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The 'feeling of what happens' in fourth year:

Exploring the emotive dimensions of learning in a
communication design programme

University of Cape Town

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for the award of the degree of Master of Philosophy in Education

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Declaration

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

Signature: _____

Date: _____

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The title of the thesis was inspired by Antonio Damasio's *'The feeling of what happens: Body and emotion in the making of consciousness'*, 2000.

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Abstract

Key words: emotion, self development, motivation, transformational learning, identity.

This is a story of discovery and renewal in my approach to teaching, learning and research. The research is a product of insights gained through the holistic theories of cognition offered by enactivism and complexity thinking. Some of the more established learning theories have clarified areas of concern I encountered in interpreting the data.

Among my aspirations for the education of fourth year design graduates are those that tend toward transformational learning, critical learning and lifelong learning. As such, I undertook this research in an attempt to understand the kind of learning environment that would best support creativity, and the self-development of a designer in their fourth year.

To do this, I needed to *really* listen, and *really* see – which perhaps best describes an enactive, hermeneutic mode of inquiry. It was through this approach that the research revealed the mostly unspoken phenomenon of emotion (Austerlitz, 2008) as a powerful force in relation to the transformational learning that I had expected from the course.

Prompted by interventions introduced on the fourth year Graphic Design programme which included new specialist learning areas, and assessment practices, the study took on a cyclical path as data emerged. Each intervention became an opportunity to observe student response and, through conversation and written reflection, to track students' personal development as a designer. The research finds its way through the complexity, confusion and self-doubt that a creative learning environment can produce for students, and grounds itself in the learning theories that explain these states.

My research journey is foregrounded throughout, which, claimed by (Geelan, 2006:104), establishes a particular dialogic or educative relation with the reader, involving and engaging them, in the hope of evoking thoughtful response. In navigating my own way through this unpredictable space, I aimed to provide an insightful account of how students respond in a new learning context whilst reflecting on the process as it unfolded for me.

I hope that this may contribute in some way to a reassurance that we are all learning as we teach, and that in valuing the individual, we are validating our practice as educators.

It is as learners that we become educators

Wenger, 1998:277

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List of acronyms and abbreviations

UoT	University of Technology
NGO	Non Governmental Organisation
Sappi	South African Paper and Pulp Industries
ITM	'Ideas that Matter' competition
HEQC	Higher Education Quality Committee
NQF	National Qualifications Framework
WIL	Work Integrated Learning
CPUT	Cape Peninsula University of Technology

University of Cape Town

Part I

Lighting the background

Teachers and educational researchers must make provision for the representation and interaction of ideas, but the means of doing so must be considered on a case-by-case basis, contingent on the particular issues, contexts and participants involved.

Davis & Sumara, 2006:143

The path that this research has taken cannot be ascribed to anything but the education I constantly receive through experiences and collaboration with my committed and energetic colleagues and students. Additionally, the Master's course work preceding the study enabled me to give form to the intuitions that I know design educators hold. As my current values deeply affect the way I approach my practice, I begin by illuminating the re-framing of my philosophies of teaching and learning in design.

The emotive nature of design practice and current attitudes in design education are discussed before outlining the research study, which is detailed within the context of the University of Technology where I teach.

Viewfinding

...that one, when it shall really be possible to lead a person to a specific place, first has to find where he is and start from there.

Kierkegaard, [1859] Handal and Lauvås, 1987:4)

Design practice is intensely personal and emotive. It elicits deep commitment to discovery and responsibility, requiring the designer or artist to bring their entire self, “including their emotional interpretations and embodied knowledge, to ways of working” (Shreeve & Austerlitz 2008:140). However, there has been relatively little research into how it, and other creative subjects may be *taught*, compared to the vast literature that has been written around the actual practice of design. The competencies one develops as a design practitioner include commitment to negotiating meaning with others (Wenger, 1998) and the application of emotional intelligence (Goleman, 1995) as creative production does not follow a set of objective formulae. Shreeve & Austerlitz claim this kind of knowing is only beginning to be being acknowledged as relevant in design education (2008:140).

Finding resonance with these observations, my commitment is invested in developing a fourth year or BTech¹ Graphic Design learning environment committed to enabling learning which establishes the agency and confidence required for the creative act. The purpose of the qualification thus goes beyond the instrumental and the vocational, and prepares the graduate for meaningful participation in the community of practice in their chosen discipline.

Nearly ten years ago, Grossman (2001:1) pointed out the growing impact of visual communication on the society we live in. Developments such as the digital revolution, nano-technology and the Internet have made the design of our visual surroundings by far the most malleable component of the environment. This points to the impact of visual communication and the responsibility that graphic designers have in creating the face of the society we live in. Design educators have an enormous responsibility in preparing students to engage in critical awareness of their complicity in describing a future world. The thought that our actions both initiate and are shaped by our environment is an enactivist² view observed by Snaddon (2006:7), in acknowledgement of this responsibility.

1 The BTech, or Bacchalaureus Technologiae qualification, which is referred to interchangeably as ‘fourth year’.

2 See Chapter 3, p20 for a brief explication.

With this in mind, I suggest that design educators need to be fully aware of nurturing the development of the emotional maturity required of our students if they are indeed to play a role in the future custodianship of society's values. We need to engage constantly in ongoing questioning of current educational and professional practices that need re-definition with specific regard to whether they serve personal growth and development of students, or simply industry's need for skills.

A personal perspective

I reflect here on the origin and renewal of my own philosophy and approach to teaching and learning, as this transformation in itself was instrumental in the way I conceptualised the research study. This continually reflexive process has reified my thinking at every stage of a fascinating and humbling undertaking. Re-thinking over one's development in practice is "consistent with a cognitive perspective" (Clark, 1995:53) as it is in this reflexive process that we find meaning from our experiences. Learning through reflection is put forward by Baird (1992, in Clark, 1995:53) as a "cornerstone of professional development", and it is through this layered and cyclical process that I have come to know more about myself and hence, my practice. The journey of self awareness began with the course work preceding this research.

The course 'Re-Searching Teaching' at UCT (Breen, 2003) allowed me to question my practice rigorously and to take responsibility as an agent of my own learning. My role and identity as educator/teacher/ lecturer (or any other descriptor for one who facilitates the education of others) now feels appropriate after the last few years of practice – with renewed appreciation of what it means to teach. Davies (2002:13) suggests that small-scale research projects provide possibilities for gaining "significant and specific insight" into particular teaching and learning contexts. This holds the promise of designing curricula more sensitively, by devising learning, teaching and assessment tasks which encourage and promote genuine transformations of student understanding of the subject of study. As such, this dissertation describes a yearlong research study in which I investigated the experiences of nineteen BTech Graphic Design students who enrolled on an updated course for which I was responsible in 2008. The relevance of my own story as outlined below, lies in the way the knowledge, beliefs and values I hold, impact in turn on how I interact with students and in the way I design their programme.

As with most design practitioner-turned educators (Frascara, 2007:62), my preparation for teaching was not orthodox. Finding collaboration with education refreshing and complementary to my creative practice, I started to teach design part-time before taking up a full-time post. Mixing business with the lively nature of design education was complementary and rewarding. At the beginning of my teaching career however, with no formal 'training' in education, I subscribed to the 'master/apprentice' style of instruction which is still common to many art and design programmes and reflects the culture of learning by 'imitation' in design practice (Frascara, 2007:62). However, whilst teaching at the diploma level over many years, the demonstrated creative potential of most of my students began to shift my approach. This, together with exposure to traditionally recognized and new learning theories introduced on the Master's course developed a desire to educate, rather than 'train' future designers to

deliver on their creative potential. When reflecting consciously on my own learning in an assignment on the Re-searching Teaching course, my most vivid recollections were of early childhood learning instances where my own capability for knowledge generation was encouraged. What was interesting for me to note, was that the general content of the learned subject was not as clear in my memory as the *emotions and feeling* it evoked, as well as specific relationships with 'teachers' (informal and formal). I remembered that the self-acceptance and confidence I experienced had come about through the empathetic acceptance of my idiosyncrasies, which was powerfully motivational.

Memories of my design studies at a higher education institution in the early 1980's, however, were mostly those of anxiety over performance and fear of retribution because of the high premium placed by the system on "intellectual and artistic progress" (Hjelde, 2008:195). Needless to say, this was all that was expected at the time, and one just got on with it. I subsequently discovered, when "thrown in the deep end" in industry that I 'knew' nothing. I had the suitable 'hand' skills sought after in the field at that time, but my experience of design education had not prepared me for this new world. I realize now that my consequent personal growth has resulted from the confidence I have developed through overcoming challenging situations with creativity – once I had left higher education. However, I am of the belief that transformational learning or 'changing as a person' (Barnett, 1997:5 in Brockbank & McGill, 1998:51), is the purpose of higher education and may be engendered in a well-designed and supportive learning environment.

During this reflexively transformative time in my personal growth as an educator (Hocking et al., 2001), learning as *authentic, embodied* and arising in *interaction* were concepts that became clear, orienting my disposition to an 'holistic' paradigm of teaching - meaning the development of the whole person. Through this account I am reminded once again of the very personal and holistic nature of making meaning of the subject-matter. The concept of *self as agent* in learning touched deep chords as powerful learning experiences began to transform my understandings, in the sensing of new possibilities for design teaching and learning.

The profundity of Socrates' (Semetsky, 2008:1) notion of *self-knowledge* as central to education struck me as I found resonance with writers who acknowledge holistic and ethical approaches to teaching. Self-development and my own discoveries continue to remind me of the intensely personal, social and situated nature of learning, and that fact that purpose and meaning become increasingly elusive when the self is not agent or central in the learning. Our everyday experience of *self* teaches us "critical lessons from which we can, and should learn" (Semetsky, 2008:1). Knowledge of my own experiences and psyche proved to play a pivotal role in my practice and in my learning, and since undertaking this research, I have become increasingly aware of how the *affective* or the intangible and unspoken, emotive dimensions of learning might impact creativity (Austerlitz, 2008).

Introducing the research

Over the course of the year in which I introduced the updated fourth year design course, I found renewed appreciation of what it means to be a student designer, through 'attunement' (Davis, 1996) to student voice. My assumptions were often misaligned with actual student experience. This became evident in the strong negative emotive responses of many of the students toward certain aspects of the programme. It became clear to me, from analysing some of the early responses, that certain interventions and the design of the programme had, unexpectedly, influenced some learning decisions students had made and this had negatively affected their progress. Positive emotive impact was also recorded, mostly generated by use of the support structures that had been put in place, as well as by supportive supervisor-student relationships. Industry participation proved to have both positive and negative emotional impact during the course of the year. Themes that emerged tended toward emotion as a strongly influential factor in approaches to learning, and I investigate this phenomenon as closely related to learning specifically in creative subjects (Austerlitz, 2008).

The findings raised specific concerns with regard to how I re-structure the programme, the learning attitudes of fourth year students, and the effects of industry participation. Some of the findings point to larger areas of concern and enlightenment and I will need to do more specific research to enlarge on them. Other findings have prompted adjustments in the curriculum with short and long-term implications, informing an approach to future curriculum planning, and the beginning of a new research cycle. It is with this understanding in mind that I provide an orientation to the research problem in the next chapter.

The landscape

Education for designers (like nearly all education) is based on learning skills, nourishing talents, understanding the concepts and theories that inform the field and finally, acquiring a philosophy. It is unfortunate that our design schools proceed from the wrong assumptions. The skills we teach are too often related to processes and working methods in an age that has ended.

Papanek, 1985:285

Twenty-five years ago, Victor Papanek, in 'Design for the Real World' gave an early warning of the unprecedented socio-cultural, technological and political changes that had begun sweeping the world, and the implication this would have for design education. Ranjan (2005:1) describes the attention of design as now reaching beyond the production of products and systems and the aesthetics of the artifact, in a concerted shift to the social interface. In a developing country such as South Africa, Graphic/Communication³ designers need to be occupied now, more than ever with the economic, the ecological, the social and the spiritual dimensions of society.

Design is finding leadership roles in many 'nontraditional arenas', being able to offer organisations valuable insights with regard to decision-making and business activities. Clark & Smith (2008:8) ascribe this to the ways in which designers address problems. These leverage the emotional intelligence, integral intelligence and experiential intelligence necessary for innovation.

Design is about making intent real. There is plenty of unintentional to go around. When you design, something is brought into the world with purpose... We believe design thinking is a remarkably under-used tool for achieving strategic business initiatives that are increasingly driven by the need for innovation.

Clark & Smith (2008:8)

The following is a perspective of current challenges in design education relative to those found in the particular context of the BTech Graphic Design course at the UoT.

³ 'Graphic Design' is the current name of the course. 'Communication Design' is the name of the course subject, as well as of the profession, hence the use of capital letters. As this is also the general term used to define the activity, it may be spelled in lower case when used as a noun, and used interchangeably with the term graphic design. A possible change to the name of the course is on the agenda for discussion with an advisory board, currently being constituted.

I then consider local industry's current involvement and its expectations of the BTech qualification, and student perceptions of the purpose of this 'fourth year'. I conclude the chapter with an overview of the new vision for the fourth year programme.

A global perspective on Design Education

The potential contribution of art and design education to growing creative economies is currently recognized worldwide (Shreeve & Austerlitz, 2008:139), with the quality of the individual learning experience in design education becoming a focal point. This is acknowledged as having great impact on the way students construct their future identities as creative practitioners, in the recognition of the importance of their contribution in creating what Ranjan (2005:1) calls an "unknown future".

An understanding of the immediate qualities of user groups and their environments thus demands that design education prepares graduates for a more sustainable, reflective and holistic attitude than the traditional 'training' approach where personal convictions and self development are ignored (McCoy, 1998:3). Graphic designers are considered as informed, active citizens that should be nurtured and encouraged to pursue the concerns of a complex society with a larger ethical view. McCoy further proposes that in an increasingly specialised world, "designers hold the potential for larger vision capable of enhancing the quality of life", calling for education to "retain the critical breadth of vision of early design leaders" (1990:22). Frascara (2007:62) confronts the erstwhile intentions of design education, maintaining that there is "a difference between training students for entry-level positions in design offices, which happens in junior colleges, and educating designers for advanced practice and lifelong learning, as should happen at universities".

Heller (1997) argued that design *could not have a curriculum*, given the pace of change it responds to. Given that most manifestations of the design disciplines respond to, or support human physical and emotional need (Hanington, 2003:10), communication design consequently parallels and reflects collective human consciousness of the current time. Burdick (2007:1) describes a vividly updated image of this scenario:

This is now. From the techno-cultural inevitability of Bruce Sterling's 'amazingly different world' to the design ascendancy of Bruce Mau's 'Massive Change,' the future of design looks nothing like it used to... Forces ranging from ubiquitous computing to the global design marketplace, merging media, and new modes of literacy have rendered disciplinary boundaries obsolete. Designers are shifting from the design of artifacts in isolation to the design of interconnected nodes in elaborate systems, whether YouTube videos or 'breathing' buildings. Masters students are no longer a source of curiosity to the profession — they are busy fleshing out the future of their disciplines, one project at a time.

Referring to the increasing complexity of the field of design, Grossman (2001:1) draws attention to this phenomenon. "The problems to be solved by the graphic designer will be very different, far more sophisticated in complexity and greater in number." Implied by this statement is the need for design education to change its manifesto and agenda (Ranjan, 2005:1). Added to this challenge is the massification of Higher Education and the reduction of finance per capita.

Consequently, studio space, resources and supervisor-student contact time is reduced every year, resulting in more fragmented and pressurised design teaching every year (Jonson, 2008:71).

In my experience, constant re-invention of methodologies are devised to overcome these obstacles, sometimes with success, but often at the expense of those students not well-equipped emotionally to deal with less than available teaching staff. A reminder of the importance of the quality of students' experience in higher education, is Dewey's (1938:25) notion of the 'organic' connection between education and personal experience. He argued that because each exposure becomes a "permanent frame of reference" for the learner, encounters should be "personally meaningful" and educationally sound.

McCoy (1990:20), calls design education an "adolescent profession", being approximately sixty years old. In building Graphic Design curricula, she proposes that a reciprocal cycle of research connecting education and practice is essential, as indicated by "mature professions" that enjoy mutual enrichment through the bridging of theory and practice. With professional and industrial support, she maintains, graduate studies generate research and experimentation which in turn, enriches the profession through application of theories to real-world needs. The Graphic Design course at the UoT has evolved, however, over the last decade, in response to the changing nature of communication itself, societal metamorphosis and the pressing need for environmental sustainability. Additionally, the student body has needs and expectations that differ from those of ten, and even five years ago, being products of a fragmented schooling system, a different political dispensation and exponential technological innovation in an increasingly globalised world. Design curricula at all levels are thus in constant flux, with educators having to manage a steady and focused watch on increasingly unpredictable technological, professional and societal trends. The Communication and Creative Design industry in this country sets the bar high, in a bid to continually deliver the world-class creative work South Africa is known for.

It is also well-known, however, that industry's current involvement with design education in this country lags behind that of international institutions. In my experience, this trend has only just started to change in the last five years or so, with serious consideration of design's role in systems and business thinking only being reconsidered as recently as 2008⁴.

4 A research survey on the perceived importance of design in business, was performed by Ipsos Markinor in 2008, commissioned by Sappi, a South African paper manufacturing company. Findings reflect a growing understanding of design's impact on developing economies from a business perspective. This trend is just beginning to highlight the role of Design Education in this country, whereas relationships between Design Education and Industry elsewhere in the world have been historically more robust. This is especially evident in the UK and USA, with educators maintaining positions simultaneously in industry and education.

The University of Technology perspective

In 2003, the Minister of Education re-designated Technikons as Universities of Technology. This shifted the emphasis of the core academic functions, bringing curricula into question. Du Pre defines a University of Technology around a learner-centred ethos – the values of which are consistent with that of a traditional University (2004:4). He acknowledges the conceptualisation of traditional Universities' academic qualities as having shifted in recent years. Rather than faculty-directed, in terms of inputs such as student and faculty quality, resources and facilities, academic qualities now rely on student output with regard to performance. Shifts in the core academic functions include *results, student productivity, what students need to learn and student learning styles*.

With the re-curriculation of the diploma courses currently under way at Faculty level, the BTech Graphic Design qualification is presently only under review at departmental level. As is the case with other South African UoT's, a Design Masters' programme has only recently begun to be considered, and some have programmes in the early stages of development. It is anticipated that the BTech Graphic Design qualification will have significance in relation to how a Design Master's⁵ programme is envisaged at this UoT.

Longer-term strategic goals of the institution require the review of the Design qualification structure at the UoT (Cronje, 2008:6). In addition to these motivations, preparation for a Quality Assurance Audit in 2010, under the auspices of the HEQC is currently under way. As explained by Kistan (1999:125), at government policy level, QA is about control of standards measured in terms of accountability. At institutional level, they are about *student experience and achievement* (my emphasis).

Jones (2005:5), points out that qualifications must be educationally transformative and lead to lifelong learning, citing The National Commission on Higher Education Report (1996) thus:

*The demands of the future and the situation of South Africa as a developing country require that programmes, while necessarily diverse, should be **educationally transformative**. Thus they should be planned, coherent and integrated, they should be value-adding; build contextually on learners' existing frames of reference; they should be learner-based; experiential and outcomes oriented; they should develop attitudes of **critical enquiry** and powers of analysis; and they should prepare learners for continued learning in a world of technological and cultural change.*

in Department of Education and Department of Labour, 2003:6, my emphases

I undertook this research in response to the context outlined above, and in response to the global and local trends previously described. However, the primary goal was to gain knowledge of my practice, through inquiry into the direct learning experiences of the students on the BTech programme. The inquiry was designed to investigate emotive response toward the learning environment to discern whether it promoted conditions

5 In 2009, the first Graphic Design Master's student was registered at CPUT. with the Design Master's programme currently in development.

for creativity and generated genuine opportunity for transformational learning and self-realisation.

Industry involvement and expectations

The Communication Design industry is described as challenging, fast-paced and ever evolving. With this in mind, the three-year diploma course aims to develop value systems and intellect as well as vocational skills. The practice of involving practitioners in the communication design industry is therefore commonly understood as 'a good thing' for keeping pace of new developments. As such, local design educators look to sourcing industry partners who are well disposed to 'giving back', and contributing to the education of young designers. This practice has tended to rely on the personal relationships current lecturers built during their time spent in the profession, and on the relationships built and maintained through interested alumni.

As it is experienced practitioners that are sought after, work experience of at least five years is necessary. It is preferred however, that practitioners co-opted for assessment should have spent ten to twenty years and more in the profession. This situation however, brings with it, a range of challenges for design education, as detailed below. In my experience, some practitioners will give some of their mostly frenetic time to take part in workshops, assessment, or to moderate portfolios. However, even well-meaning practitioners are prone to unpredictable availability for the activities described above, due to the nature of their business. Furthermore, it is uncommon for the relatively small and pressurized local communication design industry to provide the work-integrated learning placements sought-after by design education⁶.

This is recognized practice in many other disciplines and considered essential for contextual knowledge for the student practitioner, but proves to be a time-consuming administrative and coordination challenge. The tenuous situation is exacerbated by what Heller (1998:88) calls industry's "lack of knowledge and understanding of contemporary design education and its curriculum". He further suggests that anti-intellectualism and critical regard for design programmes often displayed by experienced practitioners could be ascribed to the misguided notion that designers can learn 'most of what they need to' in the workplace once employed. Heller (1998:89) further maintains that a "false sense of professionalism based on real-world experience" leads to a "posturing" by professionals.

In defending university design education, as not vocational training, but as "a process of discovery and renewal", he asserts that such prevalent attitudes do not help the next generation of designers in finding their way.

6 See Appendix A for the WIL invitation which was sent out to prospective Advertising Agencies and Design Studios in May 2009, to elicit response to the proposal that they host a design student Intern. One response was initially received. After telephonic follow-up, and on the strength of the submission of student CV's and portfolio profiles, a few more students secured a four-week internship. With the coordinator's support, the rest of the students persevered and were eventually placed.

At a local industry/education forum convened at the UoT in 2008, this attitude was discernible in some respects. However, there was also evidence of a growing willingness to contribute to communication design education locally, with the recognition that fresh young talent, full of passion and energy will breathe new life into the creative field.

Designing a curriculum

For the first time at the UoT, a DACUM⁷ exercise for the Graphic Design course was convened in July 2008, and proved to expand the general, and my current perspective on the needs of industry and attitudes toward design education. This practice involves educators and industry practitioners in developing effective curricula. The reciprocal system aims to build cooperation between parties with the purpose of enhancing education and industry's agendas. Practitioners from a wide field of communication design practices presented the *status quo*, and 'key competencies' required of graduates entering the field at this forum. The format of the meeting could have been termed a 'knowledge building exercise', and not a discursive forum, as it required a 'listening' attitude on the part of the educators present, with industry practitioners presenting what they deem as the key competencies required from graduates entering the field. The approach proved fruitful, as there was no opportunity for the practitioners' original thoughts to be influenced by the existing curriculum. The recommendations offered the opportunity to gauge industry perception of the fourth year course, to understand the current and general views on design education and to understand the levels of competency expected by industry.

