery (1995) admires the way ‘Doll attempts to forge a path between the constructive and deconstructive postmodern theories’ (p.28). Doll himself (1993) explains that ‘a curriculum that is creative and transformative must combine the scientific and the aesthetic; eclecticism is one feature that makes post-modernism such an exciting movement’ (p.6).

Doll (2002) explains that this is new ground because:

The ghost in the curriculum has been control. I believe the time has come to ferry this spirit to ‘the other side’; not that we wish to live with no control but rather wish to abide here with another, new, livelier spirit of control. (p.28)

He notes that the term ‘curriculum’ first appeared in 1569 in Rasmus’s map of knowledge and is found shortly thereafter in the records of the Protestant universities of Leiden and Glasgow. He adds that ‘[t]he rise of Protestantism, commercialism and the forming of the new middle class brought a new social, commercial and intellectual order – one interested in simplicity, efficiency and method’ (p.30). Doll (1998) says that uniform procedures also brought ‘a sense of intellectual comfort in a time of chaos’ (p.300). Rasmus’s new methodology is a hierarchical ordering from general to specific and was denounced by peers as a ‘vulgar shortcut’ (Doll, 2002, p.31). Nonetheless his work marks the beginning of ‘curriculum’ as a sequential course of study.

24 Doll (1993) insists on the hyphen ‘to show connection with and transcendence of modernity’ (p.16) but by 2002 he seems to have abandoned this in favour of ‘postmodern.’
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Doll (2002) goes on to explain that ‘[m]ethodisation, with its adoption of external control, became the modus operandi of American society and culture’ (p.34) and that this is epitomised by Taylor’s time-and-motion studies in the mid 1890s. Work in scientific curriculum-making followed, and Doll says that Taylor’s management studies can be connected to the curriculum ideas of theorists such as Bobbitt, Skinner and Tyler. Doll notes, for example, that Bobbitt (1912) argued that ‘[o]ur schools are […] factories in which the raw products (children) are to be shaped and fashioned into products to meet the various demands of life’ (p.35), and Doll adds that:

Tyler’s (1950) ‘four questions’ – concerning purposes, experiences, organization, and assessment – assume that goals must be preset, linearly organised, clearly communicated from the manager-teacher to the worker-learner, and assessed in a manner that shows the immediate and quantifiable effectiveness of the whole process. (p.35)

Doll (1989) identifies 1686 as a key date. On 28 April that year, Newton unveiled The system of the world and in effect established the paradigm that ‘dominated Western scientific and intellectual thought well into this century, and continues today, as the foundational model for the social sciences, including education’ (p.243). Doll contends that ‘[d]irect correlations can be made between Madeline Hunter’s or Ralph Tyler’s notions of an orderly curriculum with ends pre-set and Newton’s idea of a stable universe with planets rotating around the sun in perfect harmony’ (p.244). Doll (1993) thus argues that ‘we need to develop a new set of criteria as to what constitutes a good curriculum’ because ‘[w]e are entering a new, eclectic, “post” era. In this era, the past will not disappear but will be reframed continually in the light of an on-going, changing present’ (p.157). Doll (2005) adds that ‘we need a new sense of method, one more lively, creative, imaginative, chaotic and complex than that given to us by modernism’ (p.47).

10.4 Curriculum as an open system

Doll (1989) outlines his curriculum framework by drawing four contrasts. First, he explains: ‘A closed system exchanges energy, but not matter, while an open system
exchanges both energy and matter, and actually rejuvenates itself through this exchange’ (p.246). He contrasts the curriculum model in which ‘ends are pre-set […] and closure is a return to the ends and the objectives to see they have been carried out’ with open systems that ‘literally “feed on flux,” using flux as the substance of their continual becoming’ (p.246). He adds that an open system ‘needs fluxes, perturbations, anomalies, errors: these are the triggers which set-off reorganization’ (p.246).

Secondly, he acknowledges Prigogine and Stengers’ (1984) argument that the ‘emerging “new science of complexity” is more characteristic of reality than is simplicity, but that we have been trained in “terms of linear causality” and now need “new tools of thought”’ (p.247). Thirdly, alongside the dichotomy between the simple and the complex, Doll adds that ‘[w]e, as observers, are inside, not outside the web. Thus knower and known are interactively entwined’ (p.247). Things exist cosmologically rather than in separation, and it is therefore false for the teacher or learner to play a role as ‘spectator’ rather than participant (p.248).

Fourthly, he argues: ‘Change is seen in transformative, not incremental terms; and errors are seen as necessary actions in the progress of development’ (p.249). Change is not externally directed but is rather ‘the result of internal reorganization triggered by the organism itself or by the organism reacting to external forces’ (p.250). Doll thus views ends as beginnings, and his postmodern curriculum is ‘a process of development rather than a body of knowledge to be covered or learned, ends become beacons guiding the process’ (p.250). Significantly, he explains that ‘[w]hile the conscious breakthrough to a new level of organization occurs suddenly and spontaneously, a long period of subconscious preparation appears to be not only important but necessary’ (p.250). This idea is also reflected in the literature on creativity – see Chapters Five and Six, and it seems there may well be a home for the becoming of the creative and resourceful entrepreneur in a curriculum that is an open system where complex and cosmological experiences enable, and even demand, transformation.
10.5 Curriculum as a matrix

Doll (1989) says ‘we will envision curriculum not as a linear trajectory nor as a course (with hurdles) to be run but as a multifaceted matrix to be explored’ (p.251). For this matrix, Doll (1993) introduces a set of characteristics in the form of four Rs: richness, recursion, relations and rigour. Richness ‘refers to a curriculum’s depth, to its layers of meaning, to its multiple possibilities or interpretations’ (p.176). Recursion involves ‘looping, thoughts on thoughts’ (p.177) with no fixed beginning or ending. By way of example, Reynolds (2005) explains that the use of ‘[c]ontrast, the process for detecting difference, is a recursive form of feedback’ that continuously enables us to redraw the map of the territory we experience (p.268). Relations are the connections within the curriculum that are developed through recursion and that give it depth. There are also cultural relations that grow out of a ‘hermeneutic cosmology’ and ‘provide us with a sense of culture that is local in origin but global in interconnections’ (Doll, 1993, p.180). Finally, rigour comes from recognising that ‘one can never be certain one “has it right” – not even to the 95th or 99th percentile of probability. One must continually be exploring, looking for new combinations, interpretations, patterns’ (p.182).

It is noteworthy that Gardner (1999) believes that ‘[m]ost students in most schools […] cannot exhibit appreciable understandings of important ideas’ (p.162) because of the ‘temptation to “cover everything”’ (p.163) and he proposes, therefore, a curriculum based on three ‘formidable’ topics: evolution as an example of ‘the true,’ the Holocaust as an example of ‘evil,’ and Mozart as an example of ‘beauty’ (p.167). He argues that exploring these through ‘a number of symbol systems, schemas, frames and intelligences’ (p.175) helps learners experience ‘a rich and differentiated set of representations of the topic,’ and this ‘conveys to students what it is like to be an expert’ (p.178). In effect, Gardner is proposing a curriculum that is rich, recursive, relational and, therefore, rigorous. For emerging entrepreneurs, three formidable topics could be examples of success, of failure and of opportunity, although there is the risk that such an approach might satisfy the four Rs but nonetheless be more concerned with the study of others rather than the becoming of self.
Doll (2002) safeguards against this possibility when he goes on to propose a vision of curriculum as 5Cs: currere, complexity, cosmology, conversation, and community. The notion of currere was first put forward by Pinar and Grumet in the 1970s. ‘Currere,’ the verb, means to run a course, whereas ‘curriculum’ is a noun. The difference marks a shift in emphasis from ‘the course to be run’ to ‘the personal experience of running’ (p.43). Doll explains that ‘[i]n simple terms, currere is the self’s exploration of its experiences (really, experiencing); in more complex terms, it is the relation of the self to the self in the self’s evolution within the world’ (p.44). Doll notes that Grumet asks ‘[w]hat does this mean to you?’ and this simple question reframes the whole experience from that of being controlled by others to dialoguing with others. Curriculum, thereby, becomes ‘a process or method of “negotiating passages” – between ourselves and the text, between ourselves and the students, and amongst all three’ (p.44).

Doll is keenly interested in mathematics and science. He notes that ‘[t]racing the rise of what is being called complexity theory – and its sister theories of chaos mathematics and non-linear dynamical systems – is daunting’ (p.45). As noted in Chapter Five, Smitheran (2005) also explains that chaos and complexity ‘are not mutually exclusive’ (p.162), and that, put simply, chaos comes from mathematics and is associated with unpredictability, and complexity comes from science and involves ‘studying how parts of a system give rise to the collective behaviors of the system, and how the system interacts with its environment’ (p.163). Doll (2002) thus warns that ‘[l]ooking at curriculum – not as a linear course to be run – but as a complex and dynamic web of interactions evolving naturally into more varied interconnected forms is a formidable task that will require vision and perseverance’ (p.46).

Doll’s notion of a new cosmology comes from Whitehead’s call for a process that ‘sees reality in terms of dynamic movement rather than in terms of the “hard massy, impenetrable” particles Newton posited as the bedrock of reality’ (p.47). Doll thus suggests that:
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To bring the curriculum to life – to recapture the creative energy of all life, the aesthetic-ness that exists in being – we might well consider a curriculum which combines the rigorousness of science, with the imagination of story, with the vitality and creativity of spirit. (p.48)

Curriculum as conversation emphasises the ways [w]e become transformed as our differing views converge on that which presently is beyond us, and the situation itself changes or becomes transformed as we go through the convergence process’ (p.49). Acknowledging Bateson, Doll identifies community as ‘the organisational glue’ which holds the other Cs together (p.50). Finally, quoting Kundera (1988), Doll asserts his belief that ‘through community we can find that “fascinating imaginative realm … born as the echo of God’s laughter” which has eluded us. In this realm, creativity abounds, newness emerges, intelligence develops’ (p.52).

Doll (2005) suggests two Ss where he refers to Holton’s (1973) concept of S1 and S2 science. Holton labels ‘the science of justification (where one “dry cleans” thought of all “personal elements”) as S2 and the “personal struggle” the scientist goes through in arriving at the point where s/he can present justification as S1’ (p.48). Doll explains that ‘textbooks still present knowledge in a formalized, “dry-cleaned,” manner, devoid of personal struggles, doubts, intuitive leaps, guesses that brought knowledge to this S2 refined and justified form’ (p.49). This resonates with Green’s (2003) argument that the curriculum is artificial and his use of Boomer’s (1988) metaphor of the Hollywood western town and the risk that ‘[i]f we don’t take the students, all students, behind our teaching set, then they are being terrorized, however benign our intentions are’ (p.129).

In effect, however, S1 and S2 are types of knowledge rather than candidates for a curriculum matrix. More likely possibilities are Doll’s (2005) other set of Ss: ‘the power of the historically storied, and the generative creativity of the spiritful and spiritual’ (p.47). However, it is arguably that the storied is already contained within conversation and community, and that spiritual is a dimension of the cosmological. What does deserve recognition as an element of Doll’s curriculum matrix is not so much spiritful itself as the broader notion of creativity. Indeed, Doll mentions
creativity in numerous places, some of which are quoted above, but it is not elevated to the prominence it now warrants as a force within the cosmology of twenty-first century life. Creativity also enables novelty and ever new interconnections within complexity, gives freshness to conversation and purpose to community, and it keeps ‘currere’ from tracking onto a course made by others.

The concept of matrix that Doll uses is an array of parts in which all the various facets are interconnected. It is not a rectangular arrangement of mathematical elements. Indeed Davis (2005) notes that the rectangle and the carpenter’s square (norma) are associated with correctness and normality but:

> Beneath the literal surface of these terms is a mesh of rightness and wrongness, of correctness and falsehood, or straightness and queerness. The priority of lines and linearities in the language is nested in the contested spaces of good and evil, truth and deception, morality and deviance. (p.122)

Thus the 4Rs and 6Cs do not constitute the x and y axes of two or even one integrated matrix, but they are rather elements of a multifaceted and complex system for exploration, an open system in which control is not imposed but rather self-organises through interactive processes.

### 10.6 Ronald Barnett

Across the Atlantic, Barnett (2004) argues that the future is unknown and he distinguishes between complexity and supercomplexity: ‘The challenges of complex systems, even if they could not be altogether unravelled, could be dissolved to a significant degree. The challenges of supercomplexity, in contrast, could never be resolved’ (p.249). Barnett thus sees the education task of learning for the unknown as twofold: first, in ‘preparing students for a complex world in which incomplete judgements or decisions have to be made’ (p.250), and secondly ‘coming to a position where one can prosper in a situation of multiple interpretations’ (p.251). He acknowledges mode 2 ‘creative knowing in situ’ but claims it is ‘problematic because it implies that […] a solution can be designed’ (p.251). He suggests that:
No matter how creative and imaginative our knowledge designs, it always eludes our epistemological attempts to capture it. This is a Mode 3 knowing, therefore, which is a knowing-in-and-with-uncertainty. The knowing produces further uncertainty. (p.251)

Barnett goes on to argue that ‘amid supercomplexity, the world is not just radically unknowable but is now indescribable’ (p.252), and he concludes that:

Under these conditions of uncertainty, the educational task is, in principle, not an epistemological task; it is not one of knowledge or even knowing per se. It is not even one of action, of right and effective interventions in the world. For what is to count as a right or an effective intervention in the world? Amid supercomplexity, the educational task is primarily an ontological task. (p.252)

Barnett and Coate (2005) therefore propose ‘a curriculum for engagement.’ Because the ‘fruitfulness’ of propositional knowledge is in doubt, ‘what matters is the student’s own engagements with knowledge – in other words his or her knowing’ (p.48).

Similarly, knowledge can no longer be simply put to work, therefore what matters now is ‘the student’s involvements in and her interpretations of her own actions – in short, her acting’ (p.48). And thirdly:

The self is implicated. No longer can the wider norms and practices be endorsed: individuals have to work things out for themselves in their own situations. Individuals have to become selves, strong, careful, open, resilient and critical selves. Students’ being, willy-nilly, comes into play. (p.48)

As already noted in Chapter Six, Barnett and Coate therefore insist that the student be given ‘curriculum space’ instead of being ‘boxed in’ (p.125), and they propose that ‘[a] curriculum has to become like so many ultra-modern buildings, full of light and open spaces, different textures, shapes and relationships and arrangements for serendipitous encounters’ (p.129).

The possibility thus opens for students to engage in three dimensions – knowing, acting and being. In this space, ‘[k]nowledge is not external to the student but has been incorporated into committed knowing acts; the student comes to make claims of her own, however tentatively, however half formed’ (p.124). Similarly, ‘the student is put
into situations [...] where she is obliged to act, to intervene in the world in some way, and take personal responsibility for that action’ (p.124). In this, the student is acting a role that is her own because ‘there are no precise scripts to follow’ (p.124). In addition:

The student is increasingly able to articulate her experience as a student and even be self-critical. As such, the student comes into herself in new ways: she becomes more fully into her own being, becoming both more daring and more deliberate all at once. (p.124)

In the final chapter, Barnett and Coate (2005) discuss ways to engage academics in debate about curriculum reform, and they make use of Nowotny and others’ (2001) comparison between the Greek agora and the Roman Senate. The agora is an open space literally and metaphorically, where conversations are more open than in the Roman Senate, and this can be contrasted with modes 1 and 2 knowledge. The agora and its mode 2 knowledge may seem messy ‘[b]ut a relative lack of rules does not mean things are easy or that anything goes; neither is true. Things are not easy in the real world of the agora: all kinds of voices present themselves and all kinds of practical problems loom into view’ (p.155). The writers conclude that discussion about curricula needs to take place in the agora, rather than in the Senate. The agora is clearly also a site for student learning as a practice-based community process. In addition, it is an exciting place of difference, flux and unpredictability where control is not externally imposed but rather occurs through the process of self-organisation.

10.7 Barnett and Doll, together

Barnett writes about the politics of higher education and relationships with teaching and learning whereas Doll’s interests are interactions amongst the curriculum, science and the humanities, and history. Barnett is troubled by the roles of the state and employers and by preoccupations with skills and standards, and Doll is concerned about the living legacy of methodisation. Barnett looks towards sociology where Doll turns more towards science. Nonetheless, in describing a contemporary world characterized by Bauman’s (2000) notion of ‘liquid modernity’ and Beck’s (1992) concept of the ‘risk society,’ Barnett (2004) notes that ‘[a] number of associated terms,
such as “chaos,” “complexity” and “fragmentation,” are also summoned in such a discourse’ (p.248). Barnett thus connects with Doll’s scientific and curriculum interest in complexity, although it is noteworthy that the notion of ‘supercomplexity’ does not come from science and seems to be his own construct. It is also worth mentioning that within scientific understandings of complexity, supercomplexity is a superfluous notion.