Forum recommendations

As observed at the forum, there is an ever-growing need for designers who think *conceptually and strategically* in addition to a need for technically skilled designers. Contextually aware, critical thinking, self actualized individuals who are *enthusiastic, adaptable, happy, positive*, have the ability to learn quickly and generate 'big ideas', were identified as some of the sought-after qualities of a third year graduate⁸. It was interesting to note that technical skills such as design ability and software knowledge were seen as a *basic requirement* of public and private design education, deemed less important than a graduate's ability to *cope under pressure*, be *adaptable, versatile* and *self-manage*. These attitudes and character traits were prioritized over the expected technical skills that have tended to dominate industry's needs agenda over the last few decades, and I found it encouraging and refreshing that an awareness of a more educative and developmental approach when employing young designers has started to come to the fore.

7 DACUM is an acronym that stands for Developing a Curriculum. The process is primarily used to create and update training and education programs. It is extensively used by educators and by trainers when establishing a new education or training program or revising an existing one. For more information, see <http://www.dacum.org/>

8 Please see Appendix B for the applicable competencies in Rohlwink's DACUM report, 2008.

However, when the question of emotional maturity and preparedness for industry was raised at the end of the session, industry practitioners admitted that they had no concrete prescription as to how these traits could be learned. It was acknowledged that the full range of skills, competencies and attitudes expected would perhaps need further time to develop than what the three year diploma currently achieved.

In looking further afield for other opinion, I found that McCoy (1990:21) proposed that, in the education of a designer, even four years falls short of ideal:

... design disciplines... involve many different elements: problem-solving methods for-giving technical skills, design theory, art history, manufacturing and production techniques, photography, oral and written communications, business practices, marketing science, sociology, psychology, and of course a thorough liberal arts and sciences education. This broad array is very hard to cover in a four year university or art school programme.

McCoy, 1990:21

In raising the question of the perceived value of the BTech qualification in industry, practitioners however, questioned the purpose of a fourth year of study, commenting that the qualification itself does not guarantee placement in industry. In their experience of interviews with fourth year students, practitioners maintained there was often no difference between good third year portfolios and those of fourth year graduates. It was stated emphatically that the above-mentioned attitudes were more indicative of their confidence in prospective employees and, if a third year graduate displayed these qualities at the interview, together with design ability, there was a higher chance that they would employ them, even if the other applicant was in possession of the BTech degree. It was clear that there was no expectation that a BTech graduate may be more emotionally prepared for practice. Looking for employees who can reason, think fast and execute with dexterity, the practitioner has had to rely on the evidence of *visual knowledge* produced by the student, and the impression they make at an interview.

Frascara (2007:64) complains that there is a tendency for an outsider to judge good creative work purely visually, and that design education “concentrates exclusively on the visual aspect of things...”. If the work is considered of high quality, this is often put down to ‘intuition’, ‘creativity’ or ‘pure talent’ (2007:63), and is highly valued. His problem with design education is that the student is not taught to “reformulate propositional knowledge”. It is thus difficult to judge a designer’s abilities, he maintains, as the combination of “knowledge, sensitivity, skills and experience and a lot of work” become invisible unless the student is able to articulate their motivations and the principles that lead to appropriate design solutions.

It was clear at the forum that there was poor comprehension of what a fourth year in Graphic Design might deliver. This is not surprising, as, in concurrence with Frascara’s opinion, most fourth year graduate students between 2000 and 2007 have had no experience in articulating new knowledge in a professional environment, nor are they generally confident enough in their own capabilities to be able to verbally defend their work. Theory, it seems, is relegated to the place of education only – a requirement to be accomplished, with a mark to designate its worth.

The possibility of building theory from practice had not been a concept students were familiar with, before taking on further study in the fourth year. At the re-curriculation forum, the tension that exists between the needs of industry and education's aspirations for its graduates was exposed. This was not surprising, as the qualification is a relatively new concept in this country, and has yet to define and clarify its purpose. As much may be said for the students on the BTech programme who are perhaps as unclear as to what the qualification may deliver.

Students' motivations and expectations of the fourth year programme

The BTech Graphic Design course, referred to mostly by students as the 'fourth year', is an elective year, and may be applied for at the end of the three-year National Diploma. It is aimed at broadening and deepening specialized knowledge in the field of Communication Design. However, the aim has not been well understood by students or industry, with the ongoing question of the purpose of the qualification still open to interpretation. Hampton (2008:227) points out that a dichotomy exists for students studying creative subjects between the need to 'work for a living' and wanting to 'do creative work'. The tension she describes is similar, in this particular context, and compounds the uncertainty students face when contemplating studying for a fourth year in design.

Students' understandings of an area of study are often built from a collection of prior judgements, expectations and occurrences and through previous coping strategies and interpretations (Austerlitz 2008:22). Many students apply for the course on the assumption that the extra year will provide the 'creative freedom' to explore an aspect of communication design without the constraints of the pre-given briefs they are accustomed to in third year (BTech class discussion, March 2008). For most students, this is a highly attractive proposition, as they some have only just begun to access their creative potential after three years of exposure to possibilities. The motivation for undertaking a further year of study is then often driven by the need for exploration of personal creativity and the opportunity to enhance whichever skill they deem undeveloped. In addition to this attitude, other students feel under-prepared for employment, and fear that their portfolio is not up to standard given the scrutiny of external practitioners at the end of third year. This tends to produce a 'reality check' for some students, with the notion of conceptual integrity and design excellence only then becoming a more serious commitment for them. The motivation for enrolling for a fourth year then becomes remedial – a means to improve on their diploma work, and 'get more experience in design'.

Considering the lack of interaction between third and fourth year students, and the little explicit evidence of what they do, this is not surprising. Work appears on the wall at the end of the year, and this is often the first time third year students are even conscious of the option to do a fourth year. Students are often not aware of the written theory component and its aims. Because BTech students often work remotely, creative activity is not directly observed by students in the undergraduate levels and this in turn, affects third year student perceptions of the fourth year of study.

A new vision

The BTech (Bacchalaureus Technologiae) Graphic Design (NQF Level 8) is currently described as delivering the following opportunity:

Graduates make a contribution through research, to the application and evaluation of existing knowledge of a specialised area of graphic design in order to further professional growth and personal development.

BTech study guide, CPUT

This very broad description aptly describes the very self-directed nature of the year as it stood in 2007. Based on the discussions and evidence above, however, the methodology and approach toward realizing these intentions had not generally been manifested in design work that communicated high levels of professional knowledge. As importantly, it had not produced students confident in articulating their strengths and accomplishments. Over the past few years it has been disappointing to witness many of them neither achieving their goals nor having the satisfaction of feeling that they have grown as a person. This had become a source of concern for colleagues and myself who felt that the needs of the students were not being met.

When the opportunity arose, a colleague and I introduced changes to the programme in 2008, that we believed would improve student experience and performance. We identified four main areas that we felt had not supported the kind of learning expected at this level. The four main areas are first described, and the new interventions are then outlined:

- **Theory:** Research Methodology seminars guide the preparation of a Research Proposal. Students then embark on qualitative and/or quantitative research in their chosen aspect of communication design, which results in a written Academic Report. The subject is continuously assessed, and the outcome is externally moderated. As observed above, the practical subject had not previously benefitted from the opportunities revealed by the research, as no synergy was required between the theoretical and practical body of work. Because of the very visual nature of the course, with the practical portfolio commanding 70% of the final mark, the perception had developed over the years that the theory course is something that 'just has to be done'. The practical course had thus not previously benefitted from the opportunities revealed by the in-depth research projects that students produce.

Intervention 1

Integration of Theory and Practice: We required that the research questions addressed in the Academic Report should fully synergise with the intentions of the students' design proposals. This was intended to encourage a reflective process enabling students to more readily engage in their own learning. This exploratory approach was envisaged to engender more active and self-directed motivations (Weil & McGill, 1989:167) toward opportunities illuminated through the research, and would lead ultimately to enhanced creativity and innovation, and a sense of empowerment (Brockbank & McGill, 1998).

- **Practical assessment:** The practical course in Communication Design previously required students to work individually on one, or two major projects for the full duration of the year, with no facilitated opportunity for reflective practice or group work. Weekly tutorials were not well attended. On completion of the projects, the supervisor and two industry moderators summatively assessed work, with voluntary assessment invited from other lecturing staff. A weighted average of these marks was then allocated to the body of work. No discussion or feedback was formally given to the students. Students did not present their work verbally to this assessment panel, and experiential learning opportunities were not an integrated part of the curriculum. (This was understood as a voluntary, self-initiated aspect of design learning.) No creative writing support was offered.

Intervention 2

Industry panel assessments – formative and continuous assessment:

Verbal and visual formal presentation of work at all stages of the practical project was planned as an assessment format. We projected that if students communicated their intentions and motivations in a critical but constructive environment, this would provide opportunity for reflective dialogue. Industry participation was introduced to create contextual meaning and broader viewpoints surrounding issues emerging from the research and the creative work. We felt that students would benefit from their work being evaluated by a panel perceived as 'more objective', and be encouraged to take part in self-evaluation through discussion.

- **Facilitation of design as reflective practice:** Previously, the negotiation of design decisions was between the individual student and one senior supervisor. Based on anecdotal evidence from students, we found this to be problematic. Many students (depending on their personalities) reported to have found it difficult to articulate their intentions clearly. Some felt that their ideas and opinions were not entertained and that their opinion did not count, and perceived themselves as powerless to defend their work. Progress was slow, and attendance at tutorials poor, with some students having worked completely independently. A reluctance to take responsibility for their work had also been evident over the last few years.

Intervention 3

Written and verbal reflection: This was introduced to emphasise the activity of design as a consciously reflexive process, and to encourage self as agent. Students were asked to submit written response to the feedback they would receive during the assessment and provide a plan of action for the next stage of the project. In dialogue during tutorials, students were encouraged to engage in reflection on the assessment, concentrating on what they had learned, and how they had learned. According to Level III of Bateson's (1973) typology of learning (see p 26), this encourages the transitions expected at fourth year university level.

- **Creative writing:** We had observed that the written part of the communication design projects was not of the standard that may be expected at fourth year level. Apart from the academic writing and research support provided by the theory

lecturer, there had been no creative writing support for the copywriting⁹ part of the practical subject.

Intervention 4

Creative writing workshops and tutorials: A professional writer was commissioned to deliver two copywriting and strategy workshops and to hold two hour-long tutorials with each student individually. He was included in the panel at all assessment points, in order to contribute to feedback and dialogue with each student.

The above interventions aimed to increase the students' awareness of their capabilities through reflective practice. Meaningful interaction with peers and industry was projected as key to this aim as it provided ways of developing the confidence with which to articulate their motivations and methodologies, encouraging the development of strong identities as future practitioners.

Focusing the research question

Being aware that my understanding of students' expectations and perceptions was broad and mostly superficial, I needed to gain knowledge of student experience of learning at this level. My interest was in understanding and evaluating the effects that these pedagogical interventions may have had on students' self-perception, learning attitudes and self-development in terms of how they see themselves as a designer.

As their work as a designer is generally projected as a lifelong endeavour, I was mindful of the assumptions we make when 'doing things to' students, which can produce unintended, long-term effects on how they view themselves and their approach to their work. My attitude throughout the research period was again, one of 'attunement' (Davis, 1997) to the nuances of the subtle phenomena that arise as positive or negative emotion – which are then verbally expressed as feelings.

From the perspective of teacher/learner/researcher with respect to finding this knowledge as part of professional development, I set out to gain understanding the *effect* of the programme on students' self-development. I did not adopt, in the words of Gunn (2001:98), a 'looking backward' or causal approach, but set out to find possibilities for future action/knowing.

As I was hoping to find the effect of the programme on student experience, with respect to their self-development, I articulated the research question thus:

9 The 'written part' of communication design refers to what is known as copywriting' in the practice of design. Professional copywriters always work in tandem with communication design practitioners as the written component of any campaign or piece of design will affect the efficacy of the visual communication. Student designers are expected to be able to write the 'copy' at a level that does justice to the design work. The standard of copy writing therefore affects the evaluation of their practical work.

How did students experience the new fourth year Graphic Design programme, and in what ways did these experiences influence their approach to learning and self-realisation?

Sub questions that addressed specific aspects of this experience focused on the following detail:

- 1 Which practices and methodologies effectively supported student self-development?
- 2 How do students feel about industry collaboration on assessment and how do they perceive this practice?
- 3 How does the Theory of Graphic design inform or support students' approach to the practical design project?

As the year unfolded, students' experiences of their world revealed new perspectives in mine. I thus interpreted the data according to the way it continually informed the process, through the lens of complexity thinking as will be discussed in Chapter 3. Emotion in the learning environment emerged early as a phenomenon influencing student experience of learning. I then adjusted the focus of the research question, as discussed in Chapter 4, and paid specific attention to emotive response in subsequent interactions.

Appropriate frameworks were identified in the literature, as I gained insight along the way, illuminating ways of interpreting and reflecting, with very recent research guiding me in terms of appropriate methods at each stage. Reflections on my discoveries, assumptions and decisions accompany each section of the story, as I attempt to create a holistic 'picture' of the developing scenario. I go on to outline Part II and III below:

Part II: Finding focus

...in complexity

Key concepts and principles that relate to my own and other relevant learning theories are discussed through the lens of complexity thinking.

... in design

My choice of method and approach to the research is outlined, providing the frameworks I applied in interpreting the information gathered. I present a rationale for the design of the study and define each stage of the process.

Part III: The picture

Analysis of the data is described in two sections:

...in colour

Data from the year as a whole is treated as a 'colouring' of my perceptions and interpretations. Emerging themes pointed to patterns of behaviour in personal journeys, directing my attention to a smaller sample group.

... and detail

Six 'cases' or journeys are tracked in two groups of three students. The two groups showed differing responses and this is interpreted according to their histories and

learning approaches. My narrative includes reflection on my original assumptions and summarises my new understandings of the effects of the learning environment on these particular students.

Framing

In conclusion, I frame a possible approach to the design of the course grounded in new awareness, and put forward recommendations for further research.

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Part II

Finding focus

Self-initiated learning which involves the whole person, feelings as well as intellect, is most lasting and pervasive.

Carl Rogers, cited in Brockbank & McGill, 1998

My orientation to the concept of learning as holistic, evolutionary and ecological was informed by the recent developments in complexity thinking which has provided me with a cohesive view of this approach. This way of thinking admits a diversity of opinion, underpinned by an entirely humanist position which now permeates my teaching practice and research methodology. Through the literature reviewed, I provide a rationale and conceptual framework with which to ground my interpretations and reflections.

Throughout my experience of teaching graphic design, I have observed that emotion experienced through the process of designing as profoundly affecting students' motivation. I explore the concept of emotion as 'organiser' and 'motivator' in transformational learning and its potentially powerful influence on the personal growth of a learner with specific regard to learning in creative subjects.

3

...in complexity

Yet sometimes the criteria for appropriate classroom behaviour still seems to require bodies and emotions to be immobilized or even absent. If the student, as a sensuous animal, is not touched in any real way there is little possibility for transformation of either student or teacher.

Kull, 2001:45

Teaching has been cast as a complicated, rather than a complex phenomenon in the quest to analyse, document and develop formulations that describe best practice (Breen, 2005:239). A distinction between 'complicated' and 'complex' may be described by the metaphor of the machine, which is able to be reduced to a set of parts, compared to a human being, or to communities, which are "more dynamic, more unpredictable, more alive". (Davis & Sumara 2007:117) A complex view of teaching acknowledges the interwoven relationships of teacher, learner and environment, and enlightens, Breen maintains, rather than complicates one's practice (2005:239). He speaks of the world of *nuances* as much closer to 'reality' than the world of 'certainty', and cautions one to resist the temptation of thinking that it is possible to capture the essence of education by living and believing that the world is merely complicated and not complex.

Taking a complex view means that the focus is on the interrelationships of things and the manner in which sub-systems come together to form larger, more complex systems. The theory of enactivism (see for example, Davis 1996, Maturana & Varela 1986; Varela Thompson & Rosch 1991) looks at each learning situation as a complex system consisting of teacher learner and context, all of which frame and co-create the learning situation.

Breen, 2005:243

The theory of Enactivism is rooted in conceptions of learning as *authentic, embodied* and arising in *interaction* in a *living system* which is regarded as a structure determined by our environment and historic and biological roots. It is also intended to highlight the notion that "identities and knowledge are not ideal forms, but *enactments* – embodied in the nested interactivities of dynamic forms" (Davis & Sumara, 2006:124). For education, this means that learning interactions will trigger a unique response in each uniquely evolving individual, in a learning environment constituted by learner, teacher and the physical context. This involves seeing the student as a whole person within their curriculum of their life, which is the context in which the individual student exists (Davis & Sumara, 2006:124).

Breen describes an enactive view of life as leading one to take on a "hermeneutic quest" about the way in which the different parts of the system interact as a whole, rather than look to closure by finding facts about a sub-section of the system. Davis & Sumara (1997:121) claim that we cannot teach everything that must be known, because the

circumstances of knowledge are always shifting and evolving. The best we can do is acknowledge learners' current predispositions which arise from "biological, historical and other contextual factors" and perturbate their inherent potential for learning.

Over the past 30 years or so, complexity science/thinking has emerged as a coherent field of inquiry or realm of discussion (Davis, 2004:150; 2006:ix), having arisen in the confluence of several areas of research. Certain emphases in the social sciences have recently begun to be included under the 'rubric of complexity' (2004:150), extending the list of diverse interests and diffuse origins of complexity research to include any phenomenon that may be described as a *living adaptive system* (Davis, 2004:151, my emphasis). This means that with regard to immediate human interest, nested levels of organisation such as cells, bodily organs, individuals, social groupings, cultures, societies, species and the biosphere, are encompassed.

The essence of complexity thinking in education is that knowing and learning, or personal understanding is understood as a complex phenomenon – self-organising, self-maintaining, self-referencing, and recursively elaborated (Davis & Sumara, 2006:117). The focus is not on application of the theory, but on its theoretical premise and methodology. The premise is presented by Davis and Sumara (2006) as an appropriate attitude for educators and researchers who acknowledge all the activities involved in human learning as arising in complex systems. Capra (2007), uses the metaphor of a biological organism, or an ecosystem to illustrate the term 'complex'.

Complexivist and ecological discourses are closely aligned as concepts, as both are attentive to interdependencies of phenomena. Both understand the universe as constantly unfolding, and foreground the roles of agents in the emergence of collectives (Davis & Sumara, 2004:160). These concepts may be described as responses to the modern tendency toward neglect for context, exemplified by Davis & Sumara as manifest in "scientific technologies that are deployed in ignorance of their environmental consequences, in medical practices that are fixated on responses to disease rather than the support of good health...and in educational systems structured around... standardised curricula" (Davis & Sumara, 2004:161). Ecological discourses have reasserted the role of human consciousness, and are now concerned with attitudes of participation and lateral or outward relationships in learning (Davis & Sumara, 2004:160). Similarly, Brockbank and McGill (1998:46) claim that the social and political context of learning influences the degree of (individual) agency experienced by a learner and depends heavily on the relationship with, and the qualities of the facilitator.

In application then, this holistic paradigm of teaching places an educator's primary interest on meaning known through experience. Broadly generalized, a holistic approach takes an ecological worldview toward education, interested in wholeness of human beings, human potential and embodied wisdom (Miller, 2001:iii). Capra (2007), maintains that this view allows a way to simultaneously include "the biological, cognitive, and social dimensions of life", for the first time.

A university course, nested in a university, is part of a complex system. For an entity such as this to be dynamic but stable and adaptable in any circumstance, the

individual/collective balance is critical (Davis and Sumara, 2006:140). It is not seen as necessary to place seemingly disparate interests of individuals in competition with one another, as the fostering of individual agency and collective potential can simultaneously be addressed without compromise. Key to the maintenance of this balance is the structure of the system, and how communication between 'neighbours' is managed. The term 'neighbours' signifies any constituent elements that come together in a grander knowledge-producing unity such as a faculty, a department, a classroom grouping, external advisors or even an individual's psyche. In essence this means that context and specific settings are the indicators by which teachers gauge and set their approaches and that they empower themselves to address the complexity of each situation (Davis and Sumara, 2006:142).

Complexity thinking/science is "not a metadiscourse" that seeks to offer complete explanations, but rather offers researchers in studies (such as this one) to "note profound similarities across a diversity of phenomena", providing a means to address hitherto and "seemingly oppositional theories and research foci" (Davis & Sumara, 2006:127). In this view, the researcher has an ethical imperative to be attentive to how he or she is implicated in the phenomena studied, and obligated to be attentive to the consequences and implications of their efforts encouraging "an ethics of care, responsiveness and responsibility". It is further suggested that educators re-examine their assumptions and theoretical positions and problematise the more linear, reductionist approaches to inquiry that have dominated educational research for over a century. Davis and Sumara caution however, that simplistic interpretation of this attitude carries the danger of reductionism and hegemonies, which could completely diminish expansion of possibilities and of richer understandings. As such, the complexity thinking researcher does not permit the error of "mistaking the theoretical, the descriptive, and/or the experimental result with stable and secure knowledge" (Davis & Sumara, 2006:169).

Complexity thinking takes all positions of research into account and defies "tidy descriptions and unambiguous definitions" (Davis and Sumara (2006:ix). It refuses definition as either a science or theory, field, domain or system of interpretation. Its relevance for my approach lies in the inclusion and exploration of emotion, which is a biological aspect of human learning. This kind of thinking admits emotion's role in learning through relationship in a complex environment. Apart from a minor presence of studies into brain function and development, Davis and Sumara claim that even 'holistic' educational research has paid scant attention to the fact that humans are primarily biological entities, and, they suggest that, in some ways, this has even been deliberately disregarded (2006:124).

Having established my attitude toward the inquiry, I discuss emotion as a phenomenon and the role it plays in 'double-loop', or transformational learning, and the role of the facilitator through consideration of the work of Brockbank and McGill (1998) below. Learning specifically in creative subjects, illuminated mainly by Austerlitz (2008), and Wenger's (1995) development of identity within a community of practice, complete the scope of the conceptual framework.

Transformational learning and the facilitating environment

Education is more than a science and more than an art. It is the transformation of being.

(Mason, 1998:1)

Harvey and Knight (1996:iiiiv), in Brockbank & McGill (1998:49) propose that the primary function of universities is the encouragement of learning that is transformative. Explicit phrases like 'transformational learning', 'critical learning' and 'lifelong learning' have indeed begun to describe the hitherto unarticulated aspirations of Higher Education. If higher education is to play an effective role, it should focus on the transformative process of learning, and must *itself be transformed* "...so that it produces transformative agents: critical, reflective learners able to cope with a rapidly changing world" (Brockbank & McGill, 1998:3). In concurring that learning is primarily about transformation (Mezirow, 1978; Freire, 1996; Brockbank & McGill, 1998; Marton, 2002; Biggs, 2003), student experience of learning therefore needs to be understood in the context of the increasingly commodified institutions where this learning is expected.

Working towards transformational or critical learning, Brockbank & McGill (1998:4) emphasise context as crucial, arguing that the constraints a social system imposes on a learner's *perception* of their ability to think, feel and act, strongly influences their *sense of agency*, and the means by which that person becomes a transformational learner. That an educational institution is itself a social construct, where power relations can progress or impede a student's performance, is not an unexplored notion, and is discussed later with regard to the concept of learning in a community of practice.

Gothe (2003:6) concurs that the prime goal of the University is the emergence of independent thinking and creative individuals. Its mandate is then to develop appropriate environments from which independent thinkers, capable of creative thought, can emerge. As Brockbank and McGill state,

Learning as a social process is critical to the learning process itself. By the learning process we mean the context and conditions in which learning takes place. Process is about how intentional learning situations are created and undertaken. If learning embraces and integrates, knowledge, self and action, then the means require their inclusion as well.

(1998:4)

Hampton, (2008:236) posits that in the higher education environment in the UK, research "continues to have more status than teaching", but cites student achievement and retention as reliant on "enthusiastic, knowledgeable and caring staff" in reporting research findings. Increasing student numbers and declining resources for caring and support are factors found to affect success in students' studies. As was found by Perry (1968, in Gothe, 2003:3), growth and maturation of students can be engendered by a system (of the university) if that system engenders the kind of community that recognises the courage required by students, to face the "inherent risks and aloneness they experience, as they begin to locate themselves through commitment, within a relativist tradition of multiplicity." Again, the additional pressures of increasing student

enrolment in the corporatised university has also compounded the already fraught but crucial notion of community, and compromised the ability of supervisors to “ensure a consistently supportive environment”. Research into the process of postgraduate education reports less than supportive environments as ‘traumatizing’ with emotional loss and conflict experienced if support is not forthcoming (Lee & Williams, 1999, cited in Gothe, 2003:5). Furthermore, Gothe speaks of the health of the institution as ultimately reliant on the facilitating environment and dependant on supervisor-student relationship, and suggests that supervisors need to be supported by the institution in their approach to teaching and mentoring.

Brockbank and McGill (1998:46), in questioning the ‘necessary and sufficient’ conditions for learning in Higher Education, cite Rogers (1983:121), who posits that the learning process is described as person-centred. It should thus be “self-initiated, significant, experiential, ‘gut level’ learning by the whole person...”, where “the facilitation of significant learning rests upon...qualities that exist in the personal *relationship* between the facilitator and the learner” (original emphasis). Their appreciation of constructivist learning demonstrates its overlaps with a complexivist viewpoint: “For the constructivist, all knowledge is constructed, and the knower is an intimate part of the known” (1998:41) with Polanyi, (1958) expressing this as “passion and participation” in this category of learning. Relationship is once again emphasised as a ‘key ingredient’, for those who take an holistic approach towards knowledge and learning, i.e. connectedness to others, empathy and awareness of feelings.

Emotion

I have established that associated reviews of research and literature suggest that emotion is largely neglected, as a subject, by both researchers and educators. Damasio, (2000); Austerlitz (2007, 2008); Jonson (2008) and Tynan (2008), underline the fact that much work needs to be done on the role and influence of emotion on practice-based learning. Jonson proposes that taking emotion seriously, is to stimulate thought and action around learning in design. He further suggests that researching emotional issues in design education should become part of continuing professional development (2008:71). To do this, I have investigated the nature of emotion itself and its expression on many levels.

Ben Ze'ev (2000:13) admits this complex phenomenon as “describable on different levels – physiological, biological, psychological, sociological or philosophical. On the psychological level, an emotion consists of feeling, cognition, evaluation, and motivation”. The physiological level consists of automatic and somatic activities of the nervous system which involve changes in the body. We are thus physically and psychologically affected by our experiences.

On the psychological level, emotion induces feeling, cognition, evaluation and ultimately, motivation. Emotion that sustains level three learning as described above, is “fueled by our passions, our battles and our behaviour, notwithstanding our espoused rationality” (Brockbank and McGill, 1998:45). For example, when positive or negative significant changes occur in our very personal situations, an emotion is evoked, with associated feeling motivating us to *change our plan of action* (Ben Ze'ev,

2000:13). Evidence from Goleman, 1995; Hillman, 1997; Damasio, 2000; Davis & Sumara, 2006, also suggests that emotion plays the role of organiser, motivator and energy provider.

The etymology of emotion as defined by Goleman explains emotion in its essence, as the impulse to act (1995:6). The root of the word emotion is *motere*, the Latin verb 'to move', plus the prefix 'e-' to connote 'move away', suggesting emotion as the moving force behind the instant plans for handling life that evolution has instilled in us. There are two fundamentally different ways of knowing that affect our lives – the rational and the emotional. In the rational state of mind, we are more aware and able to ponder and reflect. Consequently, it is not surprising that this would be a preferred state in any educational system. In contrast, emotion is a more illogical state, and is hardly given credence as a reliable indicator of learning in an educational setting – even though Goleman claims this to be a more "powerful and impulsive" system of knowing (1995:8).

An obvious example of the power emotion holds in determining our actions, is fear. The initial automatic biological reaction or reflex results in the *feeling* of dread, and a desire to avoid a similar situation. In other words, we respond to an unusual or unexpected event, by paying attention to it (Ben Z'ev, 2000:13). In the same way, a less obvious emotion felt, such as a *loss of satisfaction*, or *disappointment* during an event, can produce a feeling of misery and an actual *loss of consciousness* with regard to anything concerning the same event. This explains the 'auto-pilot' mode commonly referred to by people when describing their detachment from a situation, in a bid to cope with its demands. Of course, by mediating and selecting appropriate ways of behaving in our everyday lives, we can function in a rational manner (Goleman, 1995; Ben Z'ev, 2000; Damasio, 2000).

An opposite emotion to fear, such as joy, has as much power to transform and convert negativity into a positive and constructive attitude enabling us to overcome difficult challenges which Heywood asserts, develops the brain in a way that assists the individual to live well (2001:73). Using the metaphor of a road or track, Heywood (2001:74) suggests that both positive and negative emotional experience form the neural pathways in the brain, along which our thoughts travel and to which our memories automatically return – affecting the way we deal with each learning situation. It is further claimed by Goleman (in Heywood, 2001:73) that the development of emotional intelligence is fundamental to personal growth and success. This is identified as including self-awareness, handling feelings, motivation, empathy and relating to others, and "moves us to act and ...creates attachment [to a subject], commitment, and conviction" (Clark & Smith, 2008:9, my parentheses).

The recent work of Damasio (2000), isolates the importance of distinguishing strongly recognizable emotion from the subtle feelings that predispose us to deciding on action. It is rather the constantly shifting undercurrent of emotions that influences the way we behave and that constitute our knowing. This distinction is of relevance for my study as far as it explains the significance of everyday emotion and feeling reported by the students, and supports my assertions around an appropriate methodology for investigation as outlined in the following chapter.

The affective domain – emotion’s role in transformational learning

Much has been written of the purposes and intentions of approaches that lead to critical and transformational learning, but as Brockbank & McGill (1998:6) state, there is little recorded of the ways in which this may be facilitated. However, they recommend critical dialogue and reflective models, a recognition of the socio-political context, and an equal valuing of the three domains of learning. In order to provide a rationale for the importance of emotion in transformational learning, it is necessary to first provide a clear outline of the domains of learning and their connection to the levels of learning expected at fourth year level in a university setting.

The three abstract and overlapping aspects of learning known as ‘domains’, identified by educationists, for example Bloom (1956, 1964) are the *cognitive* (knowing); the *conative* (doing); and the *affective* (feeling). In Brockbank & McGill’s view (1998:42), transformational learning requires an equal balance between these domains within a sociopolitical context, to prevent limitations in learning potential. They claim that the emphasis on cognition in higher education has generally resulted in conative and affective intelligence being neglected. However, in undergraduate design studies which emphasise action (as with all practical subjects in design education, with the emphasis on making and doing), conative intelligence redeems the balance up to a point.

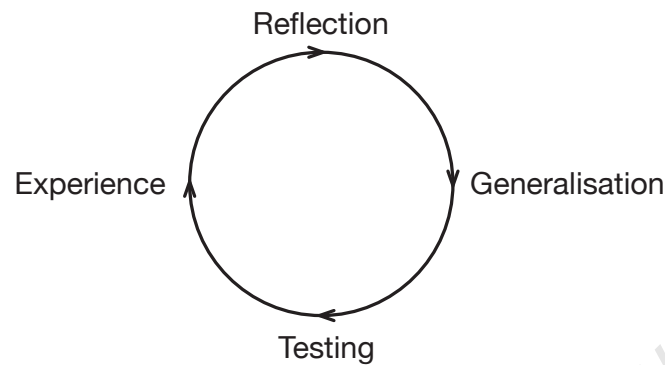
In higher education generally, however, affective intelligence or the emotional dimension of learning still remains mistrusted as too ‘touchy-feely’ (Brockbank & McGill, 1998:42) for some academics. Similarly, the emotive or affective in design learning is also still regarded in many ways, as indulgent and counter-productive, even though enthusiasm, passion and intensity are valued attributes of any creative person (Dacum, 2008). Brockbank and McGill claim that an imbalance between the learning domains is in place, and according to research studies, this has an impact on the potential for transformational learning (1998:42).

The concept of single- and double-loop learning developed by Argyris and Schön (1974), is explored by Brockbank & McGill (1998:43). This provides a rationale for the role of emotional intelligence in facilitating transformational learning or ‘paradigmatic shifts’ in the learner. Bateson’s “levels of learning” typology which describe the level of learning that may be expected from a design student in fourth year, will demonstrate emotion’s role in more detail.

Bateson (1973) offered a typology of three levels of learning developed from the work of many others (Piaget, 1932; Kohlberg, 1981 and Erikson, 1968) which has specific relevance to my understanding of the transformative intentions of the fourth year of Graphic Design study. According to Bateson, in Brockbank & McGill (1998:41), level III, or ‘third order’ learning involves discovering the ability to doubt the validity of previously held perceptions, the learning being about the learning itself. Third level learning expected to be attained in higher education builds on first and second order learning, in that it is *reflective*, with the ability to take a meta-view of content *and* of process; and in the realisation of *relativism* (the contextual nature of truth) and the *power of the learner’s own constructed knowledge*. Brockbank & McGill (1998:41) go on to say that the ability to contextualise this learning process and de-construct it in

dialogue, is the kind of reflection necessary for transformational learning to take place. The authors maintain that single-loop learning pertains to what may be expected in early undergraduate study, in that it is mainly instrumental and leaves underlying values and theories unchanged. The well-known concept of single-loop learning has been described in an often-used diagram by Kolb (1984):

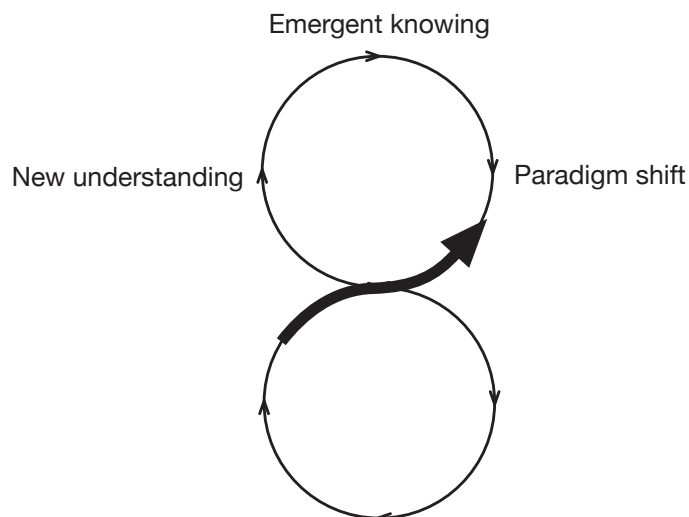
Illustration 1 Single-loop learning



Double-loop learning however, challenges assumptions and changes underlying values. This enables complete shifts in paradigms and is consistent with more mature undergraduate activity and typical of postgraduate work (Brockbank & McGill, 1998:44). It incorporates external critique of the discipline itself, which is a characteristic of the critical reflection desired at this level. As a learner makes day-to-day changes and alters practice based on experience, double-loop learning occurs sporadically, but does not pervade the life of the learner. In this temporary state of 'chaos', in the transformative phase, however, Brockbank & McGill acknowledge this kind of change may be disturbing, and, importantly, there is a need for a supportive containing or 'holding' but not 'controlling' environment in order to sustain momentum (1998:44).

The diagram below incorporates Kolb's model, and has been adapted by Brockbank & McGill (1998:45) based on the work of Hawkins (1997), with permission, to describe emotion's role in affecting the questioning or shifting of a learner's paradigm or context:

Illustration 2: Double-loop learning



Through reflective dialogue, in terms of knowledge, self and action in the world, the learner is able to traverse the single-loop orbit and plan a new learning route. Accompanied by new understanding of the discipline, the learner is able to develop a new conception of self and values, arriving at an intention to act. As argued by Brockbank & McGill (1998:45), the energy required to make this exciting and potentially disturbing shift, is *emotion*, the path of which is illustrated by the bold arrow shown in the diagram above. However, the courage required to make these changes is dependant on the attitude of the facilitator and the holding environment. A facilitator who is comfortable with, and able to manage the “volatile fuel and ensure that the energy contained for the benefit of learning” needs to be in possession of a person-centred philosophy (Brockbank & McGill, 1998:45).

...the person-centred way... is something that one grows into. It is a set of values, not easy to achieve, placing emphasis on the dignity of the individual, the importance of personal choice, the significance of responsibility, the joy of creativity. It is a philosophy built on the foundation of the democratic way, empowering each individual.

Rogers, 1983:95, in Brockbank and McGill, 1998:46

The facilitation of significant learning depends on the qualities present in the personal relationship between facilitator and learner, outlined as follows:

- 1 *Realness or genuineness*: some disclosure, a willingness to be a person, to be and live the feelings and thoughts of the moment.
- 2 *Prizing acceptance and trust of the learner*: a belief that the other person is fundamentally trustworthy... this means living with uncertainty.
- 3 *Empathetic understanding*: this must be communicated (silent or invisible empathy is not much use).

All three qualities, as the authors point out, call for a ‘high degree of emotional intelligence’ (1998:47) in that “genuineness implies a willingness to express feelings, acceptance relies on managing emotions, and *empathy* is the key for managing emotional material”. Rogers states that when a facilitator holds such attitudes, students are given ‘freedom of life and the opportunity to learn’ (1983:199, in Brockbank & McGill, 1998:47), and a high level of understanding, caring and genuineness enables a student to learn more than they would in a less supportive environment.

Empathy is defined by Egan (1976) as the ability to discriminate and communicate in the field of emotion. This means to “get inside the other person, and look at the world from their perspective”, offering understanding of their social and political world and the feelings and behaviours that underlie their experiences (in Brockbank & McGill 1998:108). This appreciation of the social systems in which he/she is embedded and the impact this has on the self as a consequence, is acknowledged by Brockbank & McGill as “difficult to attain” for those who are not affected (1998:48). Real, or what the authors call *accurate empathy* is required as an adjunct to a person-centred approach. “This is an existentialist orientation, recognising and articulating the realities of oppression and social inequalities of the learner’s context” (Brockbank & McGill 1998:48). The authors acknowledge critique on Rogers’ convictions, which has included a challenging of his ‘new romanticism’ for failing to consider “the significance of power relations, difference and the socio-political context of learning”. However, they maintain that it is real and

accurate empathy that will support critical transformation, which, they observe, is about “people who can produce new knowledge”.

Transformational learning for Mezirow (1978) involves critical reflection and learning to ‘see the world through another’s eyes’. This is the most important of the communication designer’s learning tasks, but perhaps the most difficult to achieve in an educational setting. The example below provides a closer look at the kind of ‘problem space’ or the kind of situation graphic design students deal with, and demonstrates the potential of a project of this nature to effect transformation.

Sponsored by the South African paper manufacturer SAPPI, the “Ideas that Matter” (ITM) competition calls for student and professional designers throughout the world to devise a way to promote awareness of a social cause represented by a Non-Governmental Organisation of their choice. In groups of three or four, students in the third year of the diploma course undertake this seven-week long social awareness project. These students show an intense desire to make a difference to the communities that the NGOs serve. Issues they choose to deal with cover a wide range of social ills and initiatives, ranging from child trafficking to childhood illnesses, sustainable employment, hearing and sight issues, animal rescue organisations, street children, the disabled, remedial to adult education and care for the elderly. The group project relies on students’ experience of real problems that require a communication solution. It provides direct experience of managing a situation without the presence of facilitators, the success of which is entirely dependant on the students’ own motivation. The reward is seeing their work make a difference in people’s lives, which has proven immensely empowering for the students.

Experiences of coming face-to-face with the needs of real people extends the student into a space where he or she is no longer at the centre of their world, which shifts prior understandings about what it is that they do. Over the seven years that we have successfully run this competition at third year level, there has been overwhelming evidence of students’ personal growth and transformation in life perspectives after the experience. A colleague and I researched the experience of third year students who took part. Many students only begin to realize their potential for agency after participating in this project. This reflection from my colleague eloquently describes his observation of students’ growing abilities to ‘see through another’s eyes’:

I am struck by the generosity of their engagement with a task that takes them far away from their comfort zones. The student work done during a social awareness project not only engages them emotionally, i.e. they actively access feelings such as compassion, empathy, anger, and joy, but through this they develop a strong sense of relational dynamics between: themselves and their chosen Non-Government Organisation’s message and audience; the members of each student group; and their preconceived notions of an issue, and the experience of coming to know it better.

Snaddon, 2005:58

Snaddon speaks of an energy flow, or balance that is struck between emotion and reason in this kind of project, resulting in extraordinary understanding and resolution of the communication problem. Students who participated in the research indicated

personal growth and transformed perspectives:

– We needed to get the message across...we wanted to really stand out...you have to be realistic because it's a real campaign...design is more about the message. We had to learn everything for ourselves...I didn't really think about marks...

– I should always listen to the group's ideas...I can learn from their way of seeing things...

– I learned about how others think and about how to put one's ego aside and get on with the work. I felt empowered [by the facts] and more prepared to handle the situation...I learned a lot. I became more assertive through ITM because I felt I knew more and could trust my own knowledge...

– Big revelation of Ideas That Matter, [it] had ...[nothing] to do with design. It was about people. The best thing was the worst thing. Seeing the real people. You see things in people that were always there but that you never saw before. You see things in your friends that you loathe, and things in the people that you dislike that you find endearing...

– I became that child – I went into a kid's mind – I spent so much time with little kids - read children's books trying to understand how the child does stuff...

The examples above describe instances of double-loop learning fueled by intense passion and commitment. The outward facing, mindful exploration of another's plight, for which they deem themselves to be responsible for alleviating, involves a compassionate suspension of their own beliefs, values and aspirations. This project harnesses the power of emotional involvement and intrinsic motivation necessary for transformation. It empowers, encourages a sense of self, and agency in learning. Tynan (2008:168) acknowledges the compelling argument for "releasing students from formal educational regimes of practice" (citing Foucault, 2004). She argues for the "emancipatory potential" of transformational learning as emerging through not a transmission of knowledge but through the "promotion of freedom and the subversion of the dominant order" (citing Freire, 1996).

Becoming fully immersed in the situations presented by the ITM project, the students are involved in mindfulness, engagement and presence, far from the confinement of institutional power issues and educational priorities. Based on my experiences of facilitating this project at third year level, I made assumptions as to students' preparedness when planning the fourth year programme. These assumptions are explored later in the analysis section.

Learning in creative subjects

Tardif & Sternberg's study of creativity (1998, in Williamson, 2001:144), found that creative individuals display four key traits: intelligence, originality, verbal fluency and a good imagination. They found them to possess certain cognitive abilities: "to be able to think metaphorically, to be flexible in decision-making, to show independent judgement, to enjoy novelty, to think logically, to visualize problems and to search for order in chaos. The style of their thinking is thought to be characterized by a questioning attitude and they are as interested in what is not known about something as in what is known. It is claimed, too, that they are willing to take risks".

Shreeve & Austerlitz (2008:139) explain the view that learning in creative subjects has the “particular potential for becoming emotionally laden”, due to the quality of *discovering*, through practice and engagement. Polanyi (1967:24-5), quoted by the writers, elegantly expresses a way to understand the intensity of the creative act:

To hold such knowledge is an act deeply committed to the conviction that there is something to be discovered. It is personal, in the sense of involving the personality of him who holds it, and also in the sense of being, as a rule, solitary; but with no trace in it of self-indulgence. The discoverer is filled with a compelling sense of responsibility for some hidden truth, which demands his services for revealing it. His act of knowing exercises personal judgment in relating evidence to an external reality, an aspect of which he is seeking to apprehend.

As claimed by Shreeve and Austerlitz, (2008) there is a disregard for the relevance of this kind of knowledge, even in the assertion that competent practitioners have to be able to apply these emotional and embodied ways of knowing in practice. The challenge for teaching art and design, as they point out, is to support and facilitate expression of feeling, which is not often readily accepted (2008:140). When discussed in higher education, Austerlitz (2008:31) argues that emotion is often regarded as a problematic issue that students and tutors need to overcome in order to get to a “higher, calmer, more intellectual mode of learning”. He claims that this approach diminishes the value and place of emotions, which are “vital forms of tacit knowledge”. Effective teaching, he concludes, recognizes all kinds of emotions and interactions as “generating skills and knowledge”.

Most art and design students enrol in higher education with hopes, ambitions and fears, frequently envisaging that they may become a famous designer or important artist. They see the university as a means of achieving these dreams, but that they first have to cope with a very unfamiliar kind of pedagogy (Austerlitz, 2008:19). Requiring personal involvement and intrinsic motivation, this pedagogy is effective, in many ways, unique to higher education, and has the potential to increase the affective domain in both learning and teaching.

Okuleye (2008:194) considers the mutability of the artist self. In order to grow this ‘self’, one needs to “develop an openness and flexibility of mind and spirit to constantly construct and reconstruct meanings about concepts, processes and ideas regarding a developing visual language within art practice”. She argues that this experience is also elusive, mercurial, exciting and equally frustrating, and identifies the site of performance as another key difference between art and non-art learning experiences:

The public arena is the theatre of performance, the site of the performance is the design studio, and the event is a crit or seminar. The learning process is at the centre of the production with peers, tutors and practitioners as audience and is steeped in potential for emotional arousal. This acknowledgement is important when considering the student/supervisor relationship in art-based subjects compared to those in other disciplines.

Fourth year Graphic Design is a time when the realities of self-motivated study, independent living and becoming a design professional begin to emerge as daunting for some, depending on their personalities. The experience of overwhelming emotion

such as anxiety, seldom contributes to an ability to 'play' with ideas:

An arts student has to operate at two very different levels. He or she has to be organized, adult, on top of the brief, earning money, dealing with the stresses of life and be in touch with his/her creative, playful childlike side. For this to be a realistic expectation, particularly for students who are highly stressed and with low levels of confidence, the institution needs to provide a good holding environment.

Ewings, 2008:214

Ewings maintains that research into art and design students' experience of the 'holding environment' (which in this case would be the structure and all aspects of the fourth year course), is the appropriate site for developing knowledge of appropriate curriculum in teaching and learning within this particular context (2008:214). The immediate implication for my practice, as a university design educator lies in finding a balance between providing the 'commercial world' of experience which bring social realities into the mix and, at the same time, supporting design learning which generates a deeper sense of self.

Identity – what it means to be a designer

Art, design and communication students have concerns that may differentiate them from students studying other disciplines. Many struggle with issues of identity and meaning.