Barnett (1994) argues that ‘competences’ and outcomes cannot provide guidelines for higher education because they ‘remain behaviours and capacities to act as desired and defined by others,’ and they ‘represent a form of closure’ (p.81). They belong to Doll’s notion of a closed system in which energy, but not matter, is exchanged. The alternative for Doll is a curriculum that is an open system that admits complexity and allows for transformation. Barnett and Coate (2005) also argue that ‘in a fluid age a curriculum has to be open-ended’ (p.50) and they describe their notion of an open system as ‘curriculum ecologies […] of knowing, acting and being’ (p.133). They add that:

This openness is not that our kind of curriculum bends with the wind and that its structure has been computed in advance to tolerate such disturbances; rather this open-endedness comes of genuine human engagements with the material environment, with the conceptual and symbolic environment and with other human beings. (p.50)

An open curriculum is subject to constant change. Doll (1993) says that he provides a vision but not a model because it is not a method for implementation. He argues further that ‘[i]f curriculum is truly a collaborative effort and transformative process, then “creator” and “developer” are far better descriptors than “implementor” for discussing what a post-modern teacher does’ (p.16). Barnett and Coate (2005) correspondingly explain that:

The curriculum is not so much being ‘delivered’ as being enacted in a nuanced way, with interplays and imaginative offerings. A curriculum is in part a curriculum-in-action and, therefore, curriculum design is itself design-in-action […] (p.45)
However, although the curriculum may be subject to constant change, it is not entirely unstable. Barnett and Coate (2005) explain that ‘curriculum spaces […] have to be structured spaces, or at least spaces with elements of structure written into them’ (p.134). They add that ‘[t]o suggest […] that a curriculum is a kind of educational ecology in which many forces and influences are acting on each other is not to deny a continuing responsibility on a course team in playing out those elements’ (p.134). Parallel to this, Doll (1998) explains that ‘our curriculum challenge […] is to combine stability with flexibility, flexibility with stability, in such ways that we operate near but neither on nor over the “edge of chaos”’ (p.313). Doll (1993) finds an architectural metaphor for such a combination in the Neue Staatsgalerie in Stuttgart where an Acropolis sits on the top of a parking garage. Doll notes that an art historian explains “I am beautiful” just like the Acropolis in Greece, but I am “also based on concrete technology and deceit” (p.10). Doll also reports that the elders of the city ‘like the noble past and classical lines the museum evokes’ while the youth ‘love the handrails of blue and red […] which fit with their dayglo hairstyles,’ and he thus argues for ‘a curriculum that […] has the essential tension between disequilibrium and equilibrium so that a new, more comprehensive and transformative equilibration emerges’ (p.10).

One possible difference between Barnett and Doll is that Barnett (1997) is uneasy about ‘postmodernism’ because, he argues, it ‘abhors judgement since judgement calls on independent criteria,’ and ‘[p]layfulness, not judgement, is the watchword of postmodernism’ (p.29). While this may well be true of some or even many postmodernists, postmodernism is a cosmology of voices and there is nothing in Doll’s writing to suggest he fits this bill. Indeed, interpretation requires judgement, and Doll’s four Rs – richness, recursion, relational, rigour – provide a thorough process for critical thinking. In addition, Barnett’s (2004) imperative that students be helped to ‘prosper in a situation of multiple interpretations’ (p.251) and his concept of ‘mode 3 knowing’ are wholly compatible with Doll’s vision of curriculum as an open and self-organising system.

Barnett and Coate (2005) describe a student who:
engages with the task in hand – with the other students, with the problem, with the particular practical challenge – because she aligns herself to it wholeheartedly. She wills herself into the task. She tackles it with enthusiasm, with élan, with engagement. She gives of herself to it and in doing so comes into it. She and the task – in this moment – are one. It is her task. There is, in such an instance, a unity in being and learning. (p.138)

It is not difficult to imagine that the process of her becoming is enabled by her being in a curriculum space where her potential for creativity is unleashed by Doll’s matrix of four Rs and five Cs, and that her creativity has transformative power that in turn shapes the other elements of the open system in which she participates.

10.8 The role of the teacher

Barnett (2000) says that supercomplexity:

requires space and encouragement for students to be audacious, daring and creative. [...] For such pedagogical space, the lecturer has to displace herself for her presence invades the space of the students. [...] The domain of knowledge must be retained but, in a world that is radically unknowable, its character has now to be problematized’ (p.161).

Doll (1993) suggests how this might be done. Like Barnett, he explains that ‘[a]s teachers, we cannot, do not, transmit information directly; rather we perform the teaching act when we help others negotiate passages between their constructs and ours, between ours and others’ (p.180). To clarify, he provides a ‘Pedagogical Creed’ which states:

In a reflective relationship between teacher and student, the teacher does not ask the student to accept the teacher’s authority; rather the teacher asks the student to suspend disbelief in that authority, to join with the teacher in inquiry, into that which the student is experiencing. The teacher agrees to help the student understand the meaning of the advice given, to be readily confrontable by the student, and to work with the student in reflecting on the tacit understanding each has. (p.160)

What is hugely challenging about this is that when the teacher helps the students to ‘negotiate passages,’ all bets are off because, as Barnett (2004) explains, ‘if students are expected to come to an educational situation of some risk, and so make themselves
vulnerable, we can expect nothing less from their teachers’ (p.258). In addition, as Doll (1993) explains, a challenge in open systems is to not bring closure and instead ‘to direct the transformations in such a manner that the becomingness of process is maintained’ (p.15). Indeed, quoting Brunner (1986), Doll rejects the ‘explanation’ of the ‘logical, analytical and scientific’ in favour of ‘interpretation’ associated with the ‘metaphorical, narrative and hermeneutical’ because, the former aims at precision and closure whereas ‘in the latter the teacher wishes “to keep the dialogue going”’ (p.169).

10.9 ‘Becoming’

Freire (in Shor & Freire, 1987) states that rather than observe, ‘you try to interpret reality. Then, the more I approach critically the object of my observation, the more I am able to perceive the object of my observation is not yet because it is becoming’ (p.82). As noted earlier, the student and the teacher are not spectators but are inside the web, therefore they too are not yet because they are becoming. This is why Barnett and Coate (2005) state that ‘we resort, unashamedly, to a language that is barely heard in higher education […] . It is a language of “self” and of “being” and “becoming”’ (p.63). While Doll does not himself use this precise language, he establishes a connection between his concept of ‘transformation’ and becoming when he says of ‘transformative change in an open system’ that ‘[t]hese changes are changes in states of being and hence become, in Prigogine’s terms, becomings’ (1989, p.249).

Dewey (1938) foreshadows the concept of a curriculum of becoming when he proposes a theory of experience based on ‘continuity and interaction’ (p.44). He explains that ‘[a]s an individual passes from one situation to another, his worlds, his environment, expands or contracts. He does not find himself living in another world but in a different part or aspect of one and the same world’ (p.44). Dewey suggests, however, that experience is ‘segregated’ and ‘disconnected’ (p.48) unless we ‘understand the significance of what we see, hear, and touch’ (p.68), and this points towards being and becoming integrated through practice and reflection that connect ‘one situation to another.’
More recently, Mills (2002) calls for teaching to be ‘a process of becoming which involves a holistic commitment to methodological, curricular, and pedagogical development’ (p.1). Mills notes that ‘[f]or Plato, the essence of education is most simply and elegantly expressed in the idea of “nurture”’ (p.2), and he argues that ‘[h]igher education is in need of a radical transformation, a reconstitution that will address the wider subject of the development of the human being’ (p.3). While Mills points towards a curriculum that nurtures the soul and promotes, for example, justice and love, his point that education has ‘strayed from the ancients’ pursuit of human excellence to concentrate instead on the acquisition of specialised knowledge and applied skills’ (p.2) is highly relevant to this thesis. Indeed Miller (2002), also writing about learning for becoming, explains that ‘[t]hinking roots and at the same time uproots. It is a continuum of believing and doubting, doubting and believing. Belief is punctured by doubt, and doubt swings into belief’ (p.95). He proposes that ‘[i]f the goal is to stimulate thinking, then dialogue […] is the best means for realizing that objective’ (p.95), and he argues that lecturing creates ‘educational welfare’ unless its purpose is to inform dialogue as ‘a negotiation toward truth’ (p.97). He suggests that educational welfare will continue until ‘students’ thinking can become creative and thus autonomous’ (p.97). Miller later adds that ‘[a] philosophy of interdependence complements dialogue,’ and he argues that sending students off into groups is a very weak form of collaboration. He proposes instead that ‘[t]he strongest sense of collaboration is when everyone in the classroom works towards creating optimal learning conditions’ (p.111). Mills’s ideas clearly lend support to Doll’s notions of cosmology and complexity, Miller’s to communication and community, and both to currere and creativity.

Connections can also be made with various other writers. For example, paralleling Barnett and Coate’s (2005) concept of a curriculum of and for ‘engagement,’ Keeson and Oliver (2002) call for ‘enactment’ and they propose a ‘throb theory’ of experience that ‘might re-situate living, breathing, speaking, dancing, participating human beings and other living creatures at the centre of a dynamic, oscillating, pulsing, participatory universe’ (p.186). Consistent with notions of engagement and enactment, Ellsworth
(2005) sees the learning self as a moving self: ‘The experience of the learning self is simultaneously the experience of what I shall have become by what I am in the process of learning and the experience of what I shall have learned by the process of what I am becoming’ (p.149).

Perhaps one of the most striking ideas in the literature on becoming is Slattery’s (2003) use of Picasso’s (1971) description of artistic creation:

A picture is not thought out and settled beforehand. While it is being done it changes as one’s thoughts change. And when it is finished it still goes on changing according to the state of mind of whoever is looking at it. A picture lives a life like a living creature, undergoing the changes imposed on us by our life from day, to day. This is natural enough, as the picture lives only through the man who is looking at it. (p.662)

Slattery himself goes on to make the point that:

Events find their meaning in subjective encounters where knowledge is constructed and reconstructed in every unique situation. In this sense, a work of art truly exists only in the encounter. If locked in a darkened vault, a painting is simply an aggregate of materials. Aesthetics, like education, is the process of becoming and re-creating in each new context. (p.662)

Just as students and teachers are inside the web, so too are the viewers as much a part of the creation of a painting as the painter him/herself. Furthermore, the viewers will experience the painting differently each time they see it because they, and indeed the painting itself, are not yet because they are still becoming. This is significant for a curriculum designed to nurture entrepreneurial creativity and to support the becoming of the resourcefulness necessary for success.

10.10 Curriculum as architecture

Barnett and Coate (2005) suggest that curriculum considerations might start with the question: ‘What is it to be an “accomplished human being”? ’ (p.4). As an answer, they propose that ‘individuals have to work things out for themselves in their own situations. Individuals have to become selves, strong, careful, open, resilient and critical selves’ (p.48). The argument in this thesis is that what it is to be an
accomplished entrepreneur also requires individuals to become creative, resourceful selves.

As stated earlier, Barnett and Coate (2005) use an architectural metaphor when they propose that ‘[a] curriculum has to become like so many ultra-modern buildings […]’ (p.129). As also already stated, de Botton (2006) suggests that ‘buildings speak’ (p.71), and to illustrate this he contrasts two German pavilions, one built for the Paris World Fair of 1937 and the other for the Brussels World Exposition in 1958. The former, designed by Speer and Eiermann, is a ‘500-foot Neoclassical colossus’ that uses ‘height, mass and shadow’ to suggest ‘something ominous, aggressive and defiant’ (p.91). The latter uses ‘horizontality to suggest calm, lightness to imply gentleness and transparency to evoke democracy’ (p.93). While the Paris pavilion might suggest the lecture hall and canonical knowledge, the Brussels building is a far more likely place for currere, although it may lack Barnett and Coate’s requirement for ‘different textures, shapes and relationships’ (p.129) and, therefore, Doll’s cosmology and complexity.

In a metaphorical sense, the physical site provided for the curriculum is significant because, according to de Botton (2006): ‘We depend on our surroundings obliquely to embody the moods and ideas we respect and to remind us of them. We look to our buildings to hold us, like a kind of psychological mould, to a helpful vision of ourselves’ (p.107). The curriculum idea respected in this thesis centres on engagement, the vision is of creativity, change and becoming, and the mood is of passion and excitement.

De Botton also states that:

those places whose outlook matches and legitimates our own, we tend to honour with the term ‘home.’ Our homes do not have to offer us permanent occupancy or store our clothes to merit the name. To speak of home in relation to a building is simply to recognise its harmony with our own prized internal song. Home can be an airport or a library, a garden or a motorway diner. (p.107)
In this chapter it has been proposed that a curriculum home for nurturing entrepreneurial creativity and resourcefulness will be imaginative and lively, chaotic and uncertain. It will be a place that makes available a cosmology of local experiences connected to the global, that allows fluxes, perturbations, anomalies and errors, and that is, therefore, a place of risk. In this home, students together with their teachers and diverse other voices will form dynamic communities of interactions and will hold complicated conversations. They will be creative in their acts of knowing and doing, their becoming will be their own, and they will come to understand that ends are beginnings and beginnings ends. This home will enable all kinds of transformations but will itself also be constantly subject to the creativity of its participants because it is part of the web and not the web itself.

It seems impossible to imagine a single building that is in harmony with this song. Indeed, the very notion of harmony may be at odds with a vision of complexity. It thus seems it is not a single building that is required but rather a city of buildings and spaces, a city in which ‘an airport or a library, a garden or a motorway diner’ might all at different times provide homes appropriate for the becoming of the entrepreneur. Florida (2003) points out that creative people cluster in places that are ‘diverse, tolerant and open to new ideas’ (p.223), and he adds that ‘[a]n attractive place doesn’t have to be a big city, but it has to be cosmopolitan’ (p.227). Thus the city as home for a curriculum for entrepreneurs is also consistent with the notion of complexity that dismisses separation and insists instead on interactions between organisms and their environments.

Doll and Barnett both note the importance of fluidity and stability. It seems that the city metaphorically provides a stable entity while fluidity lies in buildings that are constructed, extended, renovated and demolished, spaces that open and close, and occupants that come and go over time, even daily. Finally, of course, there also needs to be a stable home where students can come together to share their stories and teachers tell their own, where other voices are welcome and those not able to be physically present are nonetheless heard. It seems fitting that such a place would be a
city agora, ‘a space in which particular forms of contestation are allowed, […] a public space […] shaped by the interaction of its actors/agents, […] a space in which different perspectives are brought together, ultimately creating different visions, values and options’ (Nowotny and others, 2001, p.209). It may thus be the cacophony of the agora rather than any harmony that matches our prized internal song.
CHAPTER 11: CURRICULUM PROPOSAL – PRACTICE

11.1 Introduction

The previous chapter presented in theoretical terms a curriculum proposal for entrepreneurs, and this chapter completes an answer to Fleener’s (2002) question ‘how are we to describe our vision of a spirit-imbued, process-oriented, holistic, organic, ecological, postmodern curriculum without limiting or reducing our ideas to unrecognizable and meaningless dimensions?’ (p.152).

The chapter starts by translating my own vision into a curriculum with a recognisable and meaningful design, and it then goes on to grow this by adding participants’ stories and ideas. A major feature of the curriculum will be ‘work knowing on the fly,’ balanced by time for slow. Supervisors will be vital in nurturing the students’ becoming, and their roles and those of business practitioners are discussed. It is concluded that the curriculum will give life to the ten action points Bolton and Thompson (2000) associate with entrepreneurs, and that it will also satisfy Hindle’s (2005) expectation that entrepreneurs be taught experientially, joyously, respectfully, adaptively and entrepreneurially. Hindle’s creativity mandate is left for discussion in the following chapter.

11.2 A curriculum vision

As noted in the previous chapter, Barnett and Coate (2005) argue that ‘curriculum design is itself design-in-action’ (p.45), and Raxworthy (2004), an Australian landscape architect, similarly suggests that ‘the maintenance of gardens should better be described as “create-nance”: to habitual activity of fostering the productivity of the garden’(p.1).

Doll (1989) suggests that curriculum design should be a two-tier process:
The first tier would involve broad general goals, set by the teacher as the expert in the field – or done in collaboration with other experts in the field. The second tier would emerge as the particulars of the curriculum began to take shape. This tier would vary from class to class and would involve the class – teacher and students – working as a group or community. (p.251)

My own vision started out as an interest in the tension between chaos and creativity on the one hand and stability and orthodoxy on the other. An alternative to the conventional curriculum emerged intuitively from reading Doll and Barnett. Doll’s (1989) ideas about curriculum as an ‘open system,’ which I first read about in 2000, were a major influence. The first ‘tier’ thus materialised hermeneutically as ‘a design-in-action’ as the conversation with each participant flowed, and, as the number of conversations grew, a possible structure emerged.