Taylor and Littleton, 2007, in Hampton 2008:229

Wenger (1998:149) points out the profound connection between identity and practice. He discusses the complexities involved in negotiating learning, meaning and identity in depth, based on many years of collaborative work with other authors, most notably, Jean Lave. He argues for the development of identity within a 'community of practice'. However, for the purpose of attending to the emotive dimension of learning in creative subjects, I look at identity from the perspective of how this develops specifically through the process of learning in design. To do this, I will concentrate on the research that has sought to understand design students' approaches to their work based on their perceptions of the meaning of creativity and engagement, which has been found to mediate identity formation. I also discuss conditions that produce feelings of disempowerment, which counter the positive effects of feeling 'states' that have been found to enable development of identity in an educational setting.

Reid & Solomonides' (2007) research investigated design students' experience of engagement and creativity. The student participants showed that their experience of design and design learning were strongly related to their sense of self, where engagement and creativity were perceived as integral components of commitment to transformational learning, and their identity as designers (2007:37).

The research found that through engagement and creativity, students' experience a 'sense of being', or an almost transcendental state of 'flow' (Csikszentmihalyi (1990a), which when attained, that emphasizes confidence, happiness, imagination and self-knowledge (Reid & Solomonides, 2007:30). This state was found to mediate students'

learning, where they were personally transformed by their experience of becoming designers, and that they then develop an appreciation of the work and life of a designer and that their modes of thinking develop.

The research further suggests, however, that interventions such as industry assessment, if, in the form of negative critique, or misaligned approach to assessment, can result in students taking a strategic approach to their future design work, completely undermining the affective, positive and enthusiastic components cultivated in the 'liminal space', between 'sense of being' and transformation. This response was consistent in research findings from studies done in other design disciplines, such as Fashion (Shreeve, 2006) and Architecture (Blair, 2006, and Webster, 2007). All concur that this kind of intervention can be extremely detrimental to student motivation and future learning attitudes if students are not well-prepared for them, and if the situation is inadequately managed. The above example demonstrates the importance of maintaining an environment in which a student is able to achieve this state of flow and feels that he or she is acknowledged as belonging to the community of design practice. Attaining a 'sense of being a designer', Reid and Solomonides suggest, is the point at which identity is established (2007:30), and has direct implications for how students approach their work in the immediate sense, and how they view their future capability as a practicing designer as a longer-term goal.

Wenger (1998:146) holds that identity cannot be seen in terms of the individual, and is at pains to point out that the focus must be on the process of mutual constitution between individual and the collective. Identity is thus shaped by "belonging to a community, but with a unique experience". Identity is produced as a lived experience of participation in specific communities. We construct who we are through the negotiation of meaning and in the constant work of 'negotiating the self' (1998:151).

Wenger's concept of identity that evolves in a 'community of practice' concurs that it is in the way we interact, mindfully and bodily, that we find meaning for ourselves. He maintains that it is the *experience of meaning* that counts in the pursuits of our enterprises, as we "engage in all sorts of activities with complex bodies that are the result of millennia of evolution", and not a mechanical process (1998:51). Wenger argues for meaning as not a grand philosophical issue, but practice as an experience of everyday life. Meaning is negotiated, and involves *participation* and *reification* (1998:51, original emphasis). As we produce or encounter a new situation, even though we may refer to what has been said and done in the past, we produce meanings that extend, redirect, dismiss, reinterpret, modify or confirm – or *negotiate anew*. Human engagement in the world is first and foremost a process of negotiating meaning (1998:53). Participation is personal and social and involves our whole person – our "bodies, minds, emotions, and social relations" where this complex process "combines doing, talking, thinking, feeling and *belonging*" (1998:56, my emphasis). Participation, he claims, is a source of identity. Our identities are shaped by participation and non-participation. "We know who we *are* by what is familiar and what we can make use of, and we know who we are *not* by what is unfamiliar and out of our purview" (1998:164). A large part of how we define ourselves is the extent to which we imagine we come into contact with other ways of being. We also define ourselves by what we are not part of.

...a slight breach of law, it is almost a theorem of love, that we can invite others into our own identities of participation, let them be what they are not, and thus start what cannot be started.

Wenger, 2007

The relevance of the *invitation*, for education in Wenger's view, is that it is the responsibility of the educator to do the inviting. In the same way Kull maintains that teaching is about *inviting another person into a relationship* and into a new way of being and behaving – and less about the transferring of information and learning of skills (2001:43). Wenger further describes identity as tied up with engagement which is a mode of belonging (1998:174) . He describes engagement as a conjunction of

1. the ongoing negotiation of meaning,
2. the formation of trajectories and
3. the unfolding of histories of practice.

To manage this conjunction, in Brockbank & McGill's opinion (1998:56), transparent, reflective dialogue would be necessary. In the complex relationships and processes characteristic of learning and teaching, it is incumbent on teacher as facilitator to achieve a student's notion of belonging, participation and engagement. If educators seek transformational learning and wish to develop identities for critical practice, three domains of expression, must be embraced in practice. These are *knowledge, self and world*. Reflective dialogue that acknowledges emotion in learning, they maintain, is most effective:

Therefore reflective dialogue... is not an arid discourse where emotion is absent, but one where it is acknowledged as an important contributor to the learner's development.

Brockbank & McGill, 1998:56

4

... in design

We can get to know the persons whom we are to teach something by listening to them and by listening to their listening.

Poerksen & Maturana, 2002:136

From my original intentions of investigating my practice, exemplified by my own experience of learning in Chapter One, I initially designed the research around a clear linear, positivist approach to acquiring knowledge of how my students experienced the newly designed fourth year learning environment as they progressed through the programme. Imagining that students must be benefitting from the new interventions offered, I planned to be an 'objective' observer of the programme. I believed that the structure of the course would enable students to 'reach beyond themselves' (Brewis, 2005:13), by supporting their creativity and personal growth. My research question was therefore clearly chosen to gain an understanding of how students experienced this 'scaffolded' and 'constructed' learning environment.

However, from an initial class discussion in March 2008 and tutorial conversations in May, I discovered unexpected emotional responses toward the way the programme was running, especially after the first assessment point. It became evident that these feelings were affecting the way students approached their projects. Some students became uncharacteristically frustrated, anxious and even angry, floundering in areas where their knowledge was assumed to be sound. For example, writing their own briefs was thought of as an area that students were familiar with, having gone through this exercise in third year during the ITM group project as previously described. However the differing circumstances in fourth year revealed that knowledge in some areas was incomplete, resulting in slow progress.

As issues of appropriate knowledge and competence were raised through students' emotive response, new light was shed on the many assumptions I had made in the planning of the programme, emphasising a more complex reality. The phenomenon of *emotion* as exhibited by the students turned my attention to focusing on the ways in which the design of the programme was affecting their learning. The research project then became an opportunity for me to learn more about students' direct experience in an everyday context.

The enactive research space

When employing an enactive approach to research, one uses methods appropriate to the specific context and depends largely on the researcher's access to the research participants and the kind of relationships one builds from the quality of interactions.

In order to research the whole learning experience of the fourth year design students, enactivism provides the means to gain an insightful look at the context in all its complexity. The enactive is a broad, qualitative paradigm of research which does not follow a pre-imposed linear path, but rather embraces the “glorious cyclic and chaotic nature of research” when dealing with the realities and complexities within our lived worlds (Eddy, 2005:6). Opportunities for understanding then become shared in ‘instances of complicity’ and unfold “with/in communities in the making”. The research mode is thus ‘enactive’ – where ‘groundlessness’ becomes an exciting ‘space of possibility’ for how we think about knowledge, cognition and experience (Haskell, Linds & Ippolito, 2002:1).

Gunn (2001:96) describes the possibilities for investigating one’s practice as coming from meaningful interactions with students and the environment, co-emerging, co-enacting and co-participating in the creation and re-creation of environments and possibilities for action. Furthermore, Gunn introduces an ethical dimension of enactivism to models where professional development is sought, placing the responsibility on teachers to ‘know the self’ by challenging beliefs and values, blind spots and biases that may be enacted on research subjects through the unconscious power-authority relationships held by many in education. “The notion is that in being mindful of our connectedness, our ensuing interactions become more ethical, that is more respectful, caring and nurturing” (2001:99).

By employing multiple methods of data collection and an attitude of ‘attunement’ (Davis, 1996) to each situation, the research becomes a ‘creative endeavour’ (Salen, in Heller et al., 1998:92), beyond a linear method of collection. Below, I describe the research as having taken place within the enactivist paradigm described above. I employed the overlapping tenets of both hermeneutic phenomenology and ethnomethodology (Forster, 2001) in order to get closer to what perhaps constitutes a student’s lived reality, and with an awareness of my complicity in their experience.

Overlapping methods

As coordinator of the programme and supervisor to half of the fourth year students, I was in the position to observe them on a day-to-day basis. My presence, predictably interrupted activity and closed down conversation when I appeared in the classroom. Acknowledging myself, in their eyes, as a representative of the ‘system’, I realized the need to find ways to access student feelings and ideas in a non-evaluative way (Davis 1996). Davis’s work on hermeneutic listening within an enactive enquiry approach incorporates the advantages of both ethnomethodology and hermeneutic phenomenology (Forster 2001:122). In Van Manen’s (1999) description of hermeneutic phenomenology, Forster finds similarities between this approach and the enactive, as both views hold that the research should bring us into closer contact with the world, where the purpose is not to control or explain. Both methods emphasise the critical self-awareness of the researcher and attention to languages of description in interpretation.

Ethnomethodology allows us awareness patterns arising in a context through careful attunement and close observation. However, enactivism and hermeneutic

phenomenology rely on "self-report on experience", which Forster (2001:122) suggests, provides a "wider critique on the phenomenon of interest". In addition to how we listen and report on experience, enactivism's additional advantage is that it incorporates the biological and therefore all the senses. Emotion evoked as a physical phenomenon, then requires attunement not only to the language used to describe it, but to the immediate evidence of its effect. The experience then includes what is seen, heard and felt and how it is described. Incorporating the main tenets of all three paradigms in the research method aimed to produce rich possibilities for understanding emotion as the less visible dimension of learning in this context.

Phenomenography and ethnography

Noam Austerlitz's carefully designed research on a university design course (2007:167) yielded two approaches to studying design students' emotions as phenomena. Phenomenography and ethnography both proved fruitful, as the phenomenographic phase (conducted first) simply exposed the *existence of emotion*, whereas the ethnographic phase allowed more in-depth investigation. Austerlitz (2007:168) explains phenomenography as a genre of the qualitative scientific approach, citing Marton, (1988) and van Manen, (1990), as focusing on researching lived experiences of people from their own point of view. Rather than the positivist concept of research as an objective study of phenomena, phenomenography is concerned with the way people construct concepts about phenomena they have experienced. Researchers using this method of information gathering are concerned with the relevance of the research participants' *own description* of their reality and not whether this is correct or incorrect. In the phenomenographic mode, the researcher does not presume to know the meanings people ascribe to their experiences.

Austerlitz (2007:167) suggests that a sensitive strategy of enquiry is required to learn about concealed issues such as experience, feelings and the effects of emotions. Citing Entwistle, 1997, Marton & Saljo, 1997; Prosser, 2000, and Bailey, 2002, Austerlitz asserts that extensive literature and research using phenomenography has provided insight into students experience of higher education and approaches to learning over the last two decades, describing this as a productive method.

In carrying out this study, I thus 'began with silence', typical of the phenomenographic mode (Psathas, 1973, in Bogdan & Biklen, 2003:23), in an attempt to first grasp what it was I was studying. After the first assessment point, a high level of emotion emerged as a phenomenon, which I did not expect. It was after this event that I realised that I needed to determine how I could further gather substantial and descriptive information about emotions and their association with student learning.

In his study of emotion in the design studio/classroom, Austerlitz (2007:170) found that interviews conducted in the phenomenographic phase of the research were an effective means to establish the existence of emotion and further the understanding of student experience. Preconceptions were not imposed by prescribed questions, and students were encouraged to "tell their own stories". However, he asserts that in order to gain a more naturalistic view of student experience as it happened in a studio or classroom context, ethnography provided the following advantages: It

- promoted an understanding of the context of occurrences, i.e. the design task, other people's behaviour, the ambience, etc.,
- enabled the researcher to observe these occurrences in real time, hence to learn about their development both as a result of previous events and relation to other simultaneous ones, and
- created a participant-researcher relationship of trust, enabling free conversations and in-depth interviews about the observed emotional episodes (Austerlitz 2007:172).

Ethnomethodology refers to the study of how people create and understand their everyday lives (Bogdan & Biklen, 2003:29). In the ethnographic phase, as proposed by Austerlitz, the quality and quantity of data on emotion improved when using this method. Because of the researchers' close involvement in the everyday lives of the subjects, this allowed for the building of what Geertz, 1973, in Bogdan & Biklen, 2003:28 calls a 'thick description' of the context. Similarly, in this case, the research was carried out over a relatively long period of time and students were able to reflect over past experiences and take part in their interpretations of the meaning they conferred on their experiences. In my experience, the setting and my position as researcher/supervisor thus found this to be an appropriate additional approach. In the case of the sample group discussed later in this study, the students began to take part as 'quasi-researchers' in a similar vein to the Austerlitz study (2007:167). As Austerlitz suggests, this allows students to consider the researcher's observations as part of their self-development, which is a rewarding experience for all parties involved.

It appears that a high level of researcher involvement in the students' everyday experiences is the most efficient way to get an internal holistic view and a deeper understanding... of phenomena... (F)urthermore, it is also concluded that being in the studio and offering empathic listening is mutually beneficial for both the researcher and the students.

Austerlitz, 2007:175

Below, I describe *listening as an attitude* forming the backbone of the enactive approach. This kind of research has strong parallels with the creative process of design itself, which is ideally a reflective, phenomenological, hermeneutic, and ethical approach to knowledge creation.

Hermeneutics – listening and interpretation

In this study, hermeneutics as a hallmark of the enactive approach to research, plays an important role in the interpretive framework. As I was attempting to understand the "unspoken dimensions" (Austerlitz, 2008) of learning in a creative subject, I needed to firstly understand the origins of the emotions elicited, and the feelings they gave rise to. Listening interpretively then became a method for engaging in deeper understanding.

The challenge of hermeneutics is that it relies fully on the disposition of the researcher and depends heavily on "*how we listen*" (Davis (1996:29). Listening is not a technique, but an orientation. It is a participatory way of being in the world, where interpretation brings "the collective weight of our experience to bear on our emerging understandings" (Davis, 1996:29). In attempting to determine how new interventions had affected student experience of the programme, I therefore needed to listen beyond

the obvious, and reflect on every utterance. This mode of inquiry interrogates what is taken for granted and seeks richer understandings by “problematizing distinctions and boundaries that tend to be drawn in any situation”. Davis argues that the visual is privileged over the auditory in our culture, and, how to listen, has been forgotten (1996:36). Consequently, the facets of education are often described in visual metaphor. For example “gaining *insight*, intelligence as *brightness*, *looking*, *seeing*, *perspectives* and *views*, often happen at a distance – to get a better *view* or *supervision* as teaching from above. Davis observes that one stands back to see – and gets in closer, to *hear*. This implies that in the enactivist view that there is no static notion of the self, but that in hearing with intersubjective awareness or a joining of minds, the self is in a constant state of renewal (1996:36). The visual, physical expression of emotion often only tells some of the story. Hearing these emotions verbally expressed in what we call ‘feeling’ (Goleman, 1996, Damasio, 2000) requires that we not only hear what is said, but listen *with* the subject in our efforts at interpretation (Davis, 1996). This also means paying attention to what is *not* being said.

In practising a hermeneutic mode of listening, one approaches the research as an experience going beyond the ‘objective/subjective dichotomy’, consistently emphasized by the enactivist theory of Varela, Thompson and Rosch (1991). There is no procedural system but an acknowledgement of the researcher’s “striving for meaningful insights into the essential nature of human experiences” (Davis, 1996:29). A hermeneutic mode allows exploration of the qualitatively different ways in which people experience something, where the researcher extracts meaning from an utterance and compares similarities and differences in the participants’ ways of seeing things (Reid & Solomonides, 2007:30). Davis illustrates the application of hermeneutics as enabling us to not only ask, as researchers, what we think, but also, why it is that we have come to think this way – all with a view toward affecting how we act in the world – with hermeneutics thus concerned with past, present and projected understandings (Davis, 1996:19). As no method can predetermine the location of truth, an appropriate motto for hermeneutics might be Weisenheimer’s suggestion that “truth keeps happening” (in Davis, 1996:19).

Objectivity, ethics, validity and generalisability

In taking what Davis (2000:154) describes as a “middle way”, I recognised that one is unable to extricate oneself objectively from the inquiry. The enactivist expression “knowing is doing is being” is often used to foreground this point. (Davis, 2000:154).

Damasio argues that “...*all* contents in our minds are subjective and the power of science comes from its ability to verify objectively the consistency of many subjectivities” (2000:83, original emphasis). However, in prompting “an ethics of care, responsiveness and responsibility” in complexity research, Davis & Sumara (2008:170) propose that one asks the following questions of oneself:

- How am I complicit (i.e., affecting or hoping to affect) in the emergence of the phenomenon that I study?
- How is this research educational – that is, how does it educate?
- How might this research be taken up?

- How might I present, and represent these interpretations?

Michael Levin, in Davis & Sumara (2008:169) calls this a “cooperative model of research”. This gives “primacy to relationships and relies on contextual narratives and dialogue – communication”. Within an enactivist view, a qualitative researcher’s natural inclination toward subjectivity in the project of knowledge creation does not measure up to the template of objectivity (Haskell, Linds & Ippolito, 2002:1), as this frame of mind, they maintain, is unproductive. “Our work is, in many ways, who we are, and who we are becoming (and) we can interact with our connection to the research not as a liability to be guarded against, but as an opportunity to make research more meaningful by more fully appreciating our part, as researchers, in it” (2002:1). As such, the aim is not objectivity – argued by many as ‘unattainable’ and ‘constraining’, but that the research may then live as a unique asset.

This mode of enquiry calls for research to be seen as an ongoing ethical enterprise, with all involved being implicated in the research setting. “We cannot imagine ourselves just “operating in” research settings, and then leaving the cultures of which we are part”. (Haskell, Linds & Ippolito, 2002:1). The research is thus informed by an ever-shifting dynamic where the researcher is complicit in each opportunity for understanding to emerge (Davis & Sumara 1997:109). New possibilities for researching, interpreting, perceiving and interacting are revealed, implicating the researcher in an event which calls for mutual respect between the complex worlds of each individual involved. In analysis, the subjectivity of the individual is prioritised and multiple ways of interpreting these conceptualisations of behavior is admitted.

In terms of the generalisability of findings in this kind of study, Marton (1981:177, in Austerlitz, 2007:168) asserts that there are limited ways in which people experience reality. For example, anger, confusion, sadness and other emotive response are universal experiences, and may be ascribed to many personal realities. He maintains thus, that conceptions and ways of understanding should not be seen as qualities held by a particular individual, but rather that general conceptions of reality can be considered as categories for description. When seeking generalisation, a set of categories or descriptions may thus appear in different situations, and are “stable and generalisable, even if individuals move from one category to another on different occasions” (Marton,1981:177).

In congruence with Gunn (2001:96), Austerlitz (2007) observes that the ethical dimension of research becomes more sound when there is a close relationship between participants because it allows students involvement with the interpretation of their own experiences. This methodology aims to *vivify* the scenario for the reader, rather than prove the validity or generalisability of an account of the situation at hand (Lather 1991, in Jipson & Paley, 1997:9).

The research design

For most design students, assessment is the point at which they critically reflect on their learning and progress, as it is a very public and immediate forum for feedback. It is also a stressful time, as the public and visual representation of progress is very revealing of personal investment and progress.

For this reason I planned to gather data around the five assessment points in March, May, June, August and November. However, over the eight months spent with the students, I found additional opportunities for discussion, conversation or interviews, described operationally below.

When events prompted unplanned conversation, written correspondence and serendipitous conversations initiated by the students, I wrote accounts of the incidents and conversations guided by the principles of Mason's (2002) 'Discipline of Noticing'¹⁰ These assisted my reflections and interpretations as the research unfolded. Validation is accomplished, according to Mason, when these accounts are shared with colleagues. The following eight events composed the main enquiry:

- **Group discussion:** Together with the other fourth year supervisor, I opened discussion with the full cohort of nineteen students in mid-March, after their proposals for theory and practice had been assessed. I noted themes emerging from this discussion which helped refine the emphasis of my research question.

Tutorial conversations: From March through to June, I supervised ten of the students' practical projects, and formed close working relationships. With the student's permission, I digitally recorded and transcribed each of these sessions, noting and reflecting emerging themes. The remaining nine students (of the nineteen) who were supervised by my colleague, were invited to discuss their experience with me or express it in written form at any time. Three of these students wanted to reflect on their learning, in written and conversation form, seeing this as an opportunity to manage their progress on the course and feelings toward the challenges they faced. I took notes after the conversations using a 'discipline of noticing' approach.

- **'Progress Review' class discussion in May:**
I held a further class discussion after the first Industry/Supervisor panel review of design proposals. Again, I recorded and transcribed this and was able to re-focus the research question according to further emerging themes, and to question my assumptions and reflect on issues raised.
- **Written reflections:**
Written reflection on the main assessment in June was elicited from all nineteen students after this mid-year point. This reflective exercise engaged students in taking ownership of their learning and enabled them to retain a record of the panel recommendations in order to operationalise these in their projects. All students

¹⁰ In order for educators to generate meaningful research into practice, John Mason (1995,1998, 2002) developed a method of noticing events in a disciplined way by writing brief-but-vivid 'accounts of' what happened. Critically, the accounts give no explanation or justification for the occurrence, but records it as unemotionally and impartially as possible for future unbiased reflection. In order to learn from the situation, the educator/researcher then sets this as a 'task exercise' for another person or colleague to interpret, so that they are able to find resonance with, or 'entry' into the given situation. This produces opportunities for the educator to gather multiple interpretations of the situation, which provides them with 'gambits' or ways of dealing with similar future teaching and learning incidents.

complied, and eight forwarded additional comment on their feelings about their experiences to me, which was optional.

- **Semi-structured interviews/ conversations with the sample group in July:**
These 'semi-structured interviews' were held with six of the above eight students who seemed most affected, either negatively or positively by the panel assessment. I planned to question the students' feeling about their experience with some questions commonly asked of all six interviewees. As is typical in conversation-style questioning, students' responses mostly led the interviews.
- **Conversations and emails after the August progress review:**
Conversations and written reflection from the students in the sample group of six, revealed that they welcomed talking about their experience through this kind of reflection as they recognized this as an important part of their self-development. Emotive response was acknowledged as part of the learning experience.
- **Sample group in November – conversations, written reflection and notes:**
After the final exhibition of the body of work, assessed again, by a similar panel, I interviewed a group of six students again. Four of these students had formed the core sample group from the previous session. I chose six stories to explore holistic accounts of the year's experience, as there was enough evidence gathered throughout the year to build a case history of each student.

Analysis/Interpretation

As I was not testing a hypothesis, a grounded theory approach was appropriate for the study, in that it is explicitly emergent (Dick, 2005 following Strauss & Corbin, 1990, and Glaser, 1992), and worked within the enactive paradigm. Discovery of theory in the data is the aim, and methods may become apparent as the study progresses. This approach informed me of how to go about managing and sorting the data.