This first tier might be expressed as a curriculum in which students are supported to:

- work collaboratively to identify and exploit an entrepreneurial opportunity by producing and commercialising an appropriate product/service innovation;
- undertake and complete this work as two separate projects: one within an existing organisation, and the other as a new venture;
- theorise their work.

This first tier is based on three assumptions. First, the learning would be an integrated, practice-based experience and there would be no fragmenting into disciplinary courses on, for example, strategy and planning, business law, or accounting. This approach is consistent with O’Connor and others’ (2006) argument for viewing entrepreneurship as a post-disciplinary ‘domain of practice’ (see Chapter Nine) and it matches recent work in other fields. For example, Barnes (2006) proposes ‘an economic geographical pedagogy that is post-disciplinary, emphasizing non-hierarchical, student-based knowledge, disciplinary interconnectedness, epistemological plurality, and material embodiedness and embeddedness’ (p.405). Similarly in political studies, Rosamond (2005) calls for post-disciplinarity to deal with the way ‘mainstreaming disciplinary norms induce types of work that fail to address fully the somewhat paradoxical and counter-intuitive range of possible relationships’ (p.23) and Cini (2006) suggests a
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post-disciplinary approach that will ‘create a more outward-looking research field’ (p.38).

Secondly, the students would have supervisors who would have experience of the domain and would have access to people with specialist expertise. Thirdly, teaching would occur as and when required. The specialist academics and other experts from the field would thus work like the emergency department in a hospital, responding to the needs of the moment rather than dispensing medications and performing operations that might one day be of benefit to the patients. Shor (1996) makes the priority very clear when he argues for ‘frontloading student discourse and backloading the teacher’s […] didactic voice so as to generate student expression as the foundational discourse’ (p.40).

It is also assumed that the second tier would indeed allow flexible interpretation. For example, while the purpose of the two projects is to enable learning to occur within an established community of practice and to require authentic risk-taking, some students might work more on their own venture or more with the existing company. In addition, commericalisation might not always be feasible. Nonetheless, the intent to nurture the becoming of the creative and resourceful entrepreneur would not be negotiable, nor the need to theorise the work as it is essential that students hold purposeful conversations with themselves about the various voices they encounter. ‘Interpret’ might be a better word than ‘theorise,’ but that would be a matter for discussion as the curriculum design evolves further in action. So too would there be conversations that canvass the forms that the theorising might take and that ensure it does not become what Barnett and Coate (2005) describe as ‘a self-monitoring performativity’ because it is a separated activity used ‘to prove rather than to improve learning’ (p.104).

The broad vision was not introduced in any way in the two pilot interviews. I was zealous about not wanting to lead the interviewees. However, these two conversations virtually stalled when it came to discussing possibilities for curriculum change because the participants were on unfamiliar ground. As stated in Chapter Three, for an
interview to be a social encounter, the curiosity of both the interviewer and the interviewee needs to be satisfied. Therefore, in the later stages of the fourteen interviews that followed the pilots, provocative curriculum suggestions were introduced appropriately and without prejudice, and these included apprenticeships, a curriculum without prescribed content, direction or outcomes, and a program in which students identify opportunities and produce and commercialise their own innovations. The responses were enthusiastic and generative. Furthermore, participants’ stories and general views about creativity, business success and learning also tended to point towards this vision. Indeed, their reactions and ideas lend support to Gough’s (2002) argument that ‘futures are human constructions that are never “out there” but, rather, are always “here, now”’ (p.17).

11.3 A curriculum of experience

This is a curriculum for Tracey Kirwan who says that inside an experience-based space ‘I feel like I’d have a home.’ As noted in the previous chapter, de Botton (2006) says that ‘those places whose outlook matches and legitimates our own, we tend to honour with the term “home”’ (p.107). It is a curriculum for Robert Franich’s fellow students on the MBIE who are ‘kick-arse people’ who ‘were as keen as hell to get out and do something quite different’ and consequently left without completing any qualification. It is also for Debbie Duis who completed the postgraduate certificate and who says:

I don’t have much time for authority unless it works. I certainly don’t like rules and regulations. I will flout them wherever if I think they are stupid and unnecessary. I will question people why they are there and I think I’ve always been like that actually.

Petrena Miller likes the possibility that students ‘can see it from go to whoa’ and ‘they’re having to think rather than listen.’ Brigid Hardy adds ‘there’s nothing that quite beats, I don’t think, like just being able to grow something that you really believe in and seeing other people’s excitement around it and just that oh, something is actually happening here.’ For Debbie Duis this happening also involves self:
I always have a fire burning there that never goes away. Every day for me has to be productive. So you are a cog in moving but the cog underneath you is moving as well and you must be aware of that. There’s nothing fixed. It moves underneath you at the same time by external influences which you have no control over and that’s the sort of experience that’s going to see you through.

Debbie’s words closely reflect Doll’s language of complexity and Barnett’s notion of being.

Raffo, O’Connor, Lovatt and Banks (2000) report that ‘deep as opposed to surface business learning […] for entrepreneurs takes place within the context of their business activity not in formal training situations’ (p.217). Their study of micro and small business owners in the UK concluded: ‘Because tools and the way they are used reflect the particular accumulated insights of communities, it is not possible to use a tool appropriately without understanding the community or culture in which it is used’ (p.218). Therefore Cam Calder’s suggestion that ‘you’re giving them some tools and then you’re hoping that this is going to improve their ability to identify, create or define a product that they can be entrepreneurial about’ is possible only so long as the ‘you’ is the totality of the curriculum experience rather than ‘frontloaded’ knowledge. Similarly, Nancy Beck’s suggestion that ‘a basic skills checklist would be a nice place to start, just of things that are common to any kind of business’ would need to be an introductory framework rather than something prescriptive. Her suggestion that students be provided with ‘contacts for setting up potential networks where you can have other creative people you can bounce ideas off’ seems more helpful.

Daniel Batten anticipates the city metaphor (see Chapter Ten) when he proposes:

I would actually spend a day providing some structure and context and just like a little road map, saying ‘You’re going to explore this wonderful city, here’s a little road map, here’s some of the things you might like to do,’ because I think to say that to explore an entrepreneurial idea is so open that they may have no idea where to start or go down the wrong tangents. So to say you’re going to provide a bit of structure or a bit of script initially to say ‘Look, these are some things that I want: you’re going to do a business plan, it’s going to have these areas in it, these seven things, and that needs to be done in this period of time or whatever and it’s going to be reviewed. Okay, now go out and do it.’
Students on this program might thus be slightly better prepared than Bill Buckley who was ‘thrown into it.’ Bill says:

I came here with bloody, not a cent in my bank and not a cent in my pocket and I didn’t even have a pair of clothes to wear. In actual fact, I came here with my school clothes on, to Auckland. Yeah, so I didn’t know how the hell I was going to make ends meet but it got you into that way.

Bill does not explain ‘that way,’ but clearly it is currere without a course to follow and experience, which Petrena Miller acknowledges as ‘a great teacher.’

11.4 ‘Work knowing on the fly’

As discussed in Chapter Nine, Brigid Hardy confesses ‘I’m a tiny bit cynical of teaching business at all’ and says ‘I saw it as a little bit being taught as opposed to being encouraged to think.’ Brigid joined McKinsey with no prior experience of business but as soon as she started she ‘learnt a whole lot of stuff and you know it’s partly about getting yourself in context where you just, you know, can hardly swim and learning how to and you know, for me, it was like drinking from a fire hydrant.’

The notion of authentic learning in situ appeals to Brigid, and her immediate response to my suggestion is ‘[r]un your own start-up. Yeah, that’s great.’ She reflects that ‘[m]y most useful project at McKinsey was [setting up] Fencepost which was basically the IT arm of Fonterra 25.’ Brigid explains how she worked with only three others and how they ‘basically built it to like eighty people within eight months and into what basically became the whole e-commerce arm for Fonterra.’

Brigid breathlessly describes how they:

started with a business plan, we had the whole thing, like had to find the office, I had to employ the people, I had to get the equipment, I had to pitch to the different partners to come and buy in. A lot of it was all about the equity stakes and you know, a lot of the real issues, but we had Fonterra say ‘Oh look

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25 Fonterra is a New Zealand dairy company that was established in 2001. It is cooperatively owned by more than 11,000 dairy farmers, and supplies dairy products to consumers in more than 140 countries.
goodness me, how about the IP lawyer? How about the this? You know, the things that become like the legal bills and the professional service bills in starting up a business are often prohibitive, and so you end up taking these mega risks that you know, or the whole HR capacity or just having, you know, the IT helpdesk or you know, whatever. We were off site and all that sort of thing but it was an incredible experience because we had to think ‘Okay, what sort of roles do you need in these businesses?’ Actually we need a person who does everything, oh goodness me, doesn’t every start-up? And you know, all those sorts of things and it’s really, really valuable.

Fenwick (2001) would describe Brigid’s account of her work and learning as ‘work knowing on the fly’ that involves a ‘co-emergence’ that occurs ‘at the intersection of invention, identity and environment’ (p.243). Co-emergence, she says, is based on an ecological theory of learning called ‘enactivism’ which holds that ‘human beings, natural objects and cognition emerge together as intertwined systems’ (p.243). Fenwick studied 109 women entrepreneurs in Canada who ‘mobilise resources, see opportunities and act quickly’ (p.251). They describe their ‘figuring it out’ process through expressions such as ‘flying by the seat of your pants’ or ‘learning by stumbling and stumbling,’ and Fenwick argues that this approach:

casts learning as continuous invention and exploration, produced through relations among consciousness, identity, action and interaction, objects and structural dynamics of complex systems. There is no absolute standard of conduct, because conduct flows ceaselessly. (p.253)

Fenwick’s notions of learning linked to disequilibrium and the ‘co-emergence of knower and setting’ (247) are reminders of Doll’s (1993) argument that ‘open systems require disruption in order to function’ and that closed systems that treat challenge and perturbation as ‘qualities to be removed, overcome, even stamped out’ (p.159) may well be risk-free but there can be no interaction and, therefore, no transformation.

In answer to a question about teaching, I suggested to Brigid that this might take place on a just-in-time basis and she responds ‘I think that whole backloading thing, I actually think it’s, yeah, it’s a fantastic idea. Almost like an incubator.’ That may well be, but as Barnett and Coate (2005) explain, the idea of ‘a curriculum ecology’ implies that the course team ‘has responsibility for the well-being of the curriculum-in-action’
rather than for exercising ‘total control’ over the student (p.134), therefore this ‘incubator’ cannot be like a controlled environment in which a premature or unwell baby is kept to protect it from infection and assist its growth and development. Indeed, some infection is required for growth and development because, as John Alldred explains, ‘it’s an imperfect world and it’s not all formulaic and it’s constantly evolving every second.’ He adds, however, ‘I’m not sure that the people at university know how to do it, but I think they should be teaching people how to feel more comfortable with risk-taking.’ John suggests that students should have ‘a whole range of problems thrown at them so […] when they realise they know how to find solutions, they will be less worried about the risk.’ Cam Calder similarly insists on the need to ‘nurture’ the concept that ‘there’s nothing wrong with failure’ because ‘where there’s a will there’s a way,’ and he is firm on the need to ‘expose the fear of risk as the hampering, the hamper that it is to entrepreneurship.’

Taking a different approach, Brigid Hardy says ‘I see it more as opening the mind up to be able to take in the resources and the relationships and the, you know, that sort of thing, so somehow giving you that foundation that enables you to be confident enough to be open about it.’ She likes the idea of a program that is ‘a bit of a high powered sort of vitamiser version of having a go yourself’ because ‘you often hear about people who try to set something up and it didn’t work and they tried again and they were massively successful and you know, it’s almost a free run, like you envisage.’ ‘Almost’ is important here, because if it were a completely ‘free run’ it would not satisfy Pete Rive’s requirement that ‘there should be a certain amount of pain because that’s when you learn the lesson.’ He proposes that rather than ‘teaching people that it is humiliating to fail,’ the focus might instead be on how ‘the history of humanity is billions of mistakes.’ Pete thus dismisses business planning because ‘it’s just ridiculous anybody that thinks they can plan five years out,’ and he argues that the way to deal with change and risk is to help people to see that ‘the more you put on the line, the less chance you are going to fail because you are going to work damn hard to make sure you don’t.’
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Hard ‘work knowing on the fly’ is thus a legitimate response to Barnett’s (2004) questions about how to be in an age of uncertainty. It is about being creative and resourceful, and this provides support for an open curriculum system for nurturing the becoming of the entrepreneur. Dettmer (2006) notes the absence of creativity and risk-taking in Bloom’s and others’ education taxonomies and he reworks these so that at the highest levels students now ‘imagine,’ ‘wonder’ and ‘aspire,’ and they ‘improvise’ and ‘innovate.’ Although the very notion of a taxonomy has limitations, Dettmer’s work nonetheless resolves Cam Calder’s concern about a possible ‘paradox or an inherent disharmony in terms of trying to teach entrepreneurship’ because it opens the closed system of explanation and analysis into a cosmology in which, as Brazil (2003) notes, creativity is no longer of peripheral importance but rather thrives because playfulness is valued and uncertainty and ambiguity are enjoyed.

11.5 Slow and flow

It is important to note that the concept of an open system and disruption suggests noise and speed, but the undermind, which is also an open system – one that feeds off and creates unknowable complexity – requires quiet and slow. As discussed in Chapter Five, there can be no transformation if it’s all ‘on the fly.’ This is, indeed, why Debbie Duis says ‘I need a lot of time by myself’ so that ‘it just percolates away’; why Daniel Batten does meditation and unplugs his computer; Pete Rive reads and enjoys classic old movies and their remakes; Bill Buckley sails; Petrena Miller plays golf, paints, and does meditation; Robert Franich reads biographies and murder stories; John Alldred, Mary Taylor and Tony Falkenstein go for long walks; Brigid Hardy does yoga and says ‘I just play hooky quite a bit’; and why Glen Slater does not take work home although he often wakes in the middle of the night and writes notes to remind himself of his dreams. In addition, as also pointed out in Chapter Five, Csikszentmihalyi (1996) says that a goal for creative people is to achieve ‘flow’ because ‘intentionality does not work in the subconscious’ (p.102), and Amabile and others (2002) have found that ‘complex cognitive processing takes time and, without some reasonable time for that processing, creativity is almost impossible’ (p.17).
In the curriculum proposed in this thesis there is no timetable to follow but rather a self-organising structure. Like runners, the students are able to pace themselves and give time to fast and to slow, and supervisors might provide advice on this. It might also be that the notion of qualification completion returns to the time before Rasmus when, for example, ‘Luther, and those like him, studied with masters for as long as either party wished or until the master felt the student was ready to stand before the faculty for his disputation’ (Doll, 1998, p.302.)

### 11.6 Business practitioners

Mary Taylor thinks a project-based curriculum would be ‘fabulous’ because, ‘if you look at whatever product it might be, you know, like it’s got everything hasn’t it. It’s got marketing, finance, development, IT, it covers everything.’ She adds that ‘it would be nice to think that you would have someone that’s overseeing it and helping you move in the right, in a direction because why should you be able to do this straight off.’ It is noteworthy that Mary starts to say ‘in the right direction’ and corrects this to ‘a direction.’

John Alldred does ‘unofficial business mentoring’ and in the previous eighteen months had worked with three University of Otago students doing masters degrees in tourism. John says that ‘I reckon that more people, say people who are doing senior degrees in management or business, the more they sit with entrepreneurial people – I’d even have those sort of people overseeing their studies rather than people at university.’ The authenticity of having business people act as supervisors is appealing, but later in the conversation John says:

> Bring the workplace people into those meetings with the groups you know, bring the CEO or the marketing guy or whoever it is in. Let them be part of the team. Otherwise you can be unknowingly going completely down the wrong corridor, you know, way off beam, and who’s going to pull you back?

There are benefits in creating a diverse learning community that includes people from practice, but having such people act as supervisors wanting to ‘pull you back’ may
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equate to the moving in ‘the right direction’ that Mary almost said, thereby compromising the students’ own becoming. However, at another point in the conversation John also says:

I tell you the thing that gives me the biggest buzz in all of what I’ve ever done and that’s taking someone to work with you and showing them, taking them to a level way beyond the potential that they thought they ever had and to watch someone do that gives me more pleasure than anything else. So it’s about helping people grow and helping their creativity come out and freeing them up as business people.

This suggests that John may well be in tune with the Doll’s (2005) idea that ‘learner and teacher, self and text, person and culture dance together to form a complex pattern – ever changing, ever stable, ever alive’ (p.55).