Below, I review each stage of the analysis where I applied Austerlitz's (2007:176) conceptual framework for analysis of emotive experience. The framework was adapted by Austerlitz et al., (2002), from Ben-Ze-ev's original conception (2000). Developed initially by using an inductive method to identify 'discrete concepts' elicited in interviews, Ben-Ze-ev then used a deductive method to compare themes to his proposed theory of emotions, and developed categories for analysis. The categories generated, classified reported emotions such as happiness, fear, anxiety, confusion, embarrassment etc., and assisted in sorting those phenomena from non-emotional phenomena (Austerlitz, 2007:169). I found the framework relevant for the study and have used the following five points in analysis of the data:

1 Identifying common themes in students' reports of their emotional reactions:

This comprised the first-level of analysis. After each transcription of data, I identified common themes and key issues that emerged and reflected on assumptions that I had made. I sorted themes according either to students' direct textual descriptions or to my descriptions of observed behaviour. For example, these included 'confusion', 'anxiety', 'fear' and 'anger'. Patterns began to emerge, and

themes expanded to include, for example, 'confidence', 'satisfaction', self-realisation, over-confidence, humiliation and sadness.

To gain further clarity and to verify my impressions, I re-played the tape recordings after each transcription to check inflection and tone of voice, as well as ambient sound. Where necessary, I wrote a further reflection and began tentatively to discern causes, effects and focuses of concern relating these to the next part of the framework.

2 Identifying the objects and focuses of concern

As data and coding accumulated (Dicks, 2005:2), I began to make connections with possible reasons and circumstances that produced the emotive response. A second level of analysis produced objects and focuses of concern such as 'misunderstanding terminology', 'misunderstanding assessment procedures', 'unfamiliarity with educational discourses', and 'difficulty in writing briefs'.

3 Analysing common cause for the reported emotions

The third level of analysis allowed me to group the causes into categories, supported by my reflections and speculation during the year. Additionally, a task exercise (see note, p 41) assisted in a triangulation of my findings, which furthered my efforts in understanding underlying causes for the reported emotional responses.

4 Locating common causes for the intensity of emotional reaction

I relied on the conversations and interviews with the smaller sample group to provide insights into the intensity of some of the reactions. In some instances, students displaying intense emotion wrote or communicated reasons for this, and these were included in the analysis. I discuss possibilities for generalisation of these phenomena in relation to circumstances and student personal history and I use these variables as 'examples' in context.

5 Indicating reported effects of emotions on students' learning

In order to gain understanding of the effects of the reported emotional responses, I concentrated on stories of the six students in the participating sample group. In-depth conversation-style interviews at the end of the year revealed the effects that their emotive experience had on their overall learning and development, having been able to reflect on the year as a whole. I was then able to link my suppositions to theory and generate ideas with regard to the effects of the programme on student learning in the last stage of analysis.

Presenting the research

Acknowledging again the words of Conle (2003) in Freese (2006:100), I have found that the re-telling of one's story can indeed bring about new understandings through the writing, becoming in itself, part of the research.

I have divided section five into two parts, making up the colour and detail of the picture.

- **...in colour** presents a holistic impression of the year, established by emergent themes. This provides the reader with an overall sense of the kinds of issues that

surfaced during the year. I apply Austerlitz's (2007) framework for interpretation throughout, incorporating my initial reflections written during the study. During the interpretative process, however, topics that strike me as profound (Jardine *et al.*, 2003:59) add to, and expand discussion.

- **...in detail** describes the six students' experience of the year, beginning with short background biographies. These allow a closer look at the implications of the programme as it stood, and serve to introduce a rationale for how I envisaged changes in approach to the curriculum.

I reflect on the picture in Chapter 6, concluding with implications for further research and the further development of the course.

The illustration below shows an example of a BTech Graphic Design final exhibition. This particular research project was an investigation into picture books that use fictional stories and characters for the cognitive development of children aged 3-6. From knowledge gained through the primary research with school teachers and educational psychologists, the student then produced a series of illustrations (wall behind) for three picture books (in foreground, on table). The stories centred on colour, shapes and numbers, intended for aiding parental involvement with their child's education.



Illustration 3 An example of a fourth year final exhibition.

Part III

The picture

Ecological postmodern discourses... have restored a sense of agency to the individual, highlighting that one's participation matters: One's voice is more than an echo, it is an engagement that contributes to the unfolding of the universe in complex and unknowable ways.

Davis, 2000:181

In the chapter '...in colour' that follows, I discuss the causes of positive and negative emotional response toward the programme. I relate these to focuses of concern that were identified throughout the year and reflect on my underlying assumptions of learning at this level. I then discuss specific aspects of the general themes that emerged in the section '...in detail' by considering six individual students' experience of the year.

My purpose was to identify, and question the decisions I had taken when designing the programme. In the light of the information I gathered I was able to determine which of the interventions had yielded positive or negative response.

5

...in colour

The task of educators is to care for the wider human community and this is done through the careful nurturing of the individuals with whom they work – a case of ‘think global, act local’.

Heywood, 2000:74

In the words of Spindler (1982, in Hocking *et al.*, 2001:11) it is by considering “the strange familiar, and the familiar, strange” that one may become attuned to hearing *feelings* about actual lived experience and how these affect students’ approach to their learning – and as importantly, how they view themselves and their capabilities as designers. Through the experience of the research, it struck me how much we need to challenge taken-for-granted aspects of student experience. The word ‘confused’ was mentioned so often in the first term of fourth year, that it came to signal my early recognition of the assumptions my colleagues and I had made in our expectations of BTech students, and I became conscious of how easy it is to ascribe negative feelings expressed, to incompetence on the part of the student. Instances of negative, and positive feeling expressed are often ‘shrugged off’ as ‘the usual’, almost invisible with only the extraordinary, or dire emotional disturbance are perceived as significant (Ben Ze’ev, 2000:14). For example, this high-achieving student became visibly upset during the discussion after the first assessment, bursting in to tears and leaving the room:

No comment... No, not really. My project is very different. Difficult to package this in a normal way.

Margie

I then began to notice, and take more seriously, the more everyday expression of emotion – especially as there was more than one instance of the same feeling:

I’m still a bit confused as to when we start the design stuff. I’m stuck at the research and the writing.

Leisha

After this early warning, I began to notice how much of a student’s experience is really taken at face value. For example, on more than one occasion, it was suggested to particular students that they were not ‘behaving like fourth years’. After one of these occasions, I was asked directly by a student how a fourth year should ‘behave’. Perhaps this comment, more than any other, heightened my awareness of the how confusing a learning environment might be if there is a lack of clarity around attainable goals.

Throughout the year I was intrigued to note how often students' visible emotional responses toward situations were brushed aside and left unacknowledged, to be quietly managed by the student in solitude. Later in the year, for example, it took one student two weeks to summon up the courage to write an (unsolicited) email about how angry he was, and another who waited three months to admit that she was not just upset but actually angry (again, unsolicited). Both these students' work was severely hampered by the delay in time that it took to recover enough composure to continue with their work. I noticed that students lapsed into an adoption of "coping strategies, often against their own instincts and best interests" (Marton, 1981; Pines and West, 1986, Saljo, 1988 in Brockbank & McGill, 1998:33) allowing them to continue with required progress. However, the weight of the feeling seemed to immobilise earlier sources of motivation, and it became a case of 'just getting it done' (Gavin – a student with industry experience). In both cases, discussion around the cause of their feeling would have remedied the situation.

The first part of the research question had asked simply, *how students experienced the fourth year Graphic Design programme.*

I was able to generate a holistic 'picture' of the year, as experienced by students, by using the first three points in the Ben Ze'ev/ Austerlitz framework (2001, 2007), for analysis. This allowed me, after establishing the existence of emotion in the learning environment, to

1. identify common themes in students' reports of their emotional reactions
2. identify objects and focuses of concern, and
3. find common causes for the reactions toward these.

The sub-questions, re-visited here, were adequately addressed in the application of this mode of analysis, informing me of:

- the practices and methodologies which effectively supported student self-development,
- how students felt about industry collaboration on assessment and how they perceived this practice, and
- whether the Theory of Graphic design informed or supported students' approach to the practical design project and, if so, how.

The second part of the research question asked *in which ways these experiences influenced students' approach to learning and self-realisation*, and is addressed in part two of this chapter, titled '...in detail'. Focusing on six students' stories revealed more in-depth perspectives of affect.

Applying the fourth and fifth points of the framework provided a way to

- locate common causes for the intensity of emotional reactions, and
- indicate reported effects of these emotions on students' learning.

Both the general and the more detailed perspectives of experience and its effect on learning are related to the conceptual framework developed in Chapter 3. The diagrammatic overview of the year's programme below, is a guide as to the timing of assessments and the requirements for each activity for the theory and practical

subjects. This indicates the scope of the theory and practical subjects and their expected inter-relationship.

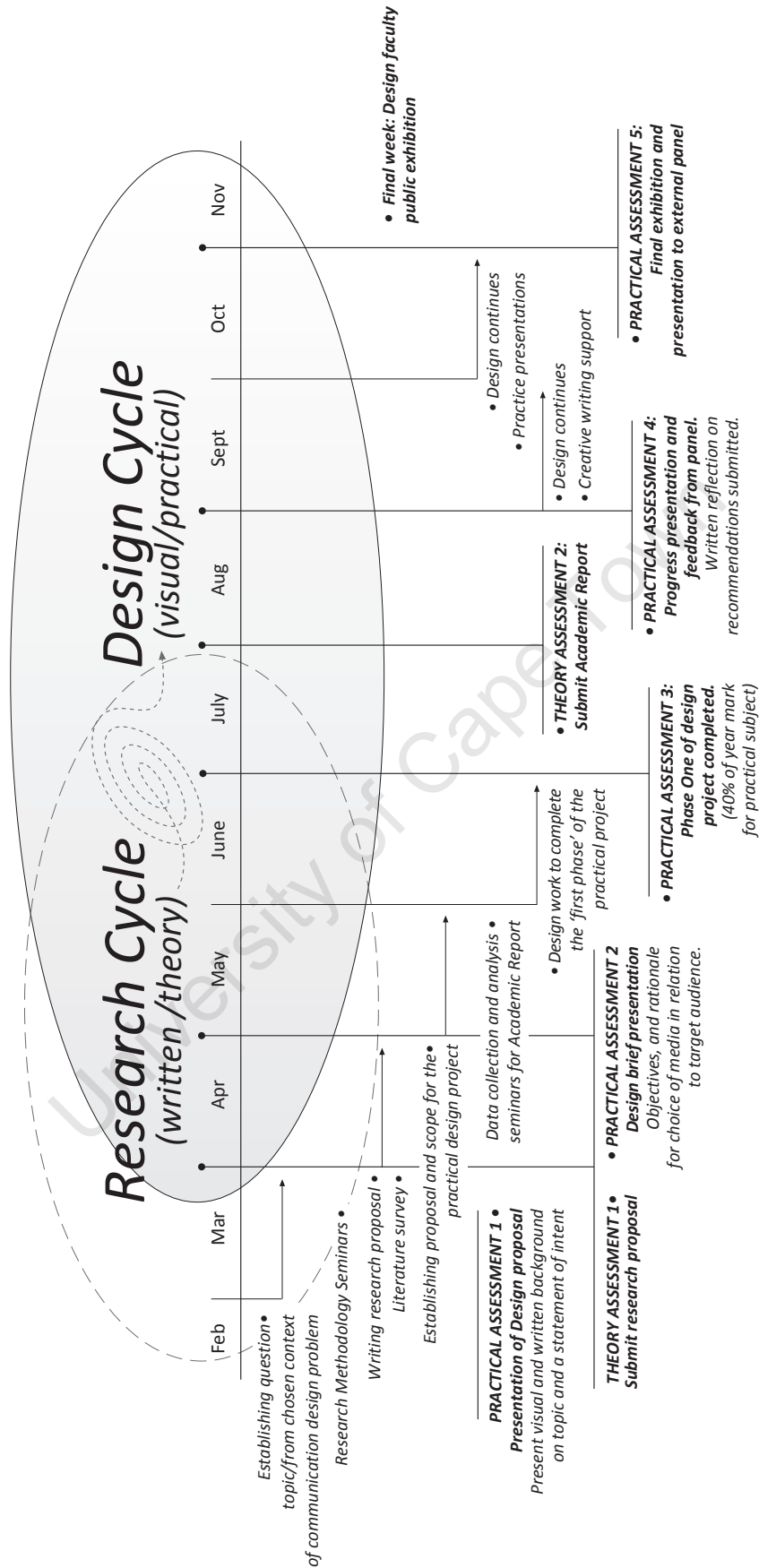


Illustration 4 - Overview of the year's programme

I superimposed the common themes arising in students' reports of their emotional reactions. Illustration 5, below, shows patterns of emotional tendency in the first semester and may be used to reference emotive response in relation to the *objects and focuses of concern* and the *common causes* for these.

Patterns of emotional tendency

As may be expected, a spectrum of emotion coloured the year. Dominating in the first two months of the first semester was the darker side, characterized mostly by *confusion*, *anxiety* and *frustration*. It was clear that momentum was not gathering fast, as elements in the design of the programme had inadvertently conspired to impede progress. As students settled into the very 'different' environment, some slowly began to build confidence as they embraced the possibilities that their new knowledge began to reveal. Enthusiasm and passion for their topics was evident, and some began to express *appreciation* for the constructively critical assessment style. Research methodology seminars proved to expand their appreciation of their topics, and most became immersed in generating new knowledge, which brought with it a range of unanticipated challenges. Along with the research's demand for consistent attention to the written outcome, *frustration*, *anxiety* and *fear* emerged as their design work took a back seat, and the practical Proposal and Design Brief assessment presentation loomed.

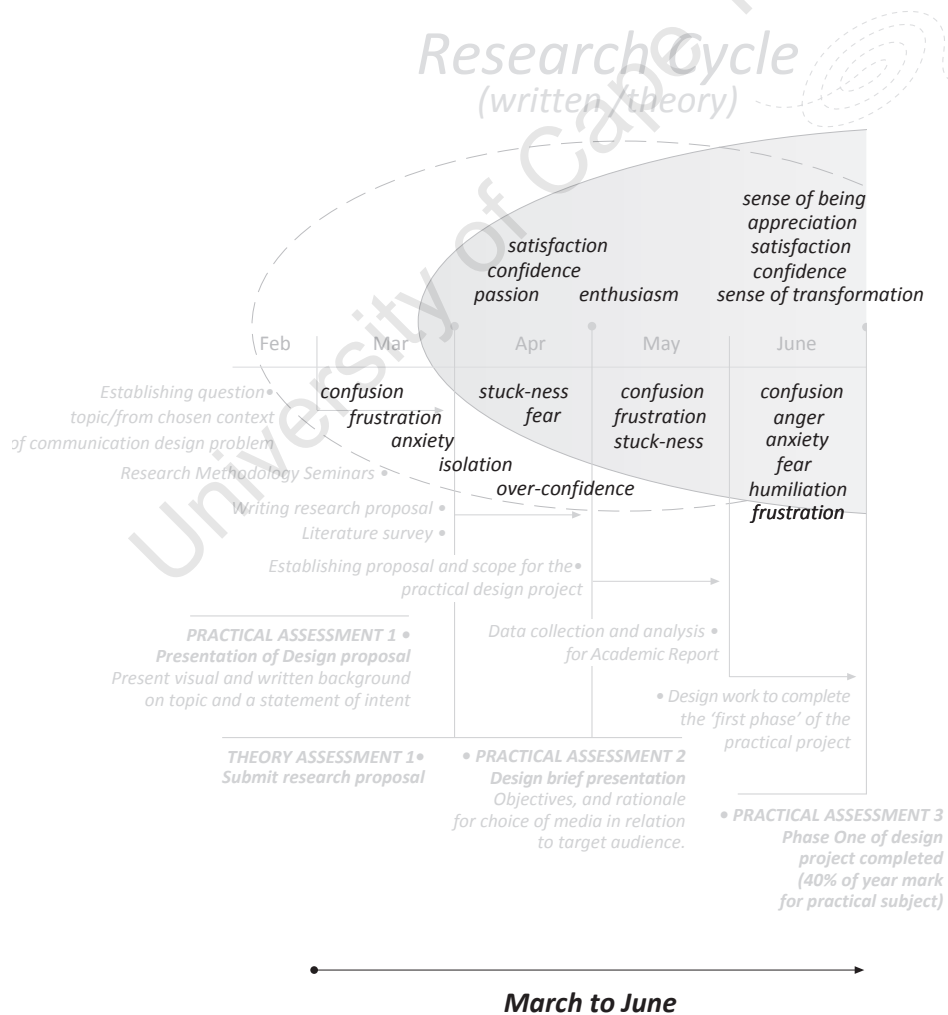


Illustration 5 Patterns of emotional tendency – Semester 1.

From extensive research and observation of design students in studio classrooms, Austerlitz defined three loci where emotions tend to be elicited (2008:21). Similarly to my study, his research identified the nature of the design task itself; second, the nature of the student supervisor relationship with specific reference to assessment, and third, the more public exposure of student work which brings a higher level of disclosure than it does for their academic counterparts.

At this point I would add a further locus in which emotion is elicited, which I found to have a strong bearing on this context. Many of the BTech students' choice of topic had produced a further layer of emotional investment – beyond the learning environment and the inherently emotive task of designing. A discussion of the kind of topics students were dealing with explains the high degree of intent and motivation toward their work (Marton, 1976, in Biggs, 1987:14) which resulted in the intensification of emotion as the year progressed. After the April tutorial interviews I reflected on this as I witnessed the passion and enthusiasm which drove the information-gathering necessary to find appropriate design solutions for the stated problems:

All students on the course addressed, at different levels, a social issue related to either economic, social or environmental needs in a developing country. None chose to promote or invent a service or product for purely commercial gain. It is rewarding to note that orientation to ethical concerns during the three-year course has sensitized students to the need for communication design to make a positive contribution to the development of responsible and sustainable social attitudes.

I have chosen examples of three diverse topics in an attempt to demonstrate the degree of personal investment into their work, specifically in fourth year.

Childhood cancer – book and activities for long-term hospitalized children

Dana (this is a pseudonym, as are the names of the other students) initially intended to investigate colour theory. Having been directed to look at hospital environments where colour is under-utilised in terms of its potential therapeutic properties, she volunteered at a local children's hospital in order to assess the current use of colour in the hospital environment. Being drawn to the children's oncology wing, her project evolved as she became more acutely aware of the reality children and their parents face when battling a life-threatening disease. Her project then became much more 'real' to her, and there was a sharp and steady rise in her commitment to make a difference to the lives of the children suffering from cancer, as well as the caregivers and parents of the children.



a



Illustration 6 Dana's proposal for using colour in the hospital and home environment is shown on exhibition (a). The cover of the 80 page book (b), and selected page (c). The game board designed to support children with cancer in the hospital environment (d), helps parents and caregivers manage the child's disease. The activity kit (e) and its contents, includes the story characters (f), who who grow 'hair' when the child plants the grass seeds supplied. Not shown here, is the funding appeal to Pharmaceutical companies in the form of a CD and illustrated letter.

Cape flats anti-drug campaign

Roelof wanted to rid the world of drug addiction. However, admitting that this was beyond the scope of a fourth year project, he tackled a project with a small community on the Cape Flats. Anti-drug campaigns are notoriously difficult pursuit for any design company and are known to be mostly ineffectual on any large scale. This is mostly because people using drugs have lost the capability to discern the devastating effects they are having on their health and families. Roelof's intense desire to devise an effective communication strategy drove him to do face to face research with addicts and gangsters, under the auspices of an NGO operating in the area. Crawling into disgusting hovels where drug addicts ply their trade, he faced the realities of the situation on the ground. He became increasingly involved with the issue as his knowledge grew, committing himself fully to the self-motivated task.





Illustration 7 The communication campaign consisted of a series of messages in specific locations identified as places where addicts use drugs. (a) An unused cloakroom on school grounds sends a positive message of help. (b) Graphic replaces graffiti under a bridge. (c) The introductory spread of a brochure issued from the NGO. (d) A further spread in the brochure, where a personal story of a rehabilitated addict is told.

Namibian Craft Co-operative

Janitha had always felt for the plight of her countrymen in Namibia. The local crafters and harvesters of indigenous products are exploited and are powerless to change the situation and make a decent living from their labour. Her intention was to devise a cooperative that would run workshops to educate them in how to run small businesses and export their products. To do this, she had first not only to understand how a cooperative like the one she envisaged would work, but to find out about Namibia's existing laws and regulations concerning indigenous products. As her knowledge of the political and social barriers to this kind of enterprise grew, so did her determination.



Illustration 8 Namibian craft cooperative. The folded-out front (a) and back (b) of a catalogue of products which was one element of the extensive campaign. This would be given to buyers at a Namibian Annual Expo held in the capital city of Windhoek. From the above examples, it is clear that the students' topics required an in-depth

understanding of the context of their topic. This drove their intense desire to use new knowledge to effect change in the affected communities.

The first semester is analysed below. I discuss the focuses of concern and the causes of the emotive response reported by students first in the group discussion in March, and then, looking closer I focus on feelings during tutorials in April and May. Negative response is reported first, as this was first evident, followed by growing positivity – as illustrated below. These focuses of concern will be evidenced in students’ comments and expanded through discussion that relates to Austerlitz’s research (2007/2008) into emotion in the design studio classroom. Forming part of this discussion are my immediate reflections at the time. I link these early understandings of the causes of the emotive responses to my assumptions of the students’ capabilities that I held when planning the year.

Focuses of concern – negative and positive response

The following focuses of concern were reported as engendering negative feelings in the first semester, were:

- Brief writing – the nature of the task
- Modes of learning – relationships
- Assessment practices
- Research/ Design tensions – decision making and progress.

Apart from the nature of the design task itself, the focuses of concern related directly to the way the programme was run. The issues are contingent on one another and thus cannot be discussed as separately. Brief writing was the first concern and led to the other interrelated areas. Students were expected to write a brief – which includes a ‘problem statement’, a set of objectives for their project, and an appropriate methodology for the creative approach. The writing of the brief is thus key to resolving the stated ‘problem’, as it provides the constraints necessary to focus on an approach. Probably the most sweeping assumption I had made was that students were competent to write a brief for their own project.

We’ve had no experience of writing our own brief. I found it hard. If we knew how to do it beforehand it would have been easier. We need more help in how to write a brief.

Ashraf, original emphasis

Followed by a ‘helpful’ suggestion by Dalene –

Maybe give us a project and let us write a brief..

Students were not fully prepared for reconciling the research question with the creative proposal and expressed frustration around this issue, saying that in third year “*the creative proposal and the research proposal are different...in third year its clearly defined.*” Nazli went on to express quite vehement frustration that resulted from the disjuncture in opinion between the theory lecturer’s approach and that of practitioners and supervisors: This made it difficult to write a brief outlining objectives for the project.

You don’t know where to focus, now the theory and practical are interrelating.