Debbie Duis repeats some of John’s points and explicitly adds the notion of being. She says:

They need to have people who come in who are innovators because only an innovator or an entrepreneur, a true entrepreneur can tell you. A person that’s written a book or an academic who’s read about it, they can’t tell you because they haven’t lived the experience and I don’t mean someone who’s just started a business on a website and made lots of money. That’s not the right people because it’s a way of thinking. It’s a way of being. It’s in your being.

Pinar (2004) argues that ‘[t]he requirement that education professors be former schoolteachers would seem that teaching is akin to physical skill like, say, horseshoeing, and that the knowledge of it requires prior practice of it’ (p.175). He suggests that ‘prior experience might make likely a certain submergence in the curricular status quo, a submergence that would make even more difficult the project of critical and scholarly understanding’ (p.175). Debbie’s argument is, however, less about skill than it is about the ways of knowing, acting and being that Barnett and Coate’s (2005) propose for their curriculum for engagement. Indeed, Debbie acknowledges the importance of ‘critical and scholarly understanding’ when she later says:
I think you need a balance of both and I also understand that there’s an academic framework that has to be fulfilled as well. So it’s finding the middle ground where, I mean, you are never going to get the perfect solution because you simply have to live through the experience. You simply have to be in it, to feel it.

Debbie also says that ‘I do think they need to be monitored by someone who knows how to monitor them,’ and this moves the discussion from personal backgrounds to how they might be with the student.

11.7 Supervision

Several different terms have been used to label the learning partner process: Mary calls it ‘overseeing,’ John ‘mentoring,’ and Debbie ‘monitoring.’ ‘Supervision’ is an established university practice, and Robert Franich has supervised PhD chemistry students and discursively relates his own experience to this project for nurturing entrepreneurial becomings. His robust interpretation has encouraged me to adopt the term ‘supervision.’

Robert says that the project starts with:

a question or [a] chemistry opportunity, and I said to the students ‘What I want you to do as a PhD project is not you start here and you follow all the methods and you come here.’ I said ‘A really good PhD in chemistry, you should start here, you need to go here and [his finger meanders across the table] try, fail, try again, fail, ah, a little bit of success, next step, fail again. Back, sidetrack, sidetrack, no, no, progress, fail, go back, until out of all this chaos, trial and learn, you can succeed,’ but that’s only part of it.

To describe the relationship Robert says:

It’s almost as if you’re going to get into a canoe and I’m going to just push you off from the shore and you’ll start paddling but I’m actually walking along the shore side and I’m yelling, coaching, ‘paddle back now’ […] so I’m coaching and also helping interpret, when required, bringing you some more theory. If the student hasn’t understood theory, it’s a coaching process.

Chaos will throw up the unexpected, and this provides the supervisor with the opportunity to encourage reflection by using frames and probes like those suggested by
Schön and Mezirow – see Chapter Eight. Robert also proposes that ‘[w]hen you discover those stumbling blocks, you’re missing some knowledge or some theory, then you come to school and you’ll learn that and how to apply it, then you test that when you’re out in your project again.’ The stumbling block provides the opportunity for people with specialist expertise in the issue of the moment – maybe in economics, human relations, quantitative analysis or organisational culture – to bring forward theories, frameworks and case studies for consideration. ‘School,’ as represented here by Robert, is the agora, and it is where the class or maybe only some groups of the class meet as what Robert calls ‘learning partners rather than students. The class is open and fluid. There’s chaos in there.’ In the agora the students also share their evolving stories and their questions, and Robert adds that this ‘brings in that emotional learning, the emotional engagement in learning, I think, because you’re actually living the learning rather than simply absorbing it.’

Robert is aligned with John and Debbie on the matter of who should play the supervision role. He says ‘I think certain people who have been there, done that. I think also people who are engaged in some kind of learning themselves. I think that’s a critical part of the teaching.’ He adds that ‘some of the best years of my PhD supervision work [was when] I was actually really stretched for time, I was actually learning here as well.’ He later suggests that:

If the coaches are as much in the dark as the learners as well, it makes it much more exciting because there’s so much more chaos and uncertainty around it, but the coaches of course must have some inkling about this way’s certainly surer, this way is less sure, but we can experiment, and from experimenting we can discover and learn together.

The experience is demonstrably rich, recursive and relational, and Robert suggests that rigour:

depends on the size of the stretch that you put into the project. So if you engage the team, being a project which is going to require a technology, a market understanding, is it a new entry into a market or is it an existing market, the degree of stretch that you’re going to actually put that team under will in a way dictate the rigour by which they take their tentative steps to get going first of all. If it’s too easy, you have done it all practically, there it is, we’ve made a nice big
stretch, then there’s going to be a certain amount of unassuredness. The people in the project have got to go back and ask, they’ve got to actually apply rigour to what they are doing in that next step.

What is critically important here is Robert’s suggestion that requiring the students to theorise their work through interpretations of others’ theories, frameworks and case studies helps provide them with an ‘assuredness’ that nurtures their becoming into Barnett’s (2004) ‘world in which incomplete judgements or decisions have to be made’ (p.250). The rigour in the theorising is thus what enables them to come ‘to a position where one can prosper in a situation of multiple interpretations’ (p.251).

Finally, Robert negotiates a pathway between academic rigour and the risk-taking that entrepreneurs crave:

It’s almost like they’ve got to walk this distance in the dark and their little LED will only show a few metres in front and they’ve got no idea what chasms, chaos, is ahead of them, so they’ve got to be very rigorous in each step they take but also allow them to imagine some shortcuts. You allow people to see the, okay we’ve got this goal and the opportunity’s perishable, we’ve got to get there as fast as possible but we cannot afford to goof up on the way. So you can do this, this and this and get there but somebody else may have actually seen a shortcut and someone else has already won. So you’ve got to allow people to look at some shortcuts and give them the opportunity to go back with burnt fingers and bloody knees as well.

There is a remarkable likeness between Robert’s account of supervision and Barnett and Coate’s (2005) description of the way ‘[t]he tutor has to open the spaces in front of the student and this injunction calls in turn for the tutor’s engagement in situ.’ (p.129). They explain that:

This engagement takes place both horizontally and vertically. Horizontally, the tutor has to have a personal stake in the student’s becoming, in the three domains of knowing, acting and being. By this we mean that the tutor has to be personally involved, to some degree, in the field of knowledge being extended to the student. This is not a plea to the effect that the tutor has herself to be ‘research active,’ although that may help, but the tutor’s identity has to be in part structured by the knowledge field in question. It means too that the tutor has to identify with the field of knowledge in action. (p.129)
With regard to the vertical engagement, they explain that ‘the curriculum is so orchestrated that the lecturers play with it. […] A] curriculum can hardly be working effectively if it never yields smiles and even laughter’ (p.130). Finally they explain that ‘the lecturer as an accomplished educationalist will exhibit his or her expertise by being able at any given moment to call upon a repertoire of possible actions, behaviours, thinking and communicative styles. He or she will be able to play with that repertoire of capabilities so as to produce the maximum effect in the exigencies of the moment’ (p.130).

The engagement with the supervisor or tutor is critical because Bennetts’s (2004) study of thirty-five creative people found that the creative process is not separate from the mentoring relationships that support their creativity. She explains that:

> Overall the close relationships of creative people and the effect these may have on their well being can be described in relation to four aspects of self: self-image […], self-esteem […], self-confidence [… and] self-worth […]. This was noticeable throughout the life span of the individual, and appeared to be a major factor in whether their personal and professional relationships succeeded or failed. (p.374)

In Chapter Seven it was explained that entrepreneurs regard networking and relationships as critical to their success, and this clearly means that the teacher’s role is not that of ‘deus ex machina’ but is ‘restructured and resituated from being external to the student’s situation to being one with that situation’ (Doll, 1993, p.167).

### 11.8 Apprenticeships

The curriculum proposal treats learning as a practice-based community process and it is imagined that the students would work collaboratively with each other, with their supervisors and specialist experts, and with the practice networks that they join or create. In addition, and building on Gonczi’s (2004) idea of an apprenticeship (see Chapter Eight), it is imagined that one of the two projects would involve working with an existing company or similar entity. Such a possibility needs to be mindful of Fenwick’s (2001) warning that notions of situated learning tend to ‘treat the
environment as supplemental to the individual consciousness, describing an individual subject who develops through participative interactions in a community of practice’ rather than seeing development through the lenses of complexity and enactivism and recognising the ‘co-emergence of knower and setting’ (p.247). Thus Bill Buckley’s idea of an apprenticeship as ‘the harder you bloody hammer them to start with, the more they’ll work out ways of bloody succeeding’ is not appropriate.

The apprenticeship idea was introduced into several conversations and responses were generally very favourable. John Alldred likes the idea of students moving ‘backwards and forwards’ between the classroom and the enterprise so ‘they kind of understand what it is like out in the battlefield. Otherwise it’s just out of a book.’ Petrena Miller says that many entrepreneurs ‘don’t like the day to day stuff […] but they do need to learn that.’ She says that when she started at Line 7, ‘I used to just order the fabric and wouldn’t care whether it was the start of the month or the end of the month you know, and it’s like a hundred grand of fabric on the twenty-sixth of November you know, instead of say doing it on the first of December.’ Petrena thus believes an apprenticeship is ‘a brilliant idea’ for learning about practice. Pete Rive has doubts about film education institutions and their lack of an ‘interconnect with industry,’ therefore, he says, ‘I hire for attitude and train for skill.’ Like Petrena, Pete believes an apprenticeship enables ‘a real connection between commerce and creativity.’

Cam Calder thinks Gonczi is ‘right on the button’ and suggests he learned less about dentistry at university than he did in one year as an apprentice working alongside an experienced practitioner. Where Pete and Petrena value the commercial realism, Cam suggests that in an apprenticeship ‘you are learning and you are improving your emotional intelligence. You’re hopefully gaining an intuition about how you react in social circumstances.’ Mary Taylor says ‘I think the idea of an apprenticeship, if that’s the right word, is not silly.’ She too sees it as a way to develop ‘intuitive knowledge and emotional intelligence.’
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Perhaps ‘apprenticeship’ is not the right word. Pete Rive warns that ‘the apprenticeship thing has got an exploitative connotation,’ and Tony Falkenstein resisted seeing how an apprenticeship might work in business, possibly because of his own experience as an apprentice pastry cook. Glen Slater asks ‘[i]s it a skill or is it just the combination of all your experiences that makes you willing to take certain risks?’ He suggests that if it is the latter, then ‘it sounds like an internship kind of program.’

Glen says that companies often go to a university seeking interns, but it rarely happens because ‘it doesn’t exactly fit with what their supervisor wants them to study.’ However, Glen says that during the year [2006]:

we took an intern […] . He’s a master student. We gave him projects to work on, and I really forced him to spend as much time with my guys as possible. On Tuesday he came back to me and said he wants to work for us next year and he wants to do that because in the last six months, he’s really loved working in a start-up situation and an environment where we don’t know what’s going on but he can really see that he’s going to learn a lot more working with us than he would if he went to a corporate.

Glen adds that the intern’s experience was about ‘being in the thrill of us and our highs and our lows. And, I mean, the last six months have been kind of a roller coaster for us.’

This is the excitement of chaos and risk, where being passionate about the quest matters more than the extrinsic financial reward. Glen goes on to argue that living with danger is central to the becoming of the entrepreneur:

If you take on an intern or apprentice, get them revved up and excited about it but make it quite safe by giving them safe things to do, then they will just fade away. If on the other hand you can make it really hard even for smart guys with masters’ degrees, really dangerous, and say ‘I don’t care if you don’t even like what we’re doing, get over there and learn about what we’re doing,’ they actually become part of the culture which is really important and the culture in a company like ours is a risk-taking culture, it’s the culture of, if we don’t work together we’re never going to get it done. There are incredible highs and incredible lows. So just beating away, beating away at what we’re doing. Also, I might take them with me when I go to meet with my mentors or I when go into situations where perhaps I’m dealing with a tough customer, ‘Come with me,
you don’t have to say anything,’ but they sit there or maybe even deal one-on-one with those people as well. That’s the stuff that makes them want to carry on.

Having the opportunity to deal one-on-one with ‘a tough customer’ is important because this is what enables a ‘co-emergence of knower and setting’ (Fenwick, 2001, p.247) whereby the intern is affected by, and affects, the becoming of the culture of the practice-based community.

Glen also highlights the value of supervision within an internship when he says, ‘[o]ne of the most important things about mentorship is that they ask the question that you’re kind of afraid of dealing with.’ To illustrate, he tells a story:

Somebody asked me two days ago ‘Have you actually raised your head up beyond your current offering and made sure that everybody else in the world wants it, like you’ve got a great new customer and your offering is working out beautifully and this is going well and your customer’s massive and you’re going to do well out of this, but have you actually raised your head up and looked at do other customers want this too?’ […] Well, not as well as I should have, but that’s a huge amount of work to take on and it’s something that I know, okay, I’ll just put that off, put that off, put that off, so being able to ask those kind of questions, well who have you actually spoken to, and this is a question that gets asked a lot around the Icehouse – ‘Who have you actually spoken to about this?’

The world unfolds here through conversation. Questions are asked, rather than answers provided, and the students are challenged to embrace further complexity and to find their own way.

Glen proposes that apprenticeship ‘as an idea can be applied to absolutely anything, not just entrepreneurship.’ He says that when he was in the Navy:

We were put in a life raft overnight for twenty-four hours in the freezing cold and we were made to go up in a blizzard and climb mountains. They put us into situations and then made us overcome them. I can’t do that for my guys. I can only do it around their technical stuff, exactly what they’re doing technically, so I can give them big obstacles in their own fields, and then coach them through it and as they achieve those things, then that sense of self comes from those things.

This ‘sense of self [that] comes from those things’ is precisely the point of the curriculum proposal. The goal is to nurture creative and resourceful selves, because, as
Barnett and Coate (2005) explain:

Increasingly it is the students’ capacity to fend for themselves in the wider world that is coming into view, their capacities to sustain themselves, to engage with the wider world, to be resilient and to prosper – not just economically – in it. We are witnessing the emergence, surely, of a curriculum for life. (p.119)

11.9 ‘Spark’

Daniel Batten commends the University of Auckland’s ‘Spark’ competition which, he says, involves:

pairing people up who have an entrepreneurial idea with mentors, getting them to write a business plan and then creating a very extrinsic reward of a $40,000 prize if they can do a great pitch, teaches a number of fantastic practical skills. So they’re actually forced to get out there in the real world and make cold calls, find out if their business plan is going to work, do the numbers, talk to people like myself who will ask some very tough questions about the feasibility of the profits and the projections and will learn an extremely large amount as a result.

Glen Slater won the Spark competition in 2005. Glen explains that first of all the competitors create a ten page venture summary that ‘really summarises your inventions,’ and ten finalists are then chosen. In the first round of judging, Glen did not get into the finals because:

we told a fantastic story and we were really excited about our great new technology and our storytelling was so other people got excited but when they looked into it, there was actually no business there. We didn’t say who was going to buy, what we were going to make and who was going to buy it and for how much. We just told a great story about exciting technology.

Glen’s team was next provided with two mentors who told them to ‘[g]o away and find out who wants this kind of stuff, why they want it, what they’re going to pay for it,’ and Glen adds that ‘they certainly challenged us pretty rawly.’ He says that his group eventually went on to win because they had not only ‘a great story’ but:

what really clinched it for us is because we also said here is where we’re going to take investment capital and here is where we’re going to exit, and because we could look even that much further forward and say okay this is the full story from start to finish, not just the start, that was what got us to the next level.
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Glen and his team are with the world because their design was, and remains, ‘not yet because it is still becoming.’ This is a far cry from the marketing ‘Proposal for Client’ (the CEO, Surf Life Saving Northern Region) that was produced by myself and others and that never saw the light of day – see Chapter One. Bradoo (2006), writing in Ingenio, the Alumni Magazine of the University of Auckland, says that Spark created:

much more than just a competition. It drove a cultural revolution within the University, hammering the point that entrepreneurship is not just about creating new businesses; it is a totally new mindset that began to be imbued within the staff and student communities. (p.25)

Considering my own experience of the university, the claim is patently absurd. Indeed, what is required is for the kind of experience valued in the Spark competition to be treated, not as an add-on that supplements program learning, but to be the program itself. In such a program the reward would not be a financial prize won by one team but rather the opportunities for all participants to become creative and resourceful and to become successful both as entrepreneurs and as strong selves.

11.10 Networking and the agora

Nancy Beck says ‘I agree one hundred percent’ with apprenticeships because ‘in a classroom situation, you are reading about a single scenario and a single part of the scenario, but that’s not the way it really works in a business. So, how do you juggle all the various things that you have to juggle?’ She says that West Coast Orchids has had several people work as apprentices including ‘one young man who had been working in the science area and had a flower that he thought was quite different and innovative and he asked if he could come and work for us for a significant drop in savings.’ He was, like Nancy, a scientist becoming an entrepreneur. Nancy says he worked on tasks such as ‘getting weeds off the floor’ but in addition ‘he got to see seriously the nuts and bolts of how our business operated and when we do that, I tend to be very open with all of our staff in terms of everything – our books, our income, our expenditure.’

Nancy would ‘prefer to have it in horticulture where they actually knew something
about plant systems or marketing systems’ and she adds that:

It has to be a long enough period of time that they will be a value to me, okay. So that is a crucial bit. If I’m going to put my time into them, then I have to have them here to provide work for me for long enough to make it be a trade-off.

She also adds, however, that ‘[i]f it’s going to be someone in an allied system, that would be fantastic because then I have a new person in my own network who’s going to give me ideas in areas that I’m a little bit weak on myself.’ She imagines learning opportunities such as ‘I can say “This is what I’ve done” and they’ll say “Why did you do it that way?”’

The conversation with Nancy explores this further and several additional possibilities emerge. In one, she suggests that there might be ‘a student who actually has a lot of background in international marketing but no experience, okay, so we can work together.’ In another, neither Nancy nor the student has ‘the background’ and so ‘they contact you as a supervisor and say these people are getting bogged down in the international patents laws and I don’t know anything about that.’ Of course, if the supervisors also lack expertise in this field, they might contact the patent attorney or the academic who specialises in intellectual property and frequently visits the agora to meet with students and supervisors. The agora, thus, becomes a place, and maybe many places including even West Coast Orchids itself, where, as Doll (1993) explains, ‘authority shifts from an external beyond to a communal and dialogic here,’ where ‘curriculum […] is a passage of personal transformation’ and there is ‘emphasis on the runner running and on the patterns emerging as many runners run,’ and where ‘[o]rganisation and transformation will emerge from the activity itself, not be set prior to the activity’ (p.4). In such a place the supervisor acts as a co-learner and as a broker, and such a notion, even in its language, sits alongside Doll’s (2003) idea that ‘we perform the act of teaching when we help others negotiate passages between their constructs and ours, between ours and others’ (p.180 – emphasis added).
11.11 Generosity and imagination

Cam Calder says that the curriculum for entrepreneurs needs to include experiences that ‘don’t constrain, they let the mind roam free, they let the mind delve and be stimulated in a lot of different areas’ so that the entrepreneur student ‘would start to recognise that there are no boundaries, the boundaries are set by one’s self.’ The goal, he says, is ‘self belief’ which ‘is crucial to anyone who wants to be an entrepreneur because invariably you’re going to face the nay sayers, the people that say it can’t be done, people who say “Oh you’re mad, why would you do that?” etc.’

Bauman (2005) would no doubt disapprove. He says that in liquid modernity ‘it is better to think of knowledge production and consumption after the pattern of fast food, prepared rapidly and eaten fresh, hot, and on the spot,’ and he argues that:

Transferring to individual students the responsibility for the composition of the teaching/learning trajectory [...] reflects the growing unwillingness of learners to make long-term commitments that constrain the range of future options and limit the field of maneuver. (p.316)

Entrepreneurs certainly are impatient, but Cam’s wanting students not to be constrained is not at all about a lack of commitment, but is rather about a passionate immersion in complexity. It is concerned with the authenticity of self. In addition, Cam’s advocacy for ‘no boundaries’ does indeed involve ‘putting the value of flexibility above the surmised inner logic of scholarly disciplines’ (Bauman, 2005, p.316), but the vision here is for a profoundly serious learning space that is fun and generative and that enables transformation, an open system in which both energy and matter are exchanged.

Gardner (2006) argues, indeed, that the ways that disciplinarians go about their business are ‘arcane’ and he suggests that:

Physicists may start with curiosity about the natural world, but they spend their time tinkering with equipment in a laboratory, building supersonic devices, juggling equations on a computer screen, and creating models that may entail an unfathomable number of dimensions. (p.139)
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Obviously this curriculum proposal does not dismantle physicists’ laboratories, but it does suggest, in relation to Schön’s (1995) metaphors discussed in Chapter Eight, that instead of expecting students to ascend to the high ground, the physicists descend onto the swampy lowlands and spend time in the agora experiencing and celebrating with students and others both the discoveries and the struggles of S1 and S2 science.

John Alldred says that the curriculum needs to nurture creativity ‘but at the same time I still think there are a core number of things that don’t seem important in New Zealand.’ amongst these, he says, ‘you have to have some structured thinking. It just shouldn’t be all of it.’ indeed, Barr and Steele (2003) argue for a ‘post-modern enlightenment’ in which higher education continues to value, for example, ‘the methodological testing of hypotheses and establishing the limits of certainty,’ but it also becomes ‘less rigid, bureaucratic and inward-looking and more generous and imaginative, less directive and more enabling’ (p.514). The dismantling of boundaries does not mean that rigour escapes.

11.12 ‘Scary’ graduates

Mary Taylor suggests that ‘it would be a bit scary to have all these graduates coming out and doing their own thing.’ Daniel Batten says that ‘you’re really talking about […] getting to the stage where you’re ready for incubation.’ Whether graduates go it alone or their start-ups join the Icehouse, this is a curriculum that begins to give life to the ten ‘action’ points – or rather the ten beings – that Bolton and Thompson (2000) associate with entrepreneurs: they are individuals who make a significant difference, are creative and innovative, spot and exploit opportunities, find the resources that are required, are good networkers, are determined in the face of adversity, manage risk, have control of the business, put the customer first, and they create capital (p.22).

It is a curriculum that gives special prominence to nurturing creativity because, according to the fourteen participants, it is irrevocably linked to entrepreneurship. They and the literature have also said that this nurturing needs structure and support but it
also needs chaos, and it requires exposure to diversity and to experiences that stimulate conscious and unconscious mental processes. The curriculum needs to require purposeful, hard work that involves risk, but it also needs to provide space for relaxation and for flow. Because creativity cannot alone deliver business success, it is also a curriculum that nurtures resourcefulness by encouraging students to develop important relationships and become networkers and communicators, and by supporting them to develop passion, enthusiasm and tenacity in the pursuit of a singular dream.

This is a curriculum that echoes Hindle’s (2005) call for entrepreneur education to focus on the whole person so that ‘through mastering the detail of this subject matter and thinking about it, I will be mastering myself and some of the mysteries of the world’ (p.21), although ‘mastery’ does not align at all well with the notion of becoming. This proposal does, however, sit very comfortably with Hindle’s ‘six mandates’ (p.22) because this is to be a curriculum that is taught ‘experientially’ consistent with Dewey’s (1938) principles of continuity and interaction; ‘joyously’ with passion, laughter and play; ‘respectfully’ through a focus on the runner rather than the running track; ‘adaptively’ with becomings the only constant, and ends always beginnings and beginning always ends; and ‘entrepreneurially’ with students engaged in exploiting authentic business opportunities. Hindle’s other teaching mandate is ‘creatively.’ This C, along with Doll’s five, will be examined in the next chapter.
12.1 Introduction

This chapter completes a set of three which proposes a curriculum for nurturing entrepreneurial creativity and resourcefulness. Chapter Ten laid down the theoretical underpinnings and Chapter Eleven described experiences that might give life to the curriculum. This chapter advances the argument by re-examining the proposal from six interrelated angles. The first five are Doll’s (2002) five Cs – currere, complexity, cosmology, conversation and community – and the sixth is creativity. The chapter ends with a proposal that creativity be recognised as a sixth C because this will have a productive influence on the other five and because it gives agency to human participants and ensures that their passion and risk-taking are not overlooked.

12.2 Currere

Brigid Hardy loves the idea that people’s lives are determined by the way they get up each morning: either they mindlessly embark on a daily routine or they maintain a quest for change. To illustrate, she points to a section in Eliot’s novel *Middlemarch* (first published serially in 1870-71) where the narrator says:

> [...] in the multitude of middle-aged men who go about their vocations in a daily course determined for them much in the same way as the tie of their cravats, there is always a good number who once meant to shape their own deeds and alter the world a little.

Of the latter, the narrator suggests that:

> [...] perhaps their ardour in generous unpaid toil cooled as imperceptibly as the ardour of other youthful loves, till one day their earlier self walked like a ghost in its old home and made the new furniture ghastly. (1967, p.151)
Brigid and other entrepreneurs are indeed amongst those who ‘shape their own deeds’ and maintain a passion that does not cool. Mary Taylor talks similarly about the way ‘[m]ulti-nationals [are] stifled by having to follow the correct path whereas the entrepreneurs just see and get there however they get there but it might not be the normal road.’ Daniel Batten also explores this idea in the tension he sees between the rhetoric of business creativity and daily routines in practice. He says:

If you have a look at company mission statements they’re all about, you know, innovation and passion and drive. And then if you look at the things the company is doing there’s absolutely no way that those qualities are going to come forth. So you don’t get to be a creative, passionate, dynamic person by sitting down on a box in front of a computer, sixteen hours a day. You actually do it by moving and feeling and talking in a dynamic, creative, passionate way.

For Daniel, creativity is about energy and transformation, therefore nurturing creativity requires education to be concerned with what Daniel calls ‘building, increasing the size of the container, not putting more stuff in a container of a fixed size.’ Brigid adds that:

You don’t want any mollycoddling, you know, you don’t even want people to say ‘This is how you should do that I think,’ because the people who are going to become entrepreneurs probably have their own ideas. They need exposure.

The curriculum proposed in this thesis thus offers exposure to a city of diverse experiences, an exposure that grows the container by nurturing potential and enabling transformation that sees the emergence of entrepreneurial ways of being. Doll (2005) explains that ‘[a]s a verb, active, currere focuses not on the structure of the course to be run, the curriculum, but on the experience of the individual running the course’ (p.67). This curriculum is thus not about the city but about each student’s unique experience of the city as they discover their own way.

This is a city where the runners do not tie their cravat in the set way and obediently follow the ‘normal’ path, rather they explore the ‘light and open spaces, different textures, shapes and relationships’ that are on offer (Barnett & Coate, 2005, p.129). However, learning does not happen simply because students have interesting experiences. Indeed, Doll (2002) explains that ‘[o]nly when experience is reflected
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upon does it truly become an experience in Dewey’s sense; only through this secondary, reflective act does meaning get made, do understanding and transformation occur’ (p.44). It is, therefore, also a city where the supervisor runs to keep up, not to ‘mollycoddle’ but rather to ask the challenging questions that Glen Slater talked about – see Chapter Eleven, to negotiate spaces, and to help the students interpret and theorise their work so that ‘[e]xperience is not what happens to (one) … it is what (one) does with what happens’ (Grumet, 1976, quoted in Doll, 2002, p.44).

12.3 Complexity

Fleener (2005) declares: ‘The New Sciences do not have, as a goal […] to reduce complexity, but to embrace it’ (p.3). Her notion of a ‘poetry of interconnectedness’ (p.2) offers an alternative to the way Daniel Batten believes conventional education exposes students to the practice of business:

The way that you experience things in the world is not like for the first three weeks of business you only deal with legal issues, then you only deal with accounting issues and then you only deal with customer management issues and then deal with marketing issues. You’re dealing with every single thing every part of the day. And so if the teaching can mirror what you’re going to experience on the outside world then you’re actually preparing people for that constant wearing of multiple hats much more effectively.

This curriculum proposal embraces the complexity of ‘the outside world’ by taking a domain rather than a discipline focus and by thus acknowledging Doll’s (2002) point that ‘the universe is creative: it is in constant flux’ (p.45). It starts on the first day with students being given Daniel’s map of the city and then being invited to go and explore. It is interesting to note that, according to Clydesdale (2005), Christopher Columbus and Henry the Navigator set out without complete maps and ‘[t]heir entrepreneurial action occurred under conditions of great uncertainty, but with flexibility they prospered’ (p.60).

In Idealog 2, Peter Biggs, Chair of Creative New Zealand, quotes from Wedde’s (1987) poem Driving into the storm:
We have to stop, we must let the hidden meanings out. The confrontations that may hurt us into original thought.

Biggs notes that for him, this is ‘all about the necessary place of art and creativity being disturbance’ (Mandow, 2006, p.24). Disturbance also lies inside Doll’s (2002) argument that ‘nature, life, organization all occur when there is a sufficient but simple level of complex interactions, and that from these complexly simple interactions new and more complex levels of nature, life and organization arise’ (p.46).

The students are not alone because supervisors and others provide support and backloaded teaching, and there is, therefore, some stability. As already noted, Tosey (2002) suggests that this “‘edge of chaos” (the dynamic between stability and instability) […] can be the most effective and most creative place to operate’ (p.2). Daniel Batten similarly notes:

It’s at the meeting point between order and chaos which is where the exciting things happen. And so that if you have too much order with no chaos then you don’t have any creativity. You have too much chaos, it’s like an engine which is misfiring and you need to create that order for the pistons to be going up in the right direction, for the sparks to be happening at the right time for it actually to go anywhere and to use that tremendous potential.

The meeting point for the interview with Glen Slater was the Icehouse where Glen and I sat in a small, glass-walled interview room at the side of a very large open space where several groups of people were standing and chatting casually. At one point Glen said if you ‘take a look at the space that we’re operating over there, it is chaos in a box, but to us, it’s a very, very structured space. It just doesn’t look like it to outsiders.’ The Icehouse is indeed a space that self-organises, a place where control comes from within. It is located at the edge of chaos where, as Tosey (2002) explains, ‘the components of a system never quite lock into place, and yet never quite dissolve into turbulence, either’ (p.18). The edge of chaos is indeed a space for the becoming of entrepreneurial creativity and resourcefulness. It is where in ‘moments of spontaneity,
on the threshold of becoming, new interactions and relations emerge in this dance of coexistence’ (Smitherman, 2005, p.169).

12.4 Cosmology

Doll (2002) notes that ‘cosmology’ is usually viewed as the study of the universe and its history and is usually focused on ‘particles,’ but, acknowledging Whitehead, he argues that this needs to be replaced with a postmodern cosmology in which ‘actual entities’ or ‘actual occasions’ are ‘the final reals “of which the world is made up,”’ and ‘these actual entities are drops of experience, complex and interdependent’ (p.47). The study of particles separated by disciplines and by notions of inside and outside is thereby replaced by a cosmos of experience, and this, Doll adds, ‘takes us back to the ancient Greek concept of cosmology […] which integrated into a harmonious balance the scientific with the storied and the spirit-ful’ (p.48).

Doll’s curriculum cosmology is one of diverse experiences, and in Chapter Six there was discussion about the ways the notion of diversity brings together entrepreneurship, the economy, creativity, complexity, the imagination, and the arts. It was also noted that Florida (2005) argues that human ‘[d]iversity is not merely enjoyable; it is essential’ for the health and well-being of an economic system (p.35). Brigid Hardy talks about the importance of ‘open-mindedness and there’s a certain space where you get into where it’s the imagine-if space,’ and in such a space Pete Rive says that ‘creativity comes from having diverse influences, so trying to gain as much experience from life as possible, keep your eyes and ears open.’ Pete suggests that ‘what surprises people is when you take something from one totally unrelated area and put it with something else and I think that’s kind of where the nexus of originality comes from.’

The importance of taking ideas from one unrelated area to another is central to Chia’s (1996) contrast between the fox and the hedgehog – see also Chapter Seven. He says that the hedgehog ‘chooses to remain within the secular confines of its own continent preferring to articulate a “grand synthesis” for the apparent fragmented multiplicity of
human experiences,’ whereas the fox ‘prefers to swim or even wallow in the 
fragmentary and chaotic currents of change accepting the necessarily ephemeral and 
discontinuous nature of human experience’ (p.4). It is noteworthy that while Chia 
contends that education should nurture the imagination of the entrepreneurial fox, 
Collins (2001) argues that a business should behave like a hedgehog – see also Chapter 
Seven. At first glance the two positions seems incompatible but a closer examination 
suggests they are complementary. Indeed, it may be the worldliness of the fox-like 
entrepreneur that provides resourcefulness and strength for forming the ‘simple, 
crystalline concept’ (Collins, 2001, p.95) that locates the enterprise uniquely within the 
cosmos.

Participants had different ideas about how the student fox might be exposed to 
diversity. Cam Calder suggests that the curriculum might ‘expose them to Zen flesh Zen bones by Paul Repps or that little book by Alan Watts Tao, Cloud-hidden, 
whereabouts unknown.’ He also suggests ‘[y]ou might go to the Mangere Sewage 
Works and see how the city’s shit is processed’ or ‘they might spend some time in a 
morgue.’ He even suggests ‘maybe we should introduce a juggling component to the 
university course’ and adds ‘it sounds fanciful but imagine the power of it.’ Some 
others’ ideas are more ‘practical,’ such as Debbie Duis’s interest in visiting companies 
willling to:

pour out all their problems, all the problems they are actually having and your 
eyes, you are made so much more aware of so many other things in the equation 
and then you come back and start to realise the enormity of what you actually 
want to do. Especially if you are at cutting edge. If you are creating a path, there 
is no recipe.