*The prac lecturers throw out my research question because it doesn't relate...
but my prac answers one of my sub questions!*

Similar frustration expressed by Adele, highlighted for me, how it must feel to have to adjust an approach constantly because of new information. It must be pointed out, however, that this is a common occurrence in professional practice. Circumstances change, the client's budget changes, and even the news of the day may shift attention away from the original intent. "I change a single word in my question, and my target audience can change...", Adele laughs and grimaces, and there is much sympathetic nodding from the group.

As I reflect, I find myself empathising with their feelings. *Here I immediately reflected on the design of the programme. It fell short of allowing students time to understand their topic – new knowledge was needed before they began to devise a strategy for the practical project.*

My assumption of students' capability for this task was founded on my experience of facilitating the ITM project (referred to in Chapter 3) with these particular students, in the previous year. Writing a brief was made possible by

- gathering information through primary research of the situation,
- developing a strategy for the communication
- and setting goals and objectives for the project.

In groups of three or four, facilitated by a lecturer, students had thrown themselves into the task with a high degree of enthusiasm and intrinsic motivation. I use a quote from a student, in Snaddon (2005:57), which exemplifies this pervasive attitude toward this project, and demonstrates my high degree of expectation of the fourth year students:

It's not about marks any more. We are now emotionally involved with these people and really want to help...

Sylva

However, students in fourth year are expected to generate the knowledge, define the situation and focus on the problem space *individually*. Creative process for these students, has taken place in community for three years, working on tightly constrained briefs and benefitting from day to day collaboration with staff and peers. Ashraf reacted at my suggestion that they should know how to write a brief, having done it very well for the ITM campaign: "Yes but we did it in groups! We all helped." Max added that "you don't think of the normal things... you get distracted by all the information". On asking them how they felt about working in groups, Rachel responded by saying that study groups "...are a good idea...its reflective. You get more ideas...".

My reflections show a sudden realization of having transposed the idea of knowledge that is developed in community, compared to knowledge generated internally and held within the individual.

For Wenger, learning and knowing is constituted by experience and competence, and this happens in a community of practice (1998:137). Previously, the knowledge

generated by the sharing of experience and competence had happened in a 'community of practice' where each student had contributed to the setting of objectives, the strategy eventually employed and the writing of the brief.

On further reflection after tutorial conversations during the first semester, it became even more evident that the expectation that a designer should suddenly work in isolation in fourth year has never been questioned. It would seem that a traditional academic approach had been applied to the Bacchalaureus year without taking into account Graphic Design's inherently 'pluralist' and 'pragmatic' tendency (Buchanan, 1995:3). Design education, Buchanan argues, could benefit from design practice's example and admit its socially directed purposes and ways of working.

Recent acknowledgement of the value of design thinking and process is currently changing the way designers are deployed in the business sector. Design is moving beyond its traditional boundaries and growing into what Clark & Smith (2008:) call "a school of thought that can solve some of the world's most pressing problems". Design thinking can help any profession solve problems in innovative ways by employing "the inherent ability of designers to innovate, create and implement new ideas" (Sappi/ think/Markinor Survey, 2008). This means that the designer is now beginning to play a more active role in extending the possibilities and scope of business practice. However, the designer never works alone. Facts, history, audience research and sometimes even a strategy for communication is determined by a team of professional marketers and strategists, with the client providing background information for writing the brief. It is therefore important to note that the 'background' work in fourth year, i.e. research, strategy, marketing, and copywriting, is undertaken on an individual basis – which does not mirror practice, and is therefore, arguably, a 'bigger ask' of one person. The projects are nonetheless evaluated against standards that would be applied in professional practice.

Even in a final year of a degree programme, say Harvey & Knight (1997:128), it cannot be presumed that learners know how to work independently. Ways in which learner autonomy might be fostered are not straightforward, as there are competing accounts of how this should take place (Robbins, 1988, in Harvey & Knight, 1997:129). Some students, such as Adele and Terry set up ways to avoid having to work in isolation to recruit 'experience and competence' in setting up informal study groups. Adele admitted that she still did not know how to approach writing a brief, but that she had found sharing knowledge as helpful:

I know this is fourth year, but... I still don't know... I chatted to Nazli and she said she was going to [design the shop]...I thought that was a great idea.

She later went on to say that working as a team was the only way she could get inspired to do creative work. Terry also revealed that she had made more progress having set up informal group discussion:

We organized our own brainstorming meetings... they were very informal, very nice...we started at eight, and it was very productive. It was valuable because they tried to make things work together and give you feedback... and sometimes we would come up with things people didn't even think about... Just to hear

about how other people see it. But I think what was nice about it was the way we did it, where we went, the setting, just to get out, and the atmosphere.

Lioy (2008) described the experiences of students engaging in an extra-curricula creative writing course. He suggests that the learning transformations experienced by students on the course arose through informal peer-learning opportunities where he, as tutor, became part of the group rather than being seen as the 'supervisor'. As observed by Tynan (2008:169), this experimental example highlighted the role informal learning plays in creative subjects, recommending that we broaden our understanding of "what happens when people learn".

Wicked problems – the design task

The term 'wicked problems' (Rittel & Webber, 1973, Buchanan, 1995) aptly describes the 'ill-defined', 'open-ended' nature of design activity. At this stage in the programme it became clear that feelings of uncertainty should be considered not only as a product of inexperience and lack of opportunity for community learning, but also a product characteristic of design practice itself. There are no rules, no givens. Cross, (2001, in Austerlitz, 2008:21) suggested that the activity in such a discipline "cannot be addressed by any linear, pre-structured method", with Austerlitz maintaining that, "engaging with these open-ended tasks is accompanied by an intensified emotional component", and this is associated with their "uncertain nature." This calls for student's creative interpretation of the task, and, as Austerlitz points out, "raises hopes for personal involvement" – but "forces students to deal with ambiguity and uncertainty regarding the path to personal accomplishment" (Austerlitz, 2008:21).

There is no definition of design or branches of professional practice that adequately covers the diversity of ideas gathered together under the label – it is a surprisingly flexible activity. Design continues to expand in its meanings and connections, revealing unexpected dimensions in practice and understanding.

Buchanan 1995:3

The high levels of anxiety and confusion may, therefore, be expected to a certain extent. The creative process in itself is known to generate confusion as the goal image or artifact remains tentative, generic and vague until final realization (Arnheim, 1995:71). This is not an entirely negative experience as it necessarily and variously generates reflexive thinking and the desired 'pregnancy' of possibilities for solving the stated problem. This state will give rise to both positive and negative emotion (Tan, 2008:135). However, the kind of confusion existing in the inherently 'wicked problems' associated with the creative activity of designing was, in this case, compounded by an inadequately designed learning environment.

The terms 'bewilderment', 'perplexity', 'puzzlement', 'mystification', 'uncertainty' and 'misunderstanding' are synonyms¹¹ for 'confusion' which perhaps, in their

11 The Encarta Online English dictionary provides the above synonyms for 'confusion'. As it is a particularly general term, I include these words to clarify its meaning in this context.

descriptiveness, give rise to a more empathetic understanding of this feeling. This was reported in relation to a lack of knowledge in certain areas, and changes in expectation (Ben Ze'ev, 2000:43) of the design process students were accustomed to.

Ashraf's comment later in the semester highlighted for me the difference in being given a task (or a brief) by lecturers, and setting the task for oneself:

I just like to have some knowledge of what it is we're supposed to be doing... I understand we're supposed to work that out for ourselves... but um... its kinda hard for me... because I haven't done it before. Last year it was all set out for us – do this by then and so on...

The various states of confusion detailed above, were reported in the first month of the semester, before the actual design phase began. These kind of responses elicited in the learning environment are arguably untenable states of mind which work against quality learning in an educational environment and are not conducive to innovative design practice. Empathy with the students' responses becomes plausible when taking a whole person into account. Their historical enculturation toward the established system of the educational institution (Brockbank & McGill, 1998:194) entrenches habitual ways of working. This leads to a set of expectations which many find hard to adapt in encountering a new environment. An example of this is the exasperation expressed, again by Nazli, when, at the progress assessment in April, she felt she was required to supply answers before being given the chance to find the information.

The target audience ...there was confusion around that even though I thought I'd explained it well... there was still confusion... I was still busy, you know... observing people's reactions...I was asking people questions... I needed a general overview. I wanted to know from their gut level...

Rachel was still immersed in the contextual research and pressurized for answers she could not give at that stage saying that "...there's so much, I don't know where to start. I'm confused. In the feedback, they said I didn't clarify what I was going to do. I still need to do more interviews so that I know what I should do." Her research into target audiences in Hout Bay was only due to start a month later and the seminar-style lectures on data collection had only just commenced. Margie felt she was being assessed on "something that I haven't even started thinking about". Her project stood apart from the rest because it was necessarily introspective, experimental and did not follow the more typical kind of communication design approach. All work that generates new knowledge takes considerable time and real investigation before proposals can be made, and theories developed. The design of the programme had not allowed for student's need to understand their topic before progress was assessed.

The word 'research' takes on a new dimension in fourth year. Apart from a few small group projects that employ primary research in third year, it is the first time that a serious research campaign, with its inherent protocols, must be undertaken. The written research component was undertaken simultaneously with the design work, and proved a highly challenging aspect of the course. As students learning in creative subjects are visually oriented (Hampton, 2008:229), even students with proven writing ability found the constant alternation between written and visual work counter-productive. Frustration was the result, then, of lack of progress in the practical work,

exemplified by Monique who said “I’ve got all this research, it goes on forever. I just want it to be over so that I can start designing!”.

Leisha expressed anxiety, and a telling sign of reliance on the third year style of instruction where external expectation determines motivation and sets intent:

I get panicky, because I see there’s the deadline, and there’s nothing concrete. I don’t know where in all of this...how far we must be... I would feel better if we were told where we must be, when.

Having spent two years employed in industry before returning for fourth year, Gavin adopted a strategic, ‘surface’ approach in saying that “I found it easier – you can set (the brief to your own strengths... [in a work situation] you just get it done!” He had not been a high achieving student in third year, and seemed happy with working toward a standard that would be just satisfactory.

Along with the rest of the group, Monique and Leisha’s frustration and anxiety emanated from a desire to make progress on their design work. The size of a fourth year project can be daunting – and when assessment takes place in a very measured way, this can, as Ewings (2008:214) points out, inhibit the ability to play with ideas. Students needed to write a brief and present it to a panel of lecturers and industry people for assessment in time to coincide with the computer system that keeps track of the marks. I reflect here on the dichotomies educators face daily – the demands of the system, and the learning paths of students. The design of the programme had thus compounded the ‘wicked problem’ by insisting on a measurable outcome at a certain time. A more sensitive approach to assessment, I noted, would be required.

Design assessment practice – a public act

The Undergraduate and BTech curricula documents state ‘critical thinking skills’ as one of the Critical Outcomes for Communication Design. Evaluation of one’s own work is deemed a key thinking skill as identified in Bloom’s (1956) Taxonomy of Educational Objectives. The operational interpretation of this aim on the three year course, as shared by colleagues, is that through consistent class and peer review critique, students become accustomed to critical appraisal in a supportive environment of trust and good practice. It is assumed that viewing their own, and peer work through a constructively expansive approach, critical assessment then becomes part of the culture and discourse of design learning. This view is consistent with an industry approach, where a designer’s work is under almost constant scrutiny by more senior ‘creatives’. These are referred to as ‘internal’ creative reviews, and are conducted in an informal manner, often sitting in the designer’s work space or in a meeting venue where work may be viewed, up on a wall, by all parties. Experienced design educators and practitioners are entirely familiar with this practice, and students come to accept this as the norm.

However, the BTech environment seems to have adjusted some students’ perception of this practice, experiencing the more ‘formal’ presentations as intimidating and personally judgemental rather than constructive. This brings me to consider the second of Austerlitz’s (2008:21) locations for emotion in design learning. This is in the

interactions with tutors/supervisors – which he acknowledges as ‘part of any pedagogy’, but believes there is more significance to these relationships particularly in design education. This has to do with both parties having to cooperate and negotiate meaning where the nature of the learning task is ambiguous, open-ended and ill defined. These relationships have further potential to become ‘emotionally saturated’ when creative processes and products – of a student’s research work, or crafted objects, for example – are subjectively assessed (2008:21).

“Design and Technology has enormous educational potential, in that, through evaluation, it can give unique insight into quality.” Garvey & Quinlan (1997:38) discuss the benefits for a learner, gained through the evaluative process. However, in their development of strategies with which to enable critical awareness, they have found this to be a two-edged sword. Although strategies devised for evaluation are projected as enhancing confidence, evaluation also exposes design learners to the perceived ‘hard light’ of ‘public’ (industry/educator) scrutiny and possible ‘ridicule’ from peers. The act of designing and making is essentially a public one, rendering students working in creative subjects vulnerable to issues of self-esteem. Covington and Beery (1976, in Garvey & Quinlan (1997:38), indicate that “an overwhelming proportion of students of all ages hold unrealistically high self-expectations”, and point out how frustrating it must be when comparing oneself to peers who may be perceived as more competent and confident. In addition to this, evaluation of one’s ideas takes place in a very public space – and there is there is no place to hide. The spatial and choreographic arrangements of these forums require students to “present both their embodied selves as well as their work for public scrutiny” (Webster, 2006:12).



Illustration 9 A student presenting his brief to a panel of supervisors.

All students reported a high level of nervousness in anticipation of the ‘scrutiny’ the industry panel would apply to their work. An intense sense of urgency built, with confusion, anxiety and fear accompanying intense application to their work. Early in the semester students said that they found the presentations to be very ‘formal’.

Three of the students who had worked in industry pointed out that this was not the case in their experience of presenting their work:

- *It wasn't as hard-core as this – it was more informal – we had to present it to them [creative directors] and then they presented it to the client.*
- *We didn't present to the creative director...*
- *Really informal but they'll tell you what they want...*

Terry, a highly competent designer, increased my awareness of how students feel about the 'formality' and approach of the industry panel assessments. She voiced her own, and peer opinion around the issue, suggesting that practitioners get involved with the projects on a more informal basis. She found the formal format of assessment to have perpetuated the idea of industry as 'jury':

I was too intimidated. I struggle to formulate an argument in my mind... they are confronting you.... Ummm... It is confrontational in that sense... because they have an opposite opinion of what you're presenting. Its not like they're working with you at all... Its all these faces you've never seen before in your life!... Its horrible! Its not nice... Its weird...like standing in crossfire... hoping you don't get sort of...shot!

Rachel, another highly competent student who had presented extremely extensive new knowledge and research, had not satisfied the panel with evidence that she had completed the 'first phase' of the project that was expected. She succumbed to emotional 'meltdown' in the spotlight of industry judgement, leaving the presentation in tears:

The feedback I appreciated, but was quite difficult for me to take. Not because I didn't want to hear it, but just because by the time it got to that, I just felt so physically and emotionally tired from the whole project and process, that I actually just didn't feel like I could handle it anymore. It was a very emotionally and physically tough time! I think for me, this year has been quite a learning curve, which I do appreciate, but it has been quite hard.

From a students' point of view, adopting a strategic, or surface approach (Marton, in Brockbank & McGill, Biggs 1998) to their work seems a safer option. Jon expressed exasperation with the panel's constructive criticism, which called for a re-look at his design solutions:

I had a few issues with um the whole thing, and I think other people had similar ones ... It was definitely a good idea, and we had to do it of course... But ... we didn't feel that we were going to be knocked down so far back. A lot of people felt that, me especially, I was kinda somewhere, and I knew my logo didn't work, but I didn't want to be taken so far back.

Jon went on to express the source of his confusion, and at this point I felt much empathy for his position, as the barrage of opinion at this kind of forum must be extremely daunting.

...there was so much input coming from everyone... but I'm not a team of people, I'm one person, that's been working hard on this project and now there's so much. I spoke to some other people afterwards – they felt confused... Like B [supervisor 1] said one thing, T [supervisor 2] said another and then you [supervisor 3] said something... I felt like I'd gone back to the beginning of my project – and changed my idea... That's how I felt. It was like overload.

Here I gained a new perspective on industry panel assessment when I read the transcript. The research had allowed me the 'space' to step back and really question our approaches toward currently accepted assessment practices. I reminded myself that this was a very different year, in a students' experience, and that they had been caught 'off-guard' by a completely different assessment practice. Terry was one of these students, and her experience of the panel assessment set off loud warning bells for me:

I don't think they were that involved, really... I don't think they really had a valid opinion in that sense... Their design opinion was valuable, but conceptually, I don't think they had a leg to stand on... and personally I was intimidated by them... the fact that they came from industry and that they knew better.

For high achieving students who have a consistently deep approach to their learning, the assessment practice needs to be as thorough and 'deep' as the students' effort.

Whose values, whose truths in assessment?

The product of the final year or BTech Graphic Design project is a written Academic Report and oral/graphic presentations of a body of work. These projects foster 'problem-seeking initiatives' as well as 'problem-posing inquiries' (Triggs, 2002:74). Similarly, across disciplines such as Humanities, Engineering, Architecture and Industrial Design, this kind of project is called a 'senior', 'capstone' or 'final year project' (Shay, 2004:307). Through her study of the assessment and validation of final year projects in two academic departments, Shay argues for assessment to be understood as a "socially situated interpretive act". As she points out, these are what the literature refers to as "high-stakes" or "complex performance-based assessments" (Linn et al., 1991, and Moss, 1992) and are characterized by allowing a "substantial latitude in interpretation and response to the task", often requiring a "range of conceptual, theoretical and practical skills" and the "collection, analysis and synthesis of data from multiple sources" (Shay, 2004:308). Graduation is typically reliant on the successful completion of a final year project. Evaluation of this kind of project also serves the purpose of measuring the exit-level quality of graduates, for accountability to institutional, state and professional bodies. However, Shay points out that although high-stakes assessment has a "long and contentious history in serving the interests of external accountability" in the United States and the United Kingdom, the use of evaluative purposes is only beginning to emerge in South African higher education (Shay, 2004:308). Shay further argues that it is thus important for academic communities to interrogate the validity of this kind of assessment, given the multiple purposes it serves.

'Validation' refers to the "mechanisms, structures, rules, policies, and procedures which the community has in place to ensure validity of its assessments" (Shay, 2004:309). The goal is to understand interpretations within the historical, cultural, institutional and immediate context that shape them. In this kind of assessment the epistemological frame of interpretation is to understand the actions, meanings and intentions of what individuals say and do, and "not to uncover universals or laws". Instead it is to "explicate context" (Rabinow & Sullivan 1987:14, in Shay, 2004:309), which Shay claims, forms the central argument for the assessment practices as "socially situated

interpretive act(s)”. In other words, context matters, and “exposes the multiple layers of contingency that shape assessors’ interpretive acts in predictable and unpredictable ways” (2004:325), highlighting espoused ‘rationality’ as neither objectivist or relativist, and exposing assessment as “contextual; experiential and perhaps most importantly, value-based.” Shay maintains that academics struggle as communities to articulate and legitimate their respective intuitive rationalities, and refers to Bernstein’s (1983) view that this is because academic communities are “fragmented” and “on the verge of imminent extinction”. Without a community of practice to strengthen the language of assessment, Shay warns, collective and individual insecurities arise, resulting in unreflective practice (2004:325).

Goldschmidt (2003:8) asserts that students’ abilities to benefit from assessment varies considerably according to needs, abilities and personalities. Additionally the professional knowledge and the personal propensities of instructors will vary according to the values they subscribe to. “Above all, different design problems invite different types of inputs and additionally, the educational setting may call for emphasis on some issues at the expense of others.” Shay (2004:327) points out that differences are inevitable, pointing out Bourdieu’s (1992:225) claim that “*double* truth, objective and subjective...constitutes the whole truth of the social world” (original emphasis). Shay suggests that we open assessment practice transparently to students, thereby exposing them to this double truth, with the spinoff being that they will then be prepared for the “decision making that is relational, situational, pragmatic and value-based”, and required, in their future professional contexts. She posits that this may be the most crucial life skill that we have to offer our students.

As industry is product/outcomes driven, the emphasis is on the end-product. With design practitioners present at all of the assessments, the variance in approaches was often apparent. In addition, the students’ engagement and tacit knowledge gained through their research was often not well-considered in the short twenty-minute assessment session. Additionally, as practitioners were not involved with the research question, they often perceived the problem space quite differently, having limited first-hand knowledge of the issue, compared to the student. This has highlighted the importance of ‘developing a language’ of assessment.

In examining my assumptions and expectations of the panel assessment format, I found that I had not taken into account the impact that differing ‘value judgments’ within the education/industry collaboration would have on students’ perception of their abilities. Hearing and witnessing student’s responses throughout the year, I realized that a more transparent and negotiated approach to assessment would de-mystify the practice and allow them to concentrate on the value of their approach to their work, rather than the pure utility of the end product – which is ultimately given one mark. If we prioritise value, asserts Shay (2004:326), assessment may be discussed by asking three classic Aristotelian questions (from Flyvbjerg, 2001:60) – “Where are we going? Is this desirable? What should we be doing?” and “Who gains and who loses and by which mechanism of power?”

The danger of students perceiving these panel assessments as formal judgments of themselves is that they begin to adopt a ‘strategic’ approach to their work to avoid

uncomfortable situations where they feel exposed and vulnerable. This may effectively disempower them in their efforts to do meaningful innovative work. Creativity becomes secondary to the task at hand when they realize that good enough marks can be achieved by working to what Hartley, 1998 and Heywood 2000 (in Davies, 2002:12), call 'straightforward outcomes' that relate to convergent thinking, rather than to divergent thinking, which is about seeking a potential range of alternative outcomes. Davies maintains that students are less likely to take a surface approach to assessment if they understand that they will be rewarded for "creativity, risk-taking' and engagement" if these are the concepts which appear in the written learning outcomes.

Another of Rachel's responses shows up the different values held by the practitioners which left her feeling that her work had less value than she had believed.

Industry people seem to operate a bit different to how fourth year works... I'm not entirely sure if they completely understand fourth year? Some of the comments made, made me feel a bit patronized.

Leisha comments on her understanding of the circumstances:

Its hard not to take it personally – the externals don't understand the research we're doing – its hard to explain it in the presentation.

Unless students convey their knowledge clearly in tutorials or at assessment points, it becomes a case of the supervisor or practitioner suggesting and directing attention to what is perceived as more appropriate according to their more general knowledge of the situation under discussion. Focus, for practitioners taking part in assessment is on the end-use of the product and its adequate fit or appropriateness for benefit to the client and consumer. Because of their differing propensities and professional knowledge, it is difficult for practitioners to make judgments that qualitatively differentiate levels of achievement of design outcomes (Goldschmidt, 2008:7). Power relations then begin to play a role and students defer to the recommendations of the 'more experienced' or what they perceive is the 'objective truth'.

Webster (2006:5) suggests that there is mostly 'tacit' or 'folklore' understanding of the purposes and processes involved in assessment, claiming that the 'design jury' practice to be "riddled with inconsistencies and contradictions". Inspired by Foucault's (1982) genealogical studies of relationship between knowledge, power and the formation of the modern subject, Webster contends that it is time to "review, modify or even abandon the design jury" (2006:5). Noting this as a widespread and "specific form of pedagogic practice", in design disciplines (Blair, 2007; Shreeve, 2007; Austerlitz, 2007), she maintains there is considerable disagreement about exactly "what students learn and how". Findings cited from Foucault's study revealed "misalignment between the espoused aims of the design jury and the effects of the jury in practice" (2006:5).