One interesting theme is Brigid Hardy’s interest in literature as a way of ‘linking 
worlds in a highly emotional way.’ She explains that:

I’m actually anti standing up there with a bunch of charts on the whiteboard 
going right, this is how you change, you go from here to here, because you sit 
there with a group of people just not owning it, you know, so you don’t have that 
empathy and that involvement. I actually think it’s really cool as well to have 
each person, because that literature thing really works for us, you know, but it 
might be quite cool even to have other creative mediums, you know, like film.
Nussbaum (1990) also argues that the complexity and mysteriousness of the world cannot be adequately stated in the language of transactional prose, and she argues instead for the reading of literary works before which ‘we are humble, open, active yet porous’ (p.282) – see also Chapter One. In a similar way, and acknowledging the work of Le Guin (1989), Gough (1998) suggests that ‘fiction is clearly “useful to us” as a means of posing options and alternatives and for connecting “present reality” with past and/or future possibilities in curriculum inquiry and, indeed, our purposes often may be better served by (re)presenting the texts we produce as deliberate fictions rather than as “factual” narratives reflecting all without distortion’ (p.93). In Chapter One, a similar point was made about the benefits of exploring change management by contrasting Hamlet and Dr Rieux. Resources more ‘useful’ for exploring this curriculum proposal might be Hardy’s novel *Jude the obscure* (first published serially in 1894-95) in which Jude Fawley aspires to learn at the university where ‘the tree of knowledge grows’ (1971, p.30) and does not see that ‘mediaevalism was as dead as a fern-leaf in a lump of coal’ (p.91), and Martel’s novel *Life of Pi* (2003) in which Piscine Molitor works out how to survive 227 days in a lifeboat with a tiger. Piscine, the narrator, says: ‘Reason is the very best tool kit. Nothing beats reason for keeping tigers away. But be excessively reasonable and you risk throwing out the universe with the bathwater’ (p.298).

As noted above, Brigid Hardy claims that the ‘literature thing really works for us’ and while this certainly appeals to me it was not clear how many participants would agree. Indeed, Petrena Miller suggests quite a different sort of journey when she says:

If you could get them to sit in a room, teach them meditation and go within to get the answers, you know, even if you supplied them like a room full of silences and taught them how to meditate and say okay, it’s very difficult to clear the brain of all your thoughts.

While there may be different ways, the common thread, as Daniel Batten points out, is that:

...to do something like to be an entrepreneur is not about specialising, it’s about incorporating a whole lot of different worlds. So bringing some of those worlds
back together I think is very important and knocking down some of the boundaries.

He suggests ‘it’s educating people about interpretation, about story, about metaphor’ and he concludes:

So I think knocking down some boundaries and being adventurous enough to say look there are some things that you cannot learn by being still inside four walls. There’s some things you can but there’s some things you can’t. Sometimes you gotta get up and be dynamic.

Maybe, to Cam Calder’s disappointment, it is not like Ingalls’s (1998) interdisciplinary arts program that ‘teaches dancers to paint, writers to compose music, musicians to create sculpture’ (p.B8), but it is rather a curriculum in which supervisors suggest to the students that the city offers a cosmology of experience and that risk-taking and story-telling are powerful learning processes. Thus spirit-ful, shared stories about Middlemarch, the morgue and meditation (the three Ms!) – not to mention stories about robotics, cashgora goats, horticulture, bioinformatics, clothes design, precision electromagnets, tourism, screen production and virtual worlds – may well set off a ‘simple level of complex interactions, and […] from these complexly simple interactions new and more complex levels of nature, life and organization arise’ (Doll, 2002, p.46).

12.5 Conversation

As already noted, Pinar (2004) sees curriculum as ‘an extraordinary complicated conversation’ (p.186), and Doll (2002) says ‘a true conversation is one that captures us’ and ‘[a]s we participate, live, and dwell in such a conversation, our task is not only to speak well but also to listen well. We need to hear back, recursively, both our own words and those of others (including ones from the cosmos, universe, ecology in which we live)’ (p.49).

Robert Franich says ‘[t]he class is open and fluid. There’s chaos in there,’ and in such spaces Trueit (2005) sees conversation as ‘the stream of thought and life’ (p.77). She
suggests that ‘[t]he turbulent flow of water, like wind flow, is chaotic, which is to say that it has not yet an identified, predictable pattern and yet it flows, as do life and thought and words’ (p.77). She contrasts this with ‘schooling [… that] dams the livingness of life and creative spirit, leaving stagnant pools that soon dry up’ (p.77). Brigid Hardy found that her corporate experience at McKinsey dammed her creative spirit because, for example, every conversation was expected to demonstrate a pyramid principle by containing three points. Brigid says ‘sometimes there are two and a half points you know and so I was constantly struggling with structure,’ and she suggests that opportunities come not from formal structures but from the wider environment and serendipitous encounters and the spontaneous conversations that occur. Daniel Batten adds that you have to ‘be prepared to listen and do a whole lot of listening and be very humble because there’s a lot of people out there who actually really want to help, who get a big kick out of helping.’ He points out the window towards the city and, I imagine, towards the agora too.

My conversations with participants were full of stories and they were a potent way to share and create our being together. Indeed, Brown and Duguid (2000) propose that:

Shared knowledge differs significantly from a collective pool of discrete parts. In this pool of knowledge, where one person’s knowledge ends and another’s begins is not always clear. […] People tell stories to make diverse information cohere. […] Stories, then, can be a means to discover something completely new about the world. (pp.106-107.)

Glen Slater thus sees his two main functions as strategy and story-telling, and Daniel Batten says that ‘the way that I’ve succeeded in selling the vision of the business is through story. And so most learnings will come naturally out of the story.’ Pete Rive says he tells his daughters that knowledge is not as important as ‘being empathetic and good storytellers and all, you know, like Daniel Pink talks about. I think you know, the concept of narrative skills are essential life skills.’ Robert Franich uses metaphor and story to suggest that ‘the business world actually operates through not just communication but chemical reaction as well. There’s a chemistry between people and opportunities and understanding what’s going on around you. It’s chemistry in action.’ He imagines ‘a whole lot of sparks going on, interactions, you know, people throwing
Chapter 12: Curriculum Proposal – Six Cs

ideas around,’ and Lachs and Lachs (2002) suggest that within such interactions, ‘[t]he demands of communication are such […] that participants in the conversation may have to reformulate their questions and their answers in terms they have not used before and thereby contribute to the creation of novel ideas and insights’ (p.233). Tlumak (2002) thus concludes that ‘[t]eaching through discussion is a methodological approach to generating a critical, reflective, and dynamic learning environment’ (p.177), and Doll (2002) adds that ‘[i]n conversation lies our hopes for convergence and transformation’ (p.49).

12.6 Community

Mary Taylor says that ‘at the moment in the world I see we’re very much an “I am” society’ but ‘I’m not sure […] whether that’s the right way or whether it should be the team thing.’ Less politely, Tony Falkenstein is scornful of people who want to be in business because they ‘don’t want to be controlled by a boss’ and who believe ‘business will give them freedom.’ Experience is never a private affair that is isolated and free, and the benefit for Brigid Hardy is that ‘all kinds of people and friends and amazingly talented people have helped me at every step of the way.’ Petrena Miller says there are rewards too for those who help because ‘there’s enough for everybody and if you can help someone or if you can share, you get the gain back tenfold and also it makes you feel good.’

Following Rorty (1989), Doll (2002) proposes that ‘when we give up the notion of an absolute, preset reality, then we realize that “what is most important to each of us is what we have in common with others” […] that “they” really are “one of us”’ (p.50). Florida (2003) thus argues that to build the creative community, ‘cities need a people climate even more than they need a business climate’ (p.283), and he suggests that the three T’s of creative places are technology, talent and tolerance (p.249). Tolerance permits diversity, and Wenger (1998) – see also Chapter Eight – argues that ‘[i]magination enables us to adopt other perspectives across boundaries and time, and
to visit “otherness” and let it speak its own language’ (p.217). This is in sharp contrast to Brigid Hardy’s ‘totally unreal time’ spent in the US studying for McKinsey’s ‘mini-MBA’ where:

we did like a couple of those Harvard business case study things a day. Like massively fast, reading through the night before and you got to breakout groups and work out what the answers would be, and it was all you know like occasionally there might be a sentence on the fact that […] the person who set up the business was influenced by their father who is reluctant to sell or you know, something like that, so then you’d have to work out what the strategy would be for getting around that. It’s so coarse, you know.

The complexities of family and business relationships, of the city and of wider ecological and cosmological communities cannot be engaged with through single, written sentences. It is scientific reductionism, and it also resonates with Nussbaum’s (1990) argument that ‘[s]tyle itself makes its claims, expresses its own sense of what matters’ (p.3) and, therefore, the complexity and mysteriousness of the world cannot be adequately stated in the language of transactional prose – see also Chapter One.

Learners need to talk with the people they want to talk about because, as Seitz (2003b) points out (see also Chapter Five), ‘individual self-expression is best nurtured within communities of association’ (p.385), and Miller (2002) adds that ‘[d]ialogue is the soul of education’ (p.97) and ‘a philosophy of interdependence complements dialogue’ (p.110).

Bauman (2000) argues, however, that:

The vision of community […] is that of an island of homely, cosy tranquility in a sea of turbulence and inhospitality. It tempts and seduces, prompting the admirers to refrain from looking too closely, since the eventuality of ruling the waves and taming the sea has already been deleted from the agenda as a proposition both suspect and unrealistic. (p.182)

Cousin and Deepwell (2005) note other skepticism amongst writers who argue that:

extolling the virtue of communitarian values of solidarity, mutual respect and so forth comes at a price, because these laudable attributes downplay the more sinister dimensions of community such as low tolerance of internal difference, sexist and ethnicised regulation, high demand for obedience for its norms and exclusionary practices. (p.58)
Nonetheless, and acknowledging the work of Wenger, they conclude that ‘the concept of community […] remains a helpful imaginary for the encouragement of change and learning.’ They caution, however, that ‘network learning practices must emerge from participants rather than be imposed by facilitators,’ ‘learning cannot be designed, it can only be designed for,’ and ‘network learning needs to support visits to “otherness” […] and to balance this with ways of coming home’ (p.65).

Doll (2002) would no doubt agree, and he argues that ‘experience needs to be reconstructed or transformed via a public interaction which occurs in a community dedicated to both care and critique’ (p.50). Care lies in the nurturing support provided by supervisors who ‘help others negotiate passages between their constructs and ours, between ours and others’ (Doll, 1993, p.180), and the notion of care also addresses Pete Rive’s concern that ‘we come from an adversarial competitive type background’ and need to replace this with ‘the whole question of collaboration and working with someone and how you share knowledge [to enable] the development of really good ideas, good products, good design and all that sort of thing.’ Brigid adds complexity and cosmology to community by suggesting ‘that whole web of relationship kind of thing you know, that’s really what it is. It’s just fitting together all this, you know, all these different worlds.’ That, in a nutshell, is the essence of this curriculum proposal.

12.7 Creativity

Loui (2006) believes that ‘in our classrooms we should teach students to dream, to imagine, and to create’ (p.208). He calls on professors to assign creative tasks and suggests that political science students could ‘write a constitution for a developing nation with a history of ethnic conflict’ and business administration students could ‘not only analyze cases but also create their own’ (p.208). Cropley (2001) contends, however, that it takes more than ‘a single course […] to achieve real change in the direction of creativity’ (p.165). As an example, he reports on a course in an electronic engineering degree taught by a psychology professor and an engineering instructor where students were asked to design and build a wheeled vehicle powered by the
energy stored in a mousetrap, but ‘[o]nly a very few were able to break away from conventional thinking’ (p.164).

The problem of the single course or activity is also evident in Fasko’s (2001) review of the literature on developing creativity. He reports that the approaches that are used are as various as individual assignments based on problem-solving or problem-finding, direct instruction, enrichment programs, techniques that stimulate creative thinking, group activities, modelling divergent thinking, strengthening attitudes conducive to creativity, and using prescribed models and creativity program packages. What is very noticeable is that these various approaches tend to be short-term and/or one dimensional supplements focused on skill. Feldman (1999) points out, however, that most robust definitions of creativity such as Sternberg and Lubart’s investment theory of creativity (see Chapter Six) describe a confluence of resources, therefore it seems to follow that multi-dimensional approaches to creativity development are required.

A multi-dimensional and longer-term approach is ‘problem-based learning,’ and Cropley (2001) believes this offers a ‘promising approach’ to enhancing creativity in higher education (p.170). He explains that it was pioneered by the medical school at McMaster University in Canada where:

The curriculum adopts an interdisciplinary problem-based approach in which students work in a sequence of small groups for three years. Students have to direct their learning and accept responsibility for the progress of the entire group in terms of the objectives that are specified for the programme as a whole and for the individual segments. (p.170)

Cropley notes that this problem-based learning has since spread to medical schools in other countries as well as into fields such as engineering and law (p.171). While there are some similarities with my own curriculum proposal, there are three major points of difference: no prescribed learning objectives, no ‘segments,’ and no expectations about how collaborative work might be played out. The last difference is most important because student collaboration can be seriously problematic. Farmer (2001), for example, interviewed medical students at Flinders University in Australia who said ‘we are bored with PBL cases’ and ‘thanks for your effort, but we are really sick of it’
(p.79), and he also found that the integrity of the problem-based learning process was undermined by exemptions given to clinical and ward teachers. Similarly, Dolmans, Wolfhagen and van der Vleuten (2001) report that at Maastricht University in the Netherlands there was an increase in poorly functioning groups therefore attendance was made compulsory, and when this led to inactive presence, it was decided to institute summative assessments of participation. It is important to note, too, that Boud and Feletti (1997) concede that while learning theorists tend to be positive about problem-based learning, they have raised concerns that it is too instrumental and that it downplays transformational goals. Problem-based learning, therefore, might encourage creativity and resourcefulness, and it may well focus on currere rather than the running track, but it nonetheless requires students to remain within the stadium and to follow the rules.

It is noteworthy that problem-based learning does not actually fit Cropley’s (2001) own argument for enhancing creativity which is based on an extensive examination of the literature. He notes there are cognitive, personality and motivational aspects to fostering creativity and that these alone are not adequate because creativity also requires interaction with the environment. He concludes that creativity thus requires of the creator: ‘independence and non-conformity; knowledge of the social rules and willingness to operate within them (if close to the edge); courage to risk being wrong or laughed at; ability to communicate in a way others can understand and accept’ (p.149). On the part of the environment, creativity requires: ‘acceptance of differentness; openness and tolerance of variability; absence of rigid sanctions against (harmless) mistakes; provision of a “creativogenic” climate’ (p.149).

The beliefs of participants in this project certainly fit within Cropley’s matrix. First, entrepreneurial creativity is indeed about daring to be different. John Alldred says that ‘[m]ost people have some creativity but they are terrified to use it in case they stuff it up because you are out there on your own doing something against convention.’ Brigid Hardy thus breaks the rules and says that the entrepreneur’s approach is ‘ready, fire, aim,’ and Nancy Beck adds that ‘whenever you do any kind of a business venture you
make mistakes, it happens. We made a lot of mistakes but we made major mistakes once.’ Cam Calder thus insists that ‘risk management rather than risk aversion has to be in the degree.’

Secondly, the nurturing of entrepreneurial creativity requires environments in which students can experience different things differently. Tony Falkenstein says ‘[y]ou don’t see an uncreative three year old.’ Tony plays with a pen and says that with ‘a three year old it’s going to be a tower or it’s going to be a rocket ship, and even in a room in here with nothing else in here, he will be able to do anything with that, anything he likes.’ Nancy Beck thus says that the curriculum for entrepreneurs needs to ‘encourage them to unleash their intuitiveness’ just as Michelangelo ‘unleashed the person who was underneath. He removed the bits that weren’t the person.’ Nancy adds ‘I don’t think you can train people to be imaginative. They either are or they aren’t. But experiencing different things, I think it’s hugely important.’ With regard to these ‘different things,’ Petrena Miller says that inspiration can come from ‘lots of things, you know, just seeing nature. I can get it from anywhere, you know, […] and also the other thing is too just being out of your normal environment.’ Robert Franich’s explanation of this is that ‘innovation really comes from not working within your silo, you have to be taken out of your focus, your comfort zone and be teased or cajoled.’

Thirdly, being creative enables entrepreneurs to transcend mediocrity. Brigid Hardy says that ‘creativity is actually much more powerful than a sort of hard core analytics and that thing sort of in a way defining yourself against […] being sort of stuck in somewhere quite provincial.’ Robert Franich similarly says that:

innovation, imagination, innovative approaches to doing things, breaking the rules by which other people have done them is all part of that creativity that pulls one process or people away from the people who are following the method and the method only.

The participants’ views are also consistent with Sternberg and Williams’ (1996) ideas on how to develop student creativity, although much of these writers’ advice is directed towards school teachers. Nonetheless, key relevant messages include the need for
students to learn to question assumptions, to seek stimulating environments and cross-fertilise ideas, to take sensible risks, to tolerate failure and ambiguity and to enjoy the discomfort that results, and to find excitement and share passions. Nickerson’s (1999) advice on ‘enhancing creativity’ covers similar territory regarding risk and overcoming fear of failure, and he also emphasises intellectual playfulness, reluctance to take things for granted, and skepticism of obvious explanations.

Chapter Five explored creativity as a personal and social phenomenon and the examination that followed in Chapter Six took a cognitive approach. These chapters concluded that creativity occurs in environments that will most likely have structure but will also enable chaos; will present opportunities for experiencing diversity; will stimulate subconscious and conscious mental processes; will provide scope for hard work that is fun and involves risk, and space for relaxation and for flow; and will enable both individual and purposeful teamwork. It was concluded that if these are the characteristics of environments that are supportive and rewarding of creative ideas, then it seems likely they will also be suitable for nurturing creativity. This possibility has been pursued, and the design of a first tier of such a curriculum is now in place.

12.8 Conclusion

In Chapter Two, it was noted that Mayer (1999) proposed that ‘creativity involves the creation of an original and useful product’ (p.449), and this definition was adopted for this thesis. In Chapters Five and Seven, participants talked about the critical role that passion plays in their creativity and their day-to-day work. Passion is a personal attribute but Cam Calder insists that passion needs to be ‘ignited’ because ‘you can’t pull it out of nowhere.’ It is noteworthy that Stanley (2005) says that ‘[n]ovelty […] emerges from the nonlinear interactions between diverse entities’ (p.148) and Fleener (2005) delights that ‘[t]hrough fractal geometry, mathematics seemed infused with creativity, beauty, and relationship’ (p.1). However, the making of novelty that is useful and of interest to people and commerce does not just happen: it requires a particular kind of human engagement and, to use Cam’s word, ‘ignition.’ It is therefore
arguable that Doll (2002) may be a little presumptuous when he proposes that ‘through community we can find that “fascinating imaginative realm … born as the echo of God’s laughter” which has eluded us. In this realm, creativity abounds, newness emerges, intelligence develops’ (p.52).

Indeed, Doll’s five Cs – currere, complexity, cosmology, conversation, community – almost seem to take it for granted that there will be richness in the interactions that occur and that transformation will naturally follow. Creativity makes no such assumptions and will thus have a generative sway on the other five Cs. Creativity as a sixth C adds the passion and risk-taking of human participants, and it enables a potency that increases the likelihood that learning and development processes will be productive. Nancy Beck says there is little point if ‘we’re not actually learning, we are just seeing new ideas along the way,’ and Petrena Miller says it is one thing ‘to get a great idea. The other thing is to take that idea and run with it.’ Petrena’s reference to running returns us to currere which provides a powerful metaphor on which to end – and to begin.
CHAPTER 13: CONCLUSION

13.1 ‘A call to arms’?

‘On the road to nowhere’ is the title of a provocative article Vincent Heeringa (2007a) wrote for *Idealog* 9. He recalls New Zealand’s ‘Knowledge Wave’ Conference in 2001 and the agreed task to reach the top half of the OECD by 2011. Six years on, he says, ‘we’re back where we were in 2001, and slipping’ (p.68). He recalls that in 2002 and 2003, New Zealand outpaced world economic growth and the New Zealand share-market was strong, but a high dollar and low commodity prices followed and now ‘[w]e’re watching the leading pack slowly but surely pulling away’ (p.68). Heeringa suggests that all is not lost because there is a broad consensus about what needs to be done: ‘increasing investment in our businesses, raising productivity, becoming more globally connected, improving infrastructure, lifting our ambition’ (p.69). He concludes, however: ‘But I can’t help feeling […] it’s all too late’ (p.69).

Two months later, in *Idealog* 10, ‘the road to nowhere’ becomes a ‘[r]oad to recovery’ Heeringa (2007b). Heeringa reports having received unprecedented and passionate correspondence that shared the frustration he had expressed in the earlier article. He concludes that ‘the next step is to galvanise this frustration into a coherent agenda. The end must rescue the frog from the pot […].’ (p.74). According to correspondents, this rescuing requires recognising that governments cannot be expected to do much to help; that the SME sector is ‘the sleeping giant in the economy’(p.74); taxes need to be reduced; investment in business needs to be increased; and finally recognising the need to ‘innovate or die’ (p.76).

Heeringa reports that one reader ‘suggests my story is a call-to-arms rather than a piece of journalism’ (p.76). He refutes this well, but the suggestion also raises questions about my own advocacy. Certainly, I admit to my respect for the entrepreneurs I
interviewed and who travel with me. I admire their passion and risk-taking, and the contrast between their worlds and the caution and pride of much in tertiary education is dazzling. But while participants’ stories and the literature have ignited new passion for teaching and learning, the thesis itself stands as a dispassionate argument. It is a reasoned interpretation of many voices gathered together for the purpose of exploring possibilities. The question arises, nonetheless, as to whether I have betrayed Doll and Barnett, in the interests of labour and economic imperatives, by proposing a curriculum that addresses several of the themes that emerged in the *Idealog* articles – improving infrastructure, nurturing the SME sector, lifting ambition, increasing productivity, and innovating. Have I sold out for thirty pieces of silver?

### 13.2 Stories for retelling

*My name was Judas* is a novel written by C.K. Stead (2006), an eminent New Zealand author. In this novel, Judas of Keraiyot does not die as reported in the New Testament but rather moves town, changes his name to Idas of Sion, and at the age of seventy tells the story of his life and the Jesus he has known since he was six years old. This is a different Jesus from the one known through the gospels, one who has a growing arrogance and who becomes unpredictable and inconsistent. Towards the end, Idas comes to dislike the ‘triumphalism in his manner, and in the way we began to stage-manage his appearances’ (p.171). In the Idas story, ‘[m]y betrayal was in my refusal to affirm what I couldn’t believe’ (p.171), and Idas’s version of the kissing incident is that after the last supper, he hears voices in the garden and:

> I rushed back and found him once again among the disciples. I broke in on what he was saying, grabbing him by the forearms – from which, I suppose, comes the story that I kissed him to signal which of our group was the prophet of Nazareth. ‘They’re coming,’ I told him. ‘If we scatter into the trees ….’ (p.217)

One day, a blind ‘Christian’ called Ptolemy comes to preach in Idas’s town and to stay at his home. Ptolemy turns out to be Bartholomew, another of the twelve disciples, but he does not recognise Idas who is ‘protected by […] his “knowledge” that I, Judas of Keraiyot, was dead, hanged from a fig tree, or impaled on a ploughshare in a field
bought with the money my betrayal of Jesus had earned me’ (p.139). Idas finally reveals himself, to which Bartholomew responds ‘“No.” He shook his head, frowning fiercely. “You died,”’ and Idas replies ‘[t]hen I must have risen from the dead’ (p.240). The reply jolts the reader. The reversal is a shock. The whole story is indeed a metaphor of the disruption of received knowledge. The novel is ‘useful to us’ (Gough, 1998, p.93 – see also Chapter Twelve) because it poses questions and invites us to look again.

First is the matter of betrayal. Barnett (2004) says: ‘To see universities and teachers as consumers of resources, or even as producers of resources on the one hand, and to see universities as sites of open, critical and even transformatory engagement are, in the end, incompatible positions, no matter what compromises and negotiations are sought’ (p.249). However, Barnett himself compromises and negotiates when, in the same article, he goes on to state that:

Being-for-uncertainty […] is characterized […] by certain kinds of disposition. Among such dispositions are carefulness, thoughtfulness, humility, receptiveness, resilience, courage and stillness. It is, perhaps strangely, dispositions such as these that will yield the ‘adaptability,’ ‘flexibility’ and ‘self-reliance’ that the corporate sector so often declares it looks for in its graduate employees. […] They offer, in short, the fashioning of being that may thrive in such a world. (p.258)

It is important to note that creativity and resourcefulness are dispositions that are enhanced by and that do not supplant those examples Barnett lists above. Noteworthy, too, is Barnett’s curious use of the word ‘strangely,’ even though it is qualified by ‘perhaps.’ What seems strange is not the compatibility that is conceded, but rather Barnett’s difficulty in getting past his own life/work binary. In my curriculum proposal there is no such trouble, and there is thus, in my view, no betrayal.

Secondly, associations between images of blindness and knowledge suggest that the ‘Jesus sect’ of Ptolemy and others was a closed system of being and belief. It is significant that at the front of the novel, Stead writes an acknowledgement ‘to Paul Morris, Professor of Religious Studies at Victoria University of Wellington, who, when
I told him I was thinking about writing this novel, and feeling uncertain, replied, “These are our stories. They must be constantly retold.”

In effect, Morris, like Doll (1989), proposes that an open system ‘needs fluxes, perturbations, anomalies, errors: these are the triggers which set-off reorganization’ (p.246). Stead’s novel is thus a disruption, a creation that brings energy and the possibility of change. The prospect of disturbance and transformation is also, of course, a motivation for the development of this thesis, with possibilities for the resurrection of the creativity that happens spontaneously in childhood, for creativity to be a story that brings new energy to Doll’s testament, and, maybe, for betrayal to be ascribed to business programs that treat entrepreneurship as science without craft and art. There are possibilities too that when the students gather on the agora to discuss the people, places and experiences that arouse them, My name was Judas might inspire at least one iconoclast to exploit an opportunity by creating a story that starts by asking: ‘Imagine if what we take for granted is not true?’

13.3 This proposal

Such a question has motivated my own search for an alternative to mainstream business education programs. The setting for this story is New Zealand, a country of only four million people, struggling to make the shift from dependence on natural resources and commodities to a creative economy based on ideas. According to Carden (2007), successful societies need to be adaptable and need to be creative, connected and flexible (p.120), but in New Zealand, he argues, we don’t provide ‘the right support’ and, therefore, ‘we’re not coming up with enough new recipes’ (p.219) – see also Chapter One.

Florida (2003) announces that ‘the creative individual […] is the new mainstream’ (p.6), and is clear that entrepreneurs energise the creative economy by taking risks, by innovating and commercialising their own innovations, and by helping to improve
labour productivity and generate wealth. Despite this, as Mintzberg (2004) explains – see also Chapter Two – business schools give primacy to the teaching of analysis in the context of what is knowable, with the result that:

true entrepreneurs get out of school as fast as they can and get on with life [because] entrepreneurship is [...] largely an act of faith, requiring the imagination of the artist more than the calculation of the technocrat. So entrepreneurs go largely by inner belief, and that is their great strength as well as their debilitating weakness. (p.134)

Hindle (2005) notes there is a view that the university is ‘a poor location (“the wrong building”)’ for entrepreneurship education’ (p.2), but as Mintzberg implies, there is a ‘debilitating weakness’ in leaving entrepreneurs to go it alone. Intending and beginning entrepreneurs have learning and development support needs, and Hannon (2004) recommends that priorities for tertiary education programs should include ‘bringing the future forward for nascent graduate entrepreneurs,’ the ‘creation of opportunities and environments for entrepreneurship practice’ (p.2), and progressing ‘desirability’ to ‘feasibility,’ and on to ‘propensity’ (p.15).

To give effect to these priorities and to address New Zealand’s own needs, this investigation has found an unambiguous link between entrepreneurship and creativity. It has also found that resourcefulness is critical for the becoming of entrepreneurs as innovators who also commercialise their own innovations. It has been established that in an era of uncertainty and (super)complexity, notions of being and becoming are more appropriate for nurturing creativity and resourcefulness than discipline-based programs that deliver knowledge and skill. A post-disciplinary curriculum that treats learning as a practice-based community process has, therefore, been proposed.

In Chapter Six it was noted that Udall (2001b) explains that creativity relies on a ‘dialogue’ between the intellect and the intuitive, and various other writers examine similar relationships between reason and emotions, and between tacit and explicit knowledge. These have been incorporated into the curriculum proposal along with other apparent opposites such as stability and chaos, ‘persistence’ and ‘surrender,’
intrinsic and extrinsic motivation, individual and teamwork, fun and seriousness, and, of course, innovation and commercialisation. The domain of practice is, thus, a complex site for a cosmology of dialogues, and this is fitting given Pinar’s (2004) suggestion that curriculum is ‘an extraordinary complicated conversation’ (p.186). More specifically, however, this curriculum proposal is based on the work of William F. Doll Jnr and Ronald Barnett. Particular attention has been given to Doll’s (2002) suggestion that a curriculum should be based on a matrix of 5Cs – currere, complexity, cosmology, conversation and community. This thesis endorses the value of this matrix. It is also proposed that creativity be added as a sixth C because, as Carden (2007) notes, ‘[a] single fluctuation adding its strength to other fluctuations may become powerful enough to reorganise the whole system into a new pattern’ (p.97). Creativity would also add passion and risk-taking and thereby increase the likelihood that learning experiences will be appropriate for ‘preparing students for a complex world […] in which incomplete judgements or decisions have to be made,’ and ‘coming to a position where one can prosper in a situation of multiple interpretations’ (Barnett, 2004, pp.250-251).

13.4 Suspicions

Just as some practitioners on the swampy lowlands doubt the capacity of the university to provide would-be entrepreneurs with suitable support, some academics from the high ground might also be suspicious of a curriculum for nurturing entrepreneurial creativity. Hartley (2003), for example, is concerned that ‘[h]aving been assigned to the margin, the creative and expressive dimensions of education are being revived. […] It is now not a question of learning to labour; but to do so emotionally, creatively. The expressive seems set to be instrumentalised’ (p.6). The view seems cynical, but Hartley’s claim that being ‘emotional’ and creative ‘will, on present trends, be managed and monitored formally as sets of competences and outcomes’ (p.17) presents a valid concern. Barnett, however, would be equally alarmed because he views competences and outcomes as ‘behaviours and capacities to act as desired and defined by others’ and therefore as ‘a form of closure’ (1994, p.81). Like Hartley, he believes
that competences and outcomes ‘spring from a particular form of reason – instrumental reason – and seek to extend its domination in the wider society into higher education, so further marginalizing other forms of interaction and reason’ (1994, pp.81-2). It seems arguable, therefore, that a curriculum based on Barnett’s work privileges the becoming of the individual and does not trade creativity in the interest of a performative vocationalism.

Looking at society at large, Bauman (2000) argues that ‘liquid modernity’ brings ‘the impossibility of ever being gratified: the horizon of satisfaction, the finishing line of effort and the moment of restful self-regulation move faster than the fastest of the runners. Fulfilment is always in the future […]’. (p.28). This curriculum does indeed set the runners free and it is, perhaps, arguable that as individuals who ‘spot and exploit opportunities’ and ‘make a significant difference’ (Bolton & Thompson, 2000, p.22), entrepreneurs also make an active contribution to moving ‘the horizon of satisfaction.’ That, however, is capitalism at work, and while this may be an interesting issue to pursue, it lies well outside the scope of this thesis.