Students on the BTech course found the experience of the assessment practice alternatively life-changing and memorable (Adele, Dalene, Dana, Roelof) to de-motivating, disempowering and even patronising (Terry, Ashraf, Margie, Rachel, Jon). Webster (2006:5) explains that similar dichotomous expression was found in her study. The design jury practice has been depicted by psychological research paradigms

to be a “student-centred event that supports and promotes reflective learning and thereby the construction of individual identity” (Schon, 1987, in Webster, 2006:5). However, in sociological research paradigms, cultural theory and critical pedagogy, the design jury is depicted as “a site for the coercive imposition of hegemonic knowledge, skills and values” (Anthony, 1993; Chrysler, 1995, Stevens, 1995; Willenbrook, 1991). Webster suggests that anyone with experience of design juries would reject both these points of view as “parodies of a more complex reality” (2006:6).

Webster’s ethnographic study aimed to allow a nuanced reading of the mechanisms and effect of contemporary design jury practice. It was clear from the study that students begin to develop a set of tactics (Entwistle, 1983) to ‘master’ the crit, and that the more introverted students showed acute anxiety, and in some cases, profound distress. It is a common belief often expressed by educators and practitioners alike, that some degree of stress is “a necessary condition” to cope in real life situations, and that it “makes students work harder” (Webster, 2006:13). Many are not aware of educational research that suggests that assessment practices that provoke anxiety tends to encourage the adoption of “surface learning approaches” (Biggs, 2003:15; Jackson, 1995:154, in Webster, 2006:14).

For students such as Adele, an arguably more ‘surface’ approach allows her to take less of a personally meaningful lesson from the panel’s criticism. Adele’s project demonstrated a fresh, but underdeveloped idea, and she was happy to hand over creative decisions and responsibilities to the ‘experts’, and makes good progress on her project by doing so:

I think it’s very important, as we get to gain knowledge on the way industry approaches our projects. It’s given me a good opportunity to see what is expected from me in the real world. I got an industry perspective on my project. After the feedback it helps push your project... forward in the right direction.

Goldschmidt (2003:2) points out the tension that exists between attaining the goals of innovation and creativity – which have become prime expectations of student’s work, and equipping students with skills expertise. The assessment of projects often hinges on demonstrated originality of ‘fresh ideas’, but at the same time “specialised skill and technical knowledge continues to demand attention from practitioners and educators”. Depending on whether the practitioners/assessors are implicitly ‘expertise-oriented’ or ‘creativity-driven’, projects may be assessed according to these personal tendencies, and, as Goldschmidt claims, it is not unusual for instructors to espouse one vision and practice another.

...and the bright side

As students began to overcome the initial disorientation, confidence, satisfaction, passion, enthusiasm, appreciation, and a sense of transformation were emotions that began to show in April and May after progress reviews, and before the assessment in June. These related to

- The comprehensive feedback received from the assessment panel.
- Positive encouragement for the personal aspirations of projects served to further

- motivate and generate new feelings of enthusiasm for their work.
- New understandings of process saw growing self-reliance and agency in learning.
- Exposure to new learning areas and new knowledge gained through the research increased confidence.
- The creative writing workshops and tutorials promoted the environment as encouraging and supportive.
- Practice and experience of presentations led to confidence and personal growth.

It was a good thing... I liked the fact that she was critical... because I think we need constructive criticism, you know. 'Cos you need to tell us where we're going wrong so that we can improve on it... because we have to learn... I think it was good.

Ashraf

... I'm so excited by this!...I have found my design style by doing what I love in this year, and I think if I didn't do fourth year and just went straight into a job I maybe would not have been so independent and positive.

Dalene

Roelof stood out as having a mature attitude toward the assessment format saying that *"It was good... I just took from it that I should go to the next phase."*

He ascribed this to having benefitted from working overseas before starting the Graphic Design course, and from being 'in industry' whilst studying in fourth year. After being 'lost' during his school years, by what he called 'conforming to the system', he had found his own motivation for doing graphic design.

The cool thing about studying is that you can then get a job you actually enjoy doing. I experienced having to get up and do something you didn't enjoy... my real world experience taught me that. Coming into this course... I think I came here with the mentality that I was here for myself, and its up to me, really... it depends on me – how much I want to get out of this.

Roelof referred to having noticed how his peers had seemed to hold back at the beginning of the year, waiting for 'permission' to proceed with their own ideas.

I think as kids, asking permission is what they're used to, being fed information... because that's the world they've grown up in – like at school they're used to instructions, to conform. They're used to that kind of system... so now in fourth year it's the first time... its changed dramatically.

I found the rest of Roelof's story enlightening, as it demonstrated the power of intrinsic motivation. His emotional reaction to a situation in third year had provided him with the energy to change his learning approach:

I'm here for a purpose. I remember in third year – there was a turnaround point for me...when I showed [the lecturer] he said 'well you don't seem that interested', and I felt so disappointed, you know! What the heck – I did all this work for nothing... and then I realized. It hit me like a ton of bricks! I can't do this thing for my lecturers. I can't do this for other people. That changed me. I felt like I was set free of marks... It limits you when you try and do it for other people. It's your responsibility. My friends here worry about how the lecturers think about them and their work. Most young people are used to constraints from their teachers.

A similar transformation, for Nazli, came about once she became the 'knower' or generator of her own knowledge. This empowered her to make informed decisions – and confidence in her work grew. It is clear to see in this expression, her development of critical thinking skills, self-reliance and agency:

I'll know when I'm ready to design – I need to polish up my strategy... I don't just go and polish up something to show to a lecturer.

Nazli's passion emanated from personal investment and belief in her own intentions for promoting an authentically South African brand – her own product. The product currently creates employment for local South African crafters who use local raw materials, thereby retaining the element of sustainability. At first Nazli had been hesitant and seemingly disengaged, producing a superficial solution for the proposal for the visual identity for the product, presenting the work with an attitude of resignation. Once she realized her 'ownership' of her vision, and the depth to which she could explore the possibilities, she developed a much deeper approach to her work.

The assessment panel had put her in a position of accountability for her decisions, with the realities of her context being thoroughly questioned. She developed a critical approach to her work, taking full responsibility for her actions. This also revived her creativity when she realized what could be achieved if her own objectives were in place, eventually producing a highly creative and original solution to the communication problem.

June – a turning point

The June assessment proved heavily demanding on some of the students. *Anger, disappointment and humiliation* were negative emotions eventually admitted as having been experienced during this time. Other students found the experience challenging, 'nerve wracking', but ultimately constructive, uplifting and even 'life changing'. Satisfaction and a 'sense of transformation' were reported as driven by enthusiasm and passion for their topics.

Most students immediately displayed signs of relief at overcoming the first major hurdle, regardless of the outcome. Students whose work had not received an entirely positive response showed visible signs of emotional disturbance and left in either a contemplative or subdued mood directly after the assessment, for the mid-year recess. This time was to be used for data collection, as the final Academic Report was to be submitted at the end of July. All seemed eager to leave for the recess to be able to concentrate on the Academic Report.

At the end of this busy and intensely emotive time, it was perhaps, in hindsight, helpful that I was not able to conduct interviews or gain a sense of students' response to the June assessment. Organising their own thoughts and reflections around the events allowed students to formulate their own ways of coping with their emotion and work through the adjustments they would inevitably have to make. The time that elapsed had seemed to enhance their sense of responsibility and agency in their own learning on their return.

The second semester – July to November

The writing was over at the end of July. The topics explored had demanded intense application, and the feeling of ‘freedom’ to focus on design was palpable. Armed with research findings, the new knowledge generated renewed passion as the depth of the issues became apparent through opportunities revealed. Most students had completely readjusted their approach to the design, finding that the reality of the situation demanded more focused attention and application than they had previously thought. In some students I noticed higher levels of engagement and creativity than they had ever displayed at third year level and they made steady progress.

When students returned in July, I sent out a short questionnaire to gauge how they had felt about the style of the June presentations and what they felt they had gained. Students were also required to submit a reflection on the recommendations made at the assessment, with detail of their intentions for their projects. Satisfaction, appreciation, passion and enthusiasm were expressed. Students that reported a ‘sense of transformation’, together with feeling a ‘sense of being’ a designer were producing work of a standard they had not been able to produce in their third year. This was immensely rewarding and inspiring to see.

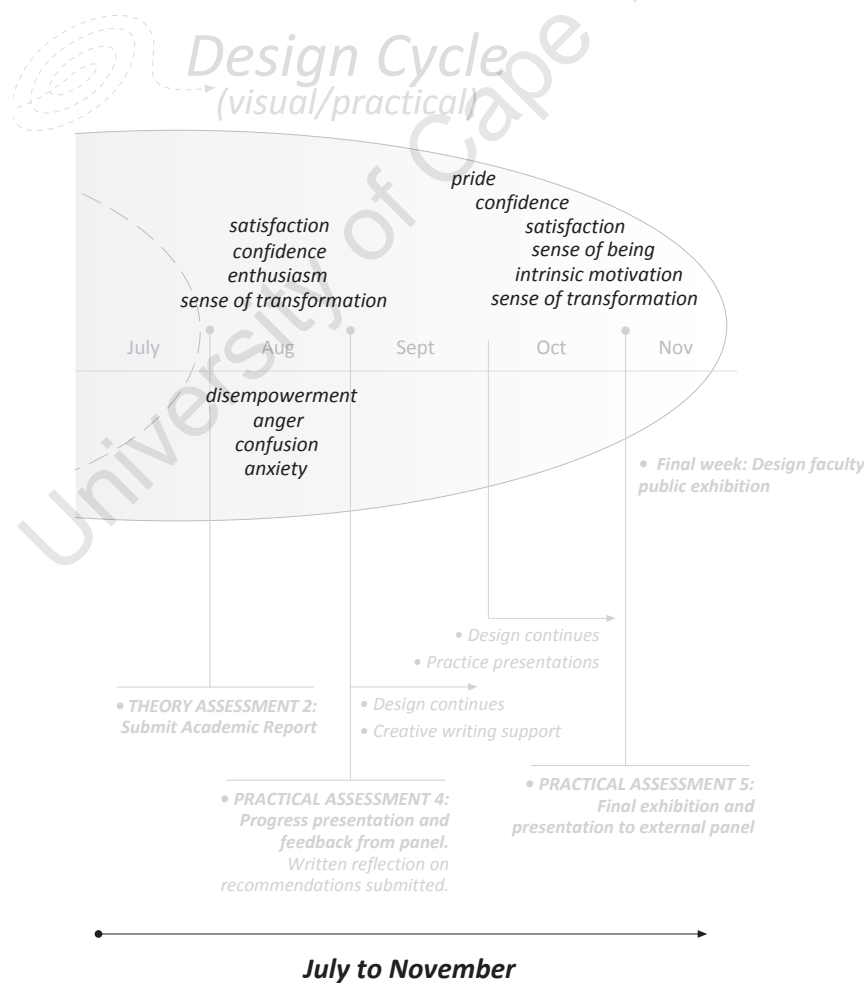


Illustration 10 Patterns of emotional tendency – Semester 2

There were some cases, however, where the event in June had affected the trajectory of the work. The focus of concern centred on the students' perceptions of the way that the panel delivered critique and recommendations. Emotions expressed were *anger*, *confusion*, *anxiety* and *disempowerment*. Anger, being the strongest negative feeling experienced at this point, served to flag specific events. Max's carefully written, but bitter reflection raised the importance of attending to the glossed over or the 'taken-for-granted' reactions of students.

... unfortunately the feedback delivered in the painfully short time we all had together could be summarized as: "Make it prettier, it's not working yet. You're not emphasising your USP enough." Valuable feedback, no doubt, but somewhat curt. This was somewhat short of the epic feedback everyone else had been receiving, surely? Perhaps I should have risked a night sleeping on a desk to stay and listen to more? Well, given that the titans of industry brought in to look at all our projects had all already left, perhaps not. In regards to the feedback I received, I had no time to explain what I was working on, so some of the feedback was redundant. I can't think of any gems or pearls of wisdom I received from the review.

These strong feelings are not usually entertained in the 'normative' framework of educational discourse (Okuleye, 2008:194). I remind myself, that this kind of reflection may not have been registered if the 'door' had not been opened by a concentrated research effort. It was not surprising that the student was angry. He felt short-changed, being last to present his progress late in the afternoon. The previous sessions had gone over the time allocated, and practitioners had other appointments to attend to, which resulted in the comments being perceived by the student as 'curt'.

From this student's point of view, he did not receive the same quality of feedback as his classmates did. Blair (2006:84) asks how it can be ensured that the formative assessment 'crit' format promotes effective student learning. She observes that students are expected to be proactive in student-led and group activities in seminars, but that student participation in crits "can be variable, either through the setup of the crit environment or in the way that the event is facilitated".

Kluger and de Nisi, 1996 (in Blair, 2006:84), found that the role played by the crit environment itself, and what they call 'meta-factors' has an impact on the value and effectiveness of this kind of formative assessment. Max had said that there was very little useful advice from the feedback. Having heard it from my point of view, the feedback was well-considered and thorough - but it was clear that the atmosphere was rushed. Max had appeared at the crit feeling undervalued from the start. This had changed his perception of what was said. This was a case of the 'meta-factors' playing a role, and this is well illustrated by Austerlitz & Aravot, 2007 (in Okuleye, 2008:197), where he found that "in cases where the intense emotion was elicited, it often captured the whole of the student's attention and led him/her to an emotional turbulence lasting days or even weeks".

Max had submitted his written comment well after the due time – and admitted in the script that he had done it reluctantly – he also inferred that it would not be taken seriously by saying "I know it's about two weeks late, but since nobody ever really reads these things anyway, I figure that it'll all be alright".

It is clear from this intonation that he felt undervalued as a student. Okuleye (2008:197) describes this as a 'veiled hurt voice' – the kind of angry comment normally written anonymously on student feedback forms that remind us of the impact power relationships have on student emotion, and not often heard within the academic framework. This incident brought home the reality of how growing student numbers (Gothe, 2003; Shreeve & Austerlitz, 2007; Hampton, 2008; Jonson, 2008) can potentially decrease the quality of interaction in an educational setting, and compromise the quality of student-educator relationships.

The three further cases where the June assessment impacted negatively on students' progress are discussed '...in detail', as this will allow a closer examination of the specific conditions which manifested into deep affect.

Progress and positivity

Early in August, 'progress reviews' were held to reduce the formality of the presentations and to give students the opportunity to discuss their work with three supervisors, and gain different perspectives. This was generally a very productive and creative time. Being able to concentrate purely on the creative process, students gathered momentum and most gained confidence after the progress reviews. Common themes identified on the positive side of the emotional spectrum, in order of frequency of experience mentioned or implicated, were confidence, passion, enthusiasm, satisfaction; a 'sense of being', and a 'sense of transformation'. These feelings were concerned with the assessment presentations, new knowledge gained and the creative writing support. Students' positive feelings were elicited through

- seeing assessment as a positive learning experience, in a supportive learning environment,
- constantly presenting their progress had built a strong work ethic, perseverance and agency, and the developing sense of 'being a designer',
- making use of support and selecting useful advice developed self-knowledge,
- new knowledge and growing interest in their topics brought about independence and self realization.

Leisha, a new student, having studied for three years at a private institution, had experienced previous studies and the working world as less conducive to self-realisation and agency. She experienced the reviews and assessments as contributing to her personal growth, and furthering her learning.

The research has forced me to think about what I'm doing – I used to rely on lecturers feedback and just do what they said without thinking. Before a presentation you would just stick things together and hope for the best. Now I question everything I'm doing. I can't believe I even put the work up that I did. I look at it now [3 months later] I'm so far away from that.

I felt that the final review was wonderful. It was extremely nerve-wracking waiting outside while moderators deliberate, but upon entering I was pleasantly taken through my work from their point of view. Everything that was said was done in a manner as to inspire and add to the thinking. I never experienced comments to be negative... It was definitely positive criticism that I was grateful to have received at this stage...

Jon had started to approach his work with more self-directed energy and had begun to take responsibility for his own decisions, appreciating what he experienced as a constructive environment. He commented that “*there’s a balance, and there’s enough input but more responsibility for you...*”

Ashraf pointed out that having to consistently present his work at all stages developed his confidence through forcing him out of his ‘comfort zone’:

It is kinda scary because I haven’t done anything like it before. But doesn’t that mean it’s a good thing? Practice makes perfect. I learned that you gotta be confident and have faith in the work you’ve done.

Circumstance and specific conditions in the requirements for the research and practical work had put Monique in unknown territory. She discovered that she was capable of far more than she had thought:

In the end I did totally the opposite to what I thought I wanted to do. I didn’t just focus on something I did in third year, I did something new, and I feel now I know a whole lot of new things and I have more skills, and broader knowledge. I’m glad the project took a different turn in the end. It was also more exciting to do something new.

I noticed a renewal in her whole being – her posture, facial expression and attitude had changed. Confidence and self-belief shone through visibly in many of the students.

...in detail

All learning engages the self and results in changes to the ways in which people make sense of themselves and their world... It is an existential requirement that people reach a view of themselves which is credible, authentic and sustainable. New knowledge, and ways of thinking can threaten this process profoundly. New experiences can be negative; they can result in new forms of self-awareness in which people come to see themselves as adequate or unworthy.

Williamson, 1998:199

I have chosen the following six stories to tell, because they all highlight specific examples of ‘what happened’ when students began to learn about themselves on the course. Through their stories I learned about myself, and what questions to ask of my practice. I was afforded insight into their realisations that there was more to learning than they had previously thought, and more to being a designer.

The fourth and fifth points of the Austerlitz (2007) framework were:

- locating common causes for the intensity of emotional reactions, and
- indicating the reported effects of these emotions on students’ learning.

In applying these points in interpreting these cases, I found that in order to understand the intensity of the emotion displayed through the year, it was important to look at each of the six students’ particular history with regard to their previous experience on the course, learning styles, learning achievements and prior expectations. All these factors have an interesting relationship with the students’ choice of topic – they reflect much of who they are and their approach to their work. In a recursive, circular fashion, the topics chosen then show influence on students’ engagement with their experiences. Finding common ground between the three students in each of the groups, I divided the six students’ stories into two groupings of three.

Three stories

Throughout the three-year course, Terry, Rachel and Margie had stood out as ‘super achievers’. The three students were enthusiastic, hardworking and popular with their peers. Each project through all three years was tackled with passion and intensity, to a degree that exceeded expectation.

Each has a unique strength in their approach to design, and a recognizable ‘signature trait’. Unique style and individual ‘personality’ in a designers work is highly regarded (Buchanan, 1995), with hopeful emulation often attempted by those who aspire to achieve a similar proficiency. That these students elected to further their studies was not surprising, and it was assumed that they would set the bar high, and bring

a dynamic work ethic to the new programme. However, assessing this kind of students' work can result in finding merit where there might be less than is actually presented. The 'halo' effect is a term used by colleagues and myself to remind us of this phenomenon. However, as Hutton points out, assumptions are often unconscious, difficult to identify with habitual expectation being difficult to modify (1998:57). The converse of this, is that to avoid the 'halo effect', these students' work may sometimes be assessed with a more critical eye, as expectation of them is high.

All three of these students chose complex social issues for their projects, which related to strong personal value systems and beliefs. High expectations of these students carried the assumption that they would cope on their own regardless of the complexity of the issues they chose, and manage new situations and challenges with more ease than their counterparts. It was thus easy to assume that the topics chosen were within their scope of ability.

High expectations and their impact on identity

The course was perceived as completely new, and high expectations had filtered through. As one of the three top students, Rachel felt the pressure "...before you even begin". She was aware that "everyone was wanting the level to be raised". Margie had "...high expectations. I was very excited that I could spend a whole year doing something I really wanted to. Also from an academic perspective which was very exciting...there was this huge expectation that it was going to be different..."

The comment below was the last sentence in the series of conversation/interviews that I held with Terry during the year. It emphasized for me the difference between the perceptions people have of a person compared to what is internally perceived:

... people have this expectation of you and they project that onto you and then you start acting in that way. And you can't explain it. And then you feel like a big fat old fake. So I need to get to a place where I'm just stable and secure in who I am. I have wanted to run away a few times.

This powerfully summed up the extent to which our self-perception and identity can colour our everyday interactions and relationships and affect our decisions and actions. In Reid & Solomonides' view, the very process of design is tied up with identity, and identity is constantly reified through competence and participation in community (2007:164).

Terry, Rachel and Margie's high expectation of themselves was similarly tied up with their identity, sense of belonging and engagement within the developing community of practice. The feelings of fear, anger and humiliation expressed below indicate the extent to which they felt removed or excluded from real acknowledgement of their process and their learning during the assessments. All three achieved results, at times, of a much lower standard than what they expected of themselves.

Margie

We are marks-driven – that is how we understand our value – I think it's the same for everyone, so yes, I was shocked to get the mark I did.

Margie

The first assessment seemed to set the tone for Margie for the rest of the year. After the June review, she said she could not find the motivation to design, even though a new brief had been developed for a cause she was passionate about. She felt that her confidence in herself and her ability as a designer was just not there. Even though she agreed many of the comments were valid, and appreciated the feedback, she felt that her personal ability had been questioned, rather than the merits of the project. She had expected more constructive criticism, with less obvious frustration from the panel about the unresolved design issues inherent in the project. After this experience, the feeling that she was perhaps not viewed as a competent designer, hampered her design thinking and approach. She described a feeling of blurred disorientation, and that her head had felt physically “swollen and swirling”, whenever she presented further ideas. Before the final assessment of the year, Margie wrote an e-mail to me:

I am petrified of the presentation... Fear of once again putting everything into my work, working hard, going into the presentation on a very positive note and leaving more negative than I've ever been. I don't want to fail again or look at the disappointment on (supervisor's) face again. I don't want to do it anymore. I don't want to go into the presentation. So I can't work. I can't put the effort in.

At this stage, Margie questioned the validity of university design education, wondering if going straight into industry would not have been a better way of ‘getting an education’. Soon after this Margie expressed her feelings, after a copywriting tutorial. It took a few words to change her outlook. She wrote to me straight afterwards:

I feel freed up for the first time in a long time. He really encouraged me, he also enabled me to look beyond this year. He also showed me how to see this year differently... Even if I don't receive a piece of paper, I have learnt something this year that no one can take away from me. He mentioned that ... education is what you remember after you have taken away all the 'facts'. The education for me is how I have grown as a person.

A later e-mail saw Margie reflecting further on her learning.

I wanted to challenge myself at the beginning of the year, to set out on a journey of change. That is exactly what has happened. Maybe not in the way I would have expected, but I am different. Very different... I think my attitude towards people has changed I'll never relate to them in the same way as before I did this project, because my perception of the world and how it works has shifted radically.

I found that Margie had learned to see the situation through very different lenses. The year had seen her struggle with major issues of identity, and she had begun to realise that it was her perception of other people's expectation of her that had prevented her from achieving her best design work. Her experience of the year had produced unexpected transformations for Margie.

This year will never be a waste of time for me – its been life-changing. Its given me confidence in knowing what I want in life, not to be scared of what others think, but be humble and be who I am.