Bauman (2007) more recently argues that:

For the gardeners, utopia was the end of the road; for the hunters it is the road itself. Gardeners visualized the end of the road as the vindication and the ultimate triumph of utopia. For the hunters, the end of the road can only be lived as utopia’s final, ignominious defeat. (p.109)

However, Bauman (2007) also states that ‘non-participation in the on-going hunt can only feel like the ignominy of personal exclusion, and so (presumably) of personal inadequacy’ (p.109). It thus seems that if ‘non-participation’ is not an option, then a curriculum for becoming offers a viable means for being with the uncertainty and complexity of ‘liquid times.’ In such a space, it may be that hunters and the hunted are also able to become gardeners involved in the ‘create-nance’ (Raxworthy, 2004) of beauty and good living by engaging in an unending, but productive, battle between chaos and order, and that this enables the development of strong selves able to reject the defeat that Bauman seems to embrace.
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13.5 The academy

The academy itself might have concerns about the impact of a curriculum that disrupts conventional boundaries and requires on-demand access to resources. However, it is arguable that different elements of the proposed curriculum are already in place. First, for example, the University of Central Missouri (Michaelsen, n.d.) enables bachelor students to have an ‘integrative business experience’ in which they work in teams for seven weeks to develop a business plan for a start-up company and a plan for a service project for a non-profit community organisation. The plan is presented to a loan review committee, and, if the loan is granted, in the following seven weeks the students are required to do enough business to generate profit for their service work. Secondly, the Tertiary Education Commission (n.d.b) reports that it has helped to fund Unitec Institute of Technology in Auckland to establish a design innovation centre called the ‘Hothouse’ where academic staff, graduates and current students work together with small companies with ‘limited time and resources to grow their businesses […] to define, distill and develop […] ideas and identify the most viable options that have commercial potential.’ Thirdly, Brown (2006) writes about new learning environments for the twenty-first century and gives special attention to the architecture studio where ‘all work in progress is made public,’ the students ‘start to appreciate and learn from the struggles, the missteps, and the successes of their peers,’ and ‘because they were in a sense peripheral participants in the evolution of each other’s work, they also have a moderated nuanced understanding of the design choices and constraints that led to the final result’ (p.18). Brown says that in the studio, ‘students move from “learning about” something to “learning to be” something – a crucial distinction’ (p.19). I would suggest that if the ‘integrative business experience’ was less prescribed and included the collaborative innovation work of the Hothouse, and if the learning style was modelled on the studio but extended to the agora, then a second tier of this proposal could quickly start to take shape.
If the proposal is nonetheless perceived as radical, I would suggest that it would still gain acceptance if it could generate enough income to cover its costs and create a surplus. Indeed, writing about contemporary curriculum research in New Zealand, Roberts (2003) notes that:

In a market-driven system of education, where what counts is what sells, fundamental changes in university curricula are inevitable. [...] However, talk about curriculum aims and objectives now has a quaint ring to it: It seems somehow old fashioned, unrealistic, and too imprecise. Thus, instead of asking, ‘What do we expect a graduate […] to know?’ the temptation is to say ‘What are the numbers?’ (p.506)

It would, maybe, be more challenging for the academy if a number of domains of practice started to demand a similar, alternative approach to professional education and development. It is beyond the scope of this thesis to explore that possibility, but it is perhaps appropriate to note that Nowotny and others (2001) argue that ‘the Mode-2 university […] will have to be both adaptable and resilient’ (p.93), and in a discussion about increased instability, they note Scott’s (1998) observation that:

at the end of the 18th century the university was on the brink of extinction. Stigmatised as an agent of the ancien régime and an intellectual backwater, it appeared unable to cope with the demands of revolutionary modernisation. The future, it seemed, belonged to radical salons and higher professional schools. Yet the European university was able to re-invent itself and to become the embodiment of modernity, science and democracy. So there is hope […]. (p.94)

13.6 Assessment

Doll (1989) suggests that curriculum planning would be a two-tier process, and a first tier was introduced in Chapter Eleven, along with suggestions as to how this might be enacted. The second tier and related implementation matters are not topics for this thesis, but the thorny issue of assessment warrants some mention because, as Ramsden (1992) notes, ‘[t]he assessment of students is a serious and often tragic enterprise’ (p.181).
In a tragedy someone or something dies, and Dineen and Collins (2005) suggest that in creative education ‘the pedagogic goose, neglected and un-nourished, looks increasingly unlikely to survive. And without the goose, human fulfilment through creative education will become as rare as golden eggs’ (p.50). Dineen and Collins argue that ‘[t]he fetishisation of grades and testing has brought in its wake demands for transparency, accuracy and parity of assessment within and across discipline areas,’ but creativity ‘[t]heorists and practitioners talk about the “elegance” of an appropriate solution, a concept difficult to define and equally difficult to assess but which is invariably part of expert judgment [...]’ (p.48). They explain that ‘motivation increases when learners are given ownership of a task, when their input is valued, and when they have the opportunity to pursue their own interests and passions,’ but militating against this is the requirement that ‘every line of enquiry, every creative impulse, must conclude at a pre-set moment, with an assessment. And each assessment must reflect not the student’s own involvement and development, but designated learning outcomes’ (p.48).

It is essential that tier two curriculum designers note this warning, because this curriculum proposal is also related to Dineen and Collins’ belief that ‘[c]reative individuals tend to be self-confident, independent, uninhibited and curious, willing to speculate and take risks, naturally playful and flexible’ (p.49). Writing about assessment and intuition, Broadfoot (2000) argues there is now overwhelming evidence we pay a high educational price for our obsession with measurement because ‘fundamentally important, but necessarily more amorphous forms of learning are becoming excluded’ (p.200). Administrators therefore need to exercise delicacy rather than apply heavy-handed formulae because, as Kleiman (2005) notes, appropriate and valid assessment is possible so long as the link between education and creativity is ‘viewed contingently and in subtle and nuanced ways’ (p.27).
13.7 Participants’ suggestions

Several participants identified other issues for consideration by tier two curriculum designers. Glen Slater suggests that ‘your number one challenge is communicating to potential students what it is that they’re going to learn.’ He also believes that ‘the people who are running the [business] school are more interested in the study of entrepreneurship,’ and Mary Taylor says that ‘some of these kids’ minds are way out there’ and ‘I don’t think a lot of teachers can catch up.’ Mary also raises questions about funding, but as a consultant to the New Zealand Pork Board she has worked with several New Zealand universities on research contracts and she imagines that ‘[i]nstead of the companies going to university for the quick fix, I guess the universities are going to the companies and saying “This is our idea, would you support it?”’

Pete Rive raised several issues from the perspective of business. He says:

There’s a number of risks for an employer in terms of taking on an apprentice. One is the risk to your reputation with you, you know, if they fuck something up, you have to take responsibility for it because you’ve hired the guy. In effect you’re hiring someone. (1) there’s a good chance it’s going to cost you and (2), at the end of it, aren’t they just going to you know, go back to their study and walk away?

As the conversation progressed, Pete became more favourably disposed to a relationship in which the apprentice is not working for the employer, but is rather engaged with the entrepreneur and others seeking to spot and exploit an opportunity. At first he suggests that ‘if the entrepreneur is as heavily involved in their industry as they should be, they are far more likely to have identified an opportunity,’ but he goes on to concede that ‘there will be a certain amount of arrogance coming from the entrepreneur’s point of view that students know nothing and that they come and all they are will be take.’ He says: ‘Now, I don’t believe that. I believe that there is far more two-way things that can happen.’ This ‘two way thing’ involves active co-learning, and when this is extended to Nancy Beck’s vision of a community (see Chapter Eleven) that also includes the supervisor and experts in the field, as well as whoever else might assemble on the agora and join Pinar’s (2004) ‘extraordinary
complicated conversation’ (p.186), then the learning is indeed rich, recursive, relational and rigorous.

Several participants also suggested ways they could participate in the curriculum. Glen’s and Nancy’s interest has already been discussed – see Chapter Eleven. John Allred mentors local entrepreneurs and has worked with several students doing masters degrees in tourism, and he would be keen to extend this. Mary Taylor likes the possibility of working with a student who can also help her with her time management problems. Petrena Miller has only recently said to a new graduate employee:

‘You’ve got $10,000 […] and for this season, how about you do a little collection within the Petrena range,’ just to keep them motivated and interested, and she’s very keen on that so you know, we could work with somebody from the university if they did want to do that. Yeah, that would work okay. And then we could get, even if we put that range in our business and sold you know, the garments as part of our business and they’d get that as the exercise of seeing how the sales went and maybe we could do a little profit-share or something like that possibly.

If Tony Falkenstein ran his own business school he says he might say to students:

We’re going to start a business. We’re not making it as if we’ve got nothing. We’ve got $30,000. We’re going to create a business. At the end of it, we’ll value it and if someone wants to buy it, that’s fine, or we sell it on the market.

The serial entrepreneur quickly moves on to a further suggestion. Tony says:

It’s often tough for people to come up with something from absolutely nothing and say ‘Okay, think up an idea,’ because some might be slower thinkers but if you said, for example, ‘Okay guys listen, we’ve got an association with Just Water over there. We can’t take all of their time but take a note of this, have a look at what they’re doing, go on their website, have a look at what that company’s doing. You come up with a product that they could do and let’s bloody get all this together, talk to Tony or whatever, let’s go and get all this together and we’re going to go out and market this product and either they can come in with some marketing planning and put some money in or they don’t, but you know, we’ll put in [… pause]. I don’t know how that works, but we’ll come up with something for them that we think can add value to that company.’

Brigid Hardy sees exciting possibilities too. She says:
I can think of right now about three or four different strategies that I would love to be implemented if I had like a hit team. Basically if I had a McKinsey team, I’d go ‘Right, we absolutely have to be in the health and organic stores, they all want us, we don’t have the time or the resources to service them. If we were going to get a distributor it would cost us forty percent, you know, we don’t have that amount of margin to give away, you know, we need a way to get around this, that we can actually get our messages out in those environments. What are all the issues and challenges and how should we approach this and can you pilot a few stores and show us what we could do, for example.’ Okay, and I just thought of that then. I could think of twenty projects like that but is that too much project with a very specific implementation outcome as opposed to an academically interesting? I also have right, we want to go to Australia, how should we do that?

Brigid’s response raises as many questions as answers, but what is exhilarating is that conversations that confront these demand creativity and resourcefulness not only of students but of entire communities of practitioners and scholars. This is a twenty-first century curriculum that honours passion and risk, and perhaps the best support for the proposal lies in Brigid’s concern that it might be offered at Deakin University but not in New Zealand.

13.8 Enterprising spirits and poetic imaginations

Robert Franich recalls New Zealand in the 1980s and a work conference where:

We had a facilitator of some type, a human resources type of person came and said ‘I want you to think about the new world that is coming. There’s going to be political change, economic change, the social change in New Zealand. How are you scientists going to change?’ And he said ‘I want you to line up. Very commercially-minded people at that corner and the people who see this as just an imposition in their life down that corner. That’s poets’ corner down there […] and that’s where the enterprise people want to be up there.’

Although the notion of a single line along which people locate themselves is simplistic and reductionist, it is helpful nonetheless for drawing a coarse contrast between the study of entrepreneurship that takes place in poets’ corner and the becoming of creative and resourceful entrepreneurs that requires tertiary education to be far more enterprising. In reality, however, what is required is not an either/or but a cosmology of
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experiences that bring together enterprising spirits and poetic imaginations. This thesis proposes such a curriculum as an alternative to current mainstream provision.

One of the resources recommended on the BetterbyDesign website is Dreyfuss’s book Designing for people (1974, first published in 1955). Dreyfuss was an industrial designer interested in the cultural significance of design. His final words are telling:

Perhaps A.A. Milne was really addressing us rather than children when he wrote: ‘Here is Edward Bear, coming downstairs now, bump, bump, bump, on the back of this head, behind Christopher Robin. It is, as far as he knows, the only way to come down stairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it.’ (p.230)

Stopping the bumping and exploring another way to come down (or go up) neatly describes the becoming of this thesis.
Dear …

My name is Ray Meldrum, I work at Unitec Institute of Technology, and I am enrolled in a doctoral program at Deakin University in Australia under the supervision of Professor Terry Evans who is Associate Dean (Research) in the Faculty of Education.

My doctoral research project will examine how tertiary education can enhance entrepreneurial creativity. My goal is to develop a proposal for curriculum improvements.

The participants in this project will be between fifteen and twenty experienced and start-up entrepreneurs who are involved in product and production innovation. Each will usually be a chief executive or self-employed and will work in a field of economic endeavour different to each other participant.

I invite you to participate in this project.

Your participation is entirely voluntary.

You may withdraw at any time. If you withdraw, information gathered from you will not be used thereafter and will be either destroyed or returned to you within one month of notification of withdrawal.

Your participation will require at least one face-to-face, in-depth interview with me. The first interview will take about an hour and a half, and it will be at a time and place suitable to you. The questions will be open-ended and will cover the following:

1. What makes you creative?
2. Why are you a successful entrepreneur?
3. What is the connection between creativity and entrepreneurship?
4. What role has formal and informal education played in your success?
5. What are your views of tertiary education programs that aim to enhance creativity and entrepreneurship?
6. What improvements or transformation do you suggest?
7. What role could you play?
Appendices

If there is a second interview, it will be about issues that emerge in the first round of interviews. It will take no more than one hour, and it will take place between six and twelve months after the first interview with you.

I would prefer to audio-record the interviews with you and this can only be done with your consent. The recorder can be turned off at any time. After each interview, I will provide you with a written transcript for your approval.

I wish to use your name in my research because you are an identifiable person and your business has a recognisable profile. If, however, there are particular matters you discuss with me that you wish to be confidential and not used by me, I will respect this. Similarly, if there are confidential matters that I may use but not attribute to you, I will respect this too. You will able to identify on the written transcript those statements that are not to be used and those that are not for attribution.

All interview data will be stored in a secure place for six years, as required by the University.

The data will be used in the writing of my thesis and may be used in writing for academic publications and conference publications. If I wish to use the data for wider publication, I will seek your approval before doing this.

If you agree to participate in this project, please fill in and return to me the attached Consent Form. Please send this to the address identified on the Consent Form.

If, before making a commitment, you have any questions about this project or your participation, please contact me by phone on 0274 920 180 or by email – rimeld@deakin.edu.au. Alternatively you may wish to contact Terry Evans by phone on 61 3 522 71164 or by email - tevans@deakin.edu.au

Yours sincerely

Ray Meldrum

Should you have any concerns about the conduct of this research project, please contact the Secretary, Ethics Committee, Research Services, Deakin University, 221 Burwood Highway, BURWOOD VIC 3125. Tel (03) 9251 7123 (International +61 3 9251 7123). Email: research-ethics@deakin.edu.au
DEAKIN UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE
Consent Form

To Ray Meldrum
Division of Vocational Education and Training
Unitec
Private Bag 92025
Auckland

I, of

Hereby consent to be a subject of a human research study to be undertaken by Ray Meldrum, and I understand that the purpose of the research is to examine how tertiary education can enhance entrepreneurial creativity.

I acknowledge:

1. that I voluntarily and freely give my consent to my participation in this research study;

2. that the aims, methods, and anticipated benefits have been explained to me;

3. that the research findings will be used in Ray’s thesis and may be used in writing for other academic publications and conference papers, and that I will be asked for my approval if my contribution to this study is to be used for wider publication;

4. that my name will be used;

5. that I will be provided with a transcript of each interview for me to approve, and that I may identify on the transcripts matters that are confidential and not to be used as well as confidential matters that may be used but not directly attributed to me;

6. that I am free to withdraw my consent at any time during the study, in which event my participation in the research study will immediately cease and any information obtained from me will not be used thereafter.

Signature: Date:
REFERENCES


References


References


Bruce, M., Bessant, J. 2002, Design in business: Strategic innovation through design, Harlow, Pearson Education.


References


Christensen, C. M. 2000, The innovator’s dilemma, Boston, HarperBusiness.


Collins, J. 2001, Good to great: Why some companies make the leap ... and others don’t, New York, HarperCollins Publishers Inc.


References


References


References


References


Finland Ministry of Trade and Industry 2007, High growth SME support in nine countries: Analysis, categorization, and recommendations, Edita, Edita Publishing Ltd.


Florida, R. 2003, The rise of the creative class: And how it’s transforming work, leisure, community and everyday life, Christchurch, Hazard Press.


References


References


Hannon, P. D. 2004, ‘The journey from student to entrepreneur’: A review of the existing research into graduate entrepreneurship, paper presented at the 14th Internationalising Entrepreneurship Education and Training Conference, University of Surrey.


References


Heeringa, V. 2007b, ‘Road to recovery’, *Idealog*, no.10, pp.72-75.


References


Kleiman, P. 2005, *Beyond the tingle factor: Creativity and assessment in higher education*, paper presented at the ESRC Creativity Seminar, 7 October, University of Strathclyde.

References


Labone, R. 2006, ‘How was it for you?’, *Idealog*, no.1, p.20.


McCarthy, P. R., McCarthy, H. M. 2006, ‘When case studies are not enough: Integrating experiential learning into business curricula’, *Journal of Education for Business*, vol.81, no.4, pp.201-204.


References


References


Neuman, W. L. 1997, Social research methods: Qualitative and quantitative methods, Boston, Allyn and Bacon.
References


Oram, R. 2007a, Reinventing New Zealand, Auckland, Penguin Group NZ.

Oram, R. 2007b, ‘Come together’, Idealog, no.7, p.64.


References


References


References


Schostak, J. 2006, Interviewing and representation in qualitative research, Maidenhead, Open University Press.


Skilling, D., Boven, D. 2005, No country is an island: Moving the New Zealand economy forward by taking it to the world, Auckland, The New Zealand Institute.


Stead, C. K. 2006, My name was Judas, London, Vintage.


References


References


University of Auckland 2006, Graduate School of Business: Prospectus 2007, Auckland, University of Auckland.


University of Otago 2006a, Business at Otago, Dunedin, University of Otago.

University of Otago, 2006b, Guide to enrolment 2007, Dunedin, University of Otago.

University of Waikato 2006, Waikato Management School: Graduate Prospectus, Hamilton, University of Waikato.


References