She put together a list of recommendations for future fourth years, in acknowledgement of the difficulties she knew they might encounter. Her insights have served to provide me with clearer vision in terms of the kinds of challenges a fourth year design student faces.

- *Fourth year needs more structure, because it's so different to third year. Students are really confused as to how to behave differently. D was told the other day that he was not acting like a BTech because he was doing things the way he did in third year. Are we supposed to know suddenly how to 'be a fourth year?'*
- *A lot of fourth years are going through major personal growth and changes, and it really interferes with your work.*
- *We should have been prepared for fourth year in third year – have time to think about what you want to do.*

Terry

From the beginning, Terry's participation was compromised through the high standard she had set for herself, compounded by complications brought about by the misalignment of the research and the design components of the project. The practitioners had not shared her vision for the project as she had not backed up her proposal with a resolved strategy in June. She had thus questioned her competence, which led to further resistance to participation and misdirected effort. It was dismaying when Terry finished the year, by presenting work showing much potential, but in an unresolved and incomplete form.

Terry's year revealed many of the ubiquitous assumptions that had accompanied me in the planning of the year, shifting my approach to many aspects of my practice. Her personal journey throws further light on the three main focuses of concern pertaining to the design of the programme – the research/practical alignment, and the format of the assessment presentations and the brief-writing task. I found that Terry clarified specific details pertaining to these issues. The following examples of her critically reflective comments illustrate a heightened awareness of the way she had learned. She also demonstrated a quiet astuteness with regard to the design of the programme.

You need time to develop your own arguments on it and make up your mind on it you know. And you can only properly design once you have an opinion [slightly vehement] about what you're designing...

Terry suggested that the programme had not allowed students to develop enough of an opinion or knowledge of their issue, before being required to produce a designed outcome by June. Looking apologetic and downcast, she explained the reason for this:

I unfortunately only developed [an opinion] near the end of the project or, toward the end of my thesis. Then I lost about two months, three months... which is not great. So I wish the thesis could have been done in the beginning and then I could have had more focus...

Terry's voice, and body language or posture spoke of deep affect. This conversation-style interview, late in November, was held long after the episodes she talked about. It was clear that Terry's vision for her project had not been met, having seemed uncharacteristically 'paralysed' since the June assessment. I felt heightened awareness and empathy for her feelings during this conversation, beginning to realise the depth to which her learning had been affected. Kull (2001:44) speaks of empathy as being alive to the sensations that the "emotional tone and posture" of our students trigger in us as educators. Describing this bodily form of listening, Abram, 1997 (in Kull 2001:44) encourages us to 'know and respond' through this mode of intuitive, irrational apprehension. Brockbank & McGill (1998:194) suggest that a facilitator can, "with care and respect for each student, enable the expression of emotions in a helpful way, using primary or, where necessary, advanced empathy". They acknowledge that if it is the first instance of this kind of response, the effect may be quite 'dramatic'.

Terry described a feeling of disempowerment after the review, and a feeling of frustration and confusion. Even though she appreciated the view of the panel, and wrote the required reflection of comments as she understood them thoroughly and specifically, she felt that the work was now not her own and could not find her bearings again:

I would have been more stable if I'd been ready... for me it would not have been such a knock...psychologically... I feel I would've been more um... confident. Then I could have defended it properly... for myself... not in that scenario... [looks wistful].

Terry spoke of resorting to a 'strategic' approach to progress with her work, knowing that she was working to just cope with the requirements rather than pursue her own vision:

I was confused... I went through the normal, you know, what you need to do, sort of very strategic... you know... like this's what I need to do next, to change this.. I typed it up, sort of very business-like, you know... I didn't acknowledge the fact that [the assessment] did something to me... I just moved on... [mumbling] and then I saw the effect of it afterwards... you know, emotionally, when the pressure started cooking up and I didn't have what I needed to have... everything just sort of came up... and I became emotional. [Looks and sounds very downcast and sad, trying to maintain composure, voice wavers]. Because normally I'm pretty level-headed where that's concerned – I don't really freak out... I think for this one I didn't have any control, you know, in the end... that was awful! [laughs] It was horrible... voice low.

I felt that Terry had not been able to articulate her intentions for the project because she knew she had not met the stated outcome for June. Her investigation into her topic had produced new directions for the project, and her explorations into producing artifacts (crafted pieces of design) differed from the way that practitioners saw the possibilities for the topic.

Reid and Solomonides (2007:28) suggest that the determinants of creativity may not be defined mechanistically, and are not attributes of a person, pointing out Nosal's (1995) notion that "...one commonly shared mechanism of creative thinking does not exist". They further suggest that creative solutions are of a divergent nature and that

they allow for achieving an aim in "radically dissimilar ways". In some cases, it matters that it is not only one goal to be arrived at, but a whole series of goals, which fulfil the specified criteria.

Marvszewski (1995) claims that it is the real-world problems that are the determinants of creativity. Csikzentmihalyi expands this view into one that suggests that the mark of creativity is not the ability to solve a problem, but to be able to "discover a problem" (1990a:193, in Reid & Solomonides, 2007:28). It is thus the nature of the problem that is creative, and not necessarily only the solution. This implies an important consideration for teachers of design in the assessment of student projects, in that the assessment methods themselves must be creative. According again, to Hartley and Heywood (in Davies, 2002:12), accommodating divergent, rather than convergent outcomes in assessing design, however challenging to consider, should be thoroughly addressed.

Terry had approached me to talk about her work two weeks before the final presentation. She started by saying she was confused about the direction in which she had now been told to go which was not how she had envisaged her project. Even though she seemed to agree in the tutorials as to the next step in the process, she was not able to find appropriate solutions. I asked if she had ever told her supervisor that she was uncertain or confused, and she said no. She felt that because he was known as a successful designer, she could not challenge what he said. He suggested too many options and she just felt lost after each session. One meeting a week was difficult.

Terry's perception of the supervisor (a very approachable, understanding and capable practitioner) had prevented her from engaging in an egalitarian relationship. The supervisor's knowledge of Terry's capabilities had brought about the assumption that she would be able to work with his suggestions. (Conversation with supervisor, August, 2008). I had assigned the supervisor to Terry because of her history of excellent design skill. However, her lack of experience of working with practitioners had developed into a fear that her work was not up to professional standard, and that she had no right to challenge what was suggested. Applying Egan's concept of 'accurate empathy' (1976) would have acknowledged the inevitable power relations inherent in this kind of environment. By listening beyond the student's silence, and drawing her out of her reticence would have invited engagement with what lay behind her apparent paralysis. In this instance, I am reminded again of Kull's notion of teaching as inviting another person into a relationship and into a new way of being and behaving (2001:43). However, it seemed that Terry's lack of experience in dealing with 'professionals' had 'shut down' openness to engagement:

I couldn't really open up to him that much, because....because of the fact that he was so professional... it felt like you were expected to operate at the same level, and that he had this great expectancy of you to now perform and produce this awesome project... but you know you're still a student!... I think when you meet people like that, you know, you realize that you don't... you don't know anything really – where experience is concerned...Nothing can beat experience... and its really valuable. And for me, that was what was intimidating. What they've had compared to what I've experienced in BTech, they've had for ten years... ... it's a place that I don't understand... so for me, its this unknown void! [laughs]. They've got all this experience in this specific place

that you know nothing about.. and that's what's weird.

Terry was thought of as a highly skilled design student, which brought about the common assumption that she would be able to cope in all situations. However, her example, amongst others, highlights the anxiety that can be brought about by the 'unknown void' that is industry, prompting the need for a more interactive and experiential approach in the design of the fourth year learning environment. An interview with a practitioner who works with many of our graduate students highlighted current attitudes of graduate students and the climate they often work in:

Designers must understand they are part of the team - they must jointly accept responsibility and ownership and be part of the planning and decision making when being briefed by the client – they are often spoken 'at' - not to. The conversation is often one sided (from the client or art director) and no 'discussion' or two way dialogue takes place...Graduate designers find it difficult to communicate or to assert themselves – hence they walk away from the brief uninformed, frustrated and unable to proceed with the project.

JP interview, September 2008

Rachel's story below, provides further insight into student perceptions of industry practitioners.

Rachel

Rachel was unsure of her worth as a designer, even though she had usually achieved the highest results in each year of diploma study. This is shown in her use of words such as "maybe", or "like I thought", and she presented her work in an almost apologetic tone. Her perception of being 'judged' made this environment a threatening space where she initially felt insecure.

I guess I had the feeling that they were just going to come and examine this and they were just going to come and take it down... I guess I was expecting them to be brutally honest and find anything to criticise.

Fisher & Hood, 1987, 1988 and Fisher, 1989, investigated anxiety in student life, and acknowledge a background of research on university students' stressors of which was found relevant and significant. Some of the stressors were labeled as "complex, cognitive emotional-motivational states" and were found to cause absent-mindedness, diminished attention and absenteeism. These states lead to a "spiral of poor progress and increasing distress owing to perceived failure" (1994:46).

The intensity of emotions experienced around this kind of assessment, as suggested by Ben Ze'ev (1996), depends on a positive correlation between variables of the event's impact, including variables, like for example, the "strength, reality and relevance of the event and background circumstances". This includes the variables of "accountability, readiness and deservingness". The anxiety and fear that students like Rachel, Terry and Margie experienced was perhaps due to being unprepared for the outcomes expected at the assessment, because of the complexity of their projects and their unresolved directions at that stage. Most students' topics had demanded more knowledge of the context before presenting an outcome which answered the criteria of the assessment.

Some were able to present work which satisfied these at this stage, strategically presenting that which could possibly meet expectation. However, for these three students, and, to a certain degree, others, their learning had not yet culminated in what industry practitioners saw as a resolved communication design at that stage. Circumstances such as these, then, explain the intensity of the students' feeling toward the event.

Rachel's strength throughout her design education had been the generation of prolific ideas, which mostly all held potential for expansion and realization. Confessing, before June, to her enjoyment of the research stage of design, she acknowledged that she found it hard to make decisions, and that working under pressure, to shorter deadlines was more productive in terms of producing an outcome. After the June assessment which Rachel had experienced as partly patronizing, she realized that she had not articulated her intentions and decisions clearly:

I didn't think that I presented it well. I didn't feel as well-prepared as I could have been, especially as [a practitioner] was there, which made me more nervous... I felt really bad.

The reflective comment required after June proved to be a turning point at which Rachel, for the first time, was able to articulate that which she had learned about herself.

I've learnt that I actually enjoy shorter timelines and deadlines to the length of time we get in 4th year... for me shorter time means no procrastination, or over-thinking things... With more time, I tend to doubt myself a lot more and only move forward if I'm totally convinced of the direction.

However, in interesting contrast to Terry's inability to overcome the emotional difficulties she experienced, Rachel found the sharp contrast of the industry 'spotlight' remobilized her sources of creative energy.

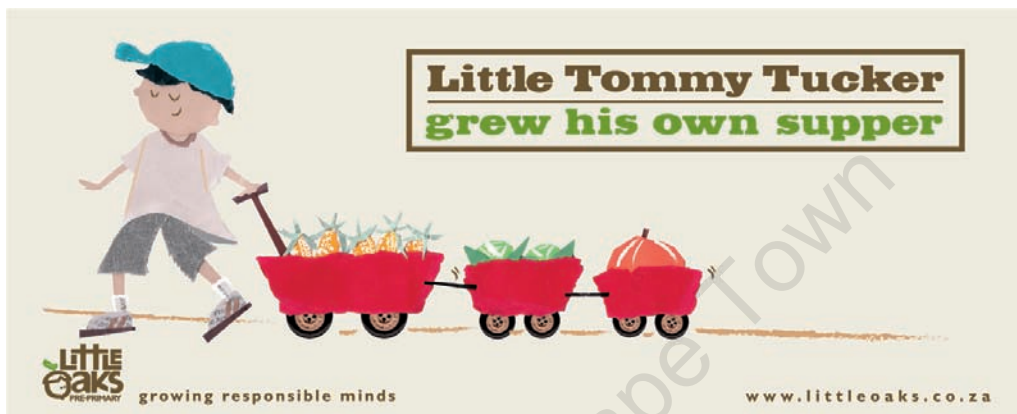
I feel like they're more of a litmus test...I know they can also be subjective, but its like they can see it from a totally different perspective...

Rachel was assigned the same supervisor as Terry after June, and began to recover as stringent deadlines and accountability were expected. On asking how her project was progressing with a new supervisor, Robyn remarked that he was "really cracking the whip!" She had noted a difference in the way she was relating to him, testing everything before tutorials, being much more critical of her own work, as she is getting a sense of how much he noticed small detail. Rachel gradually overcame her state of awe she had built up, and responded by producing a prolific and accomplished body of work by the end of the year. She had experienced personal growth and a transformation in the way she understood her capabilities and approach to designing. Reflecting on the year as a whole in an interview in November, Rachel explained how she had felt at the beginning:

What I imagined is people just expected us to know what we were doing, and just be confident – meanwhile, you're still figuring out what the brief is, and you've got all this research on your mind, so its very hard to figure out where you need to be from day one.

Having had little exposure to design practitioners and industry practice, students' perception of how they will compare or 'measure up' can be debilitating and counter-productive. Ironically, the final outcome of her project at the end of the year was of such high quality that practitioners admitted it as superior to what they would have produced, given the same brief. Rachel was very surprised at the end of the year when the work went on exhibition, and this indicated to me the level of self-expectation that some students have of themselves:

It was interesting – he was amazed about how much work went into it. He took it into account ... he was absolutely floored (laughs). I was surprised how much he appreciated it. I felt the amount of research is what I needed.



d

e

Illustration 11 Rachel based her concept on nursery rhymes, with an environmental twist. (a) One of a series of billboards advertising the pre-school learning outcome of growing vegetables and (b), the final exhibition of the body of work. (c) An example of a newspaper advertisement. (d) A further example of a billboard and (e) a billboard and recycling bins, using the concept of building blocks, shown on location in Hout Bay.

Terry, Rachel and Margie all felt that it was the 'hardest year ever'.

It felt like a journey for the whole year– for me it was a journey to the point where I felt that I actually owned it. It was the day when I did the website that I had never had done before in my life, that I felt in the deep end. And then when I did it, I thought I think I actually understand now. It was so hard, I was scared.

Rachel

The programme had introduced challenges over and above those that were inherent in the students' complex topics. An added factor was that, perhaps, these students are typical of what Ewings (2008:214) calls 'perfectionists', who cannot countenance mediocrity as they see it as failure. He maintains that it is often these students who present for counselling, as resulting anxiety can inhibit capacity to work and be creative. Negative loops, he suggests, can be broken through structured conversations with their tutors or with a counsellor.

....Students aren't ready to go into industry after 3 years. Working with industry is completely different. I have a different view on how to work with clients now. Industry brings a different spin. It's very good in fourth year.

Rachel

Margie adds a positive way of looking at what was learned:

This year has not, by any means, been a year that I have learnt about design. It hasn't been about learning facts, design techniques or even expanding my conceptual thinking. I feel I have done very little of that. I learnt what I sought to learn when I think about it... I am different. Very different.

I've also come to see what it is that I want out from my career, the type of designer I want to be...and also gained the confidence to do so (funnily enough). I feel I could be confident about who I am and where I'm at.

... and the other three stories

Ashraf, Dana and Dalene's stories are different, yet the year's experience resulted in similar personal growth. For these three students, expectation of the year stemmed from their recognition and acceptance that they still had much to learn. This led to a perhaps more open and accepting approach to what the programme promised.

Ashraf

Ashraf indicated that he had no real expectation and implies that he started the year with an open mind. He had imagined the year to be purely practical. During all the conversations, interviews and tutorials, I got the sense that he was approaching the year thinking that he just had a longer time to work on his practical than in third year.

I had no idea what to expect from fourth year at all... the only thing that I heard in third year was that you do two major projects, and that it could be anything that you wanted it to be...so... I didn't know about the thesis.

Ashraf's topic stemmed from his reflection about having known very little about

graphic design at school, and how difficult it was to make the choice for a career at that stage. After three years of studying graphic design, he finally understood the field. He wanted to design a communication strategy to help school leavers make the choice about entering the field of design. The opportunity arose for him to develop a promotion for the envisaged Winter School at CPUT, which offered school children a chance to come into contact with the field of design. Ashraf's own recent memory of his experience drove his motivation to design a communication that would change Grades 10 – 12's perceptions of the field, providing them with an advantage when deciding on their futures.

Even though Ashraf had proved himself a talented designer, having applied himself very well during all three years, fourth year proved to be far more of a challenge than he had originally thought. He had been confused and frustrated during the first semester, finding the self-directed mode of working extremely difficult. He had previously relied on the external motivation of the quick turnaround of briefs and assessment in third year, with the prescribed methodology providing the constructivist-driven 'scaffolding' for his learning, saying "...you are used to having a teacher or lecturer behind you holding you, knowing what's going on." He floundered and seemed unable to make decisions, waiting for direction during tutorials. I was surprised at his lack of proactive progress. This was explained when the year was over and he'd had time to reflect on what had happened. He had found that his way of working and thinking did not measure up to how the practitioners said that they would have approached the project.

We don't know anything at all about industry... just in service for about a week... we don't know what it's like, we've never been there, so we don't know what to expect from them.

Practitioners had questioned Ashraf's approach to his work during the June assessment implying quite strongly that his work reflected a lack of knowledge of how to go about the design of a visual identity. This had clearly caught Ashraf off-guard, and he expressed his dismay in the final interview with him, at the way this had been communicated saying "I expect the external moderators to know that we don't know that much [about industry]". He had expected a more considered approach at the session, and felt that his status as a learner was not being taken into account, adding "... but then again, we don't know what they think - they might think 'they're fourth years now so they should know a little bit about this'".

Much of Ashraf's reflection centred on his perception of industry and how little he thought he knew in comparison. This explained his tentative approach during the year. I had felt that too many students were holding back on opinion and had the sense that they thought practitioners and supervisors 'knew more' about their chosen subject than they did. This seemed to effectively shut some of the students down – neither challenging the commentary, nor debating the merits of their work. Just before the final assessment, however, Ashraf took ownership of his project after his extended period of reticence and dislocation of self from his work. I asked him at the end of the year, what it was that had brought about his change in approach. His response was that it was the suggestion that students think of themselves as 'experts' on their topics, made in an information session before final presentations, that had made him realise that his

knowledge was valuable and that he did have the capability to interpret his topic and design a communication appropriately, without relying on external 'permission'. The suggestion had initially surprised and amused many of the students, but soon it began making sense, as in effect, the students realized that they were the 'knowers' having researched their topics thoroughly and spent a year exploring an appropriate solution. Belenky's description of the word 'expert' explains the meaning it carries: "An expert becomes somebody whose answers reflect the complexity... the situation holds" (Belenky et al., 1986:139, in Brockbank& McGill, 1998:40). Ashraf's eyes lit up when I asked the question, and became animated in his response:

That helped... that helped a lot! That one simple line! You own it ... its your work! It just made everything clear... because that's what BTech is... it's you coming up with your own thing...right? ...It's you, completely. 'Cos from third year to fourth year its completely different... and that one line made a lot of sense – it helped a lot! ... you actually know everything... like everything that's behind it. It's your thing. You know the most!

Thinking of themselves as 'experts' effectively allowed them to understand their new knowledge as valuable – thereby establishing confidence and ownership. This moment of clarity had noticeably shifted many of their approaches, and all were able to present confidently at the final presentation.

Dalene

Dalene's humility and enthusiasm had been infectious throughout. She had approached all the assessment points with a determination to learn as much as she could. Early on, she took responsibility for her learning with growing confidence that could be ascribed to her work ethic and attitude. She appreciated all she'd learned at the first presentations, enthusiastically wanting to improve immediately on her initial proposal, saying: "Can we get a second chance to present!"

Dalene's attitude continued to be irrepressible throughout the year, expecting every experience to be a learning opportunity. It was interesting to note that her confident and enthusiastic approach served to invite and engage the panel, bringing about lively and constructive dialogue. Even a low mark did not discourage Dalene, as the interactions with the assessment panel encouraged and uplifted her. Her marks improved dramatically, and in June, achieved one of the highest marks:

The first term of this year was a bit hard because I didn't know what I wanted to do ... although I took chances I still came last in my class with a mark of 50% in the beginning but I didn't give up. I tried to make the best of the worse and ended up with a very good mark. That just inspired me more.

The positive encouragement, as well as a strong belief in her project motivated Dalene. She developed a strong critical approach to her work, questioning everything that she did, improving on weak points. The formal presentation format proved to sustain Dalene's work ethic, making her accountable for all her decisions.

By presenting your work and looking back on what you've done, you can see if you made progress or not. The presentation helps you to be more confident about your work....I think that formal presentations is a good thing, because in the industry they can ask you anytime to explain your project and you must

always be prepared. It is a bit nerve wracking but if you know what you are doing then it's fine.

However, Dalene experienced the progress reviews in August (part of the continuous, formative assessment introduced), as essentially confusing. Her confusion directly after the event had turned to anxiety, and then into anger once she realized that these feelings had stemmed from contradictory feedback. Her work had been accepted in June, and she had earned a good mark. Once she had progressed with the recommendations, and presented them at the review however, her strategy and design approach were questioned as possibly unsound. This was due to a new assessor, who had not been party to the original response to her work. The previous assessor had prioritized the fact that her project was commercially viable and proposed a good mark because of his personal approach to the objective for the project. The new assessor's priority was design quality. The differing subjectivities and proclivities of the assessors, were, for the inexperienced student, distressing and confusing. It took her a week of turbulence and intense 'soul searching' before she sought advice from me.

Ben Ze'ev's (1996) explanation of the emotional mode's 'partiality' explains the intensity of Dalene's emotion and its effect on her ability to work. In the emotional mode, one is focused on a narrow target – where emotions express a personal and interested perspective. The emotional state indicates a transition, during which the preceding context has changed, but no new context has yet stabilized. It struck me that students experiencing intense emotion had been caught in this transition stage because of the self-directed and mostly isolated nature of the learning environment. The states described in all cases could have been diffused relatively quickly in a community of practice where reflective dialogue is facilitated.

As exemplified in Ashraf and Dalene's cases, a discussion where the student's viewpoint was entertained was all it took to gain a different perspective. I wrote a 'task exercise' immediately after the discussion with Dalene so as to seek other opinion on how the situation could be managed going forward. The student was not able to formulate a convincing argument. She also felt she did not have the right to argue with the panel's assessment of her work, and did not show them her research or justify her chosen direction. (Additionally, English is her second language.) She still received a reasonably good mark – but the initial response of the panel was inconsistent with earlier assessment of the work. I suggested she try the recommendations, but she reminded me of why she had taken the initial design stance that she had, and she then stuck with the decision she had taken according to her research.

Dalene had responded to my suggestion that she consider the new recommendations, but make her own decision, by reflecting and returning her answer the following day:

*I don't want to change my logo I am happy with what I've got and can only make it better. I don't want to change [according to the recommendation].
This project will be successful because we have worked hard these last 8 months.*

Her confidence in her work returned, understanding that the assessor's opinion was relevant, but that her knowledge of the subject matter was just as applicable. By the end

of the year, Dalene's 'sense of transformation' is evidenced in her words, and was visibly apparent in her demeanor:

I have learnt a lot in 4th year. I have learned to be independent in my work and take chances even though you don't know what the outcome may be. It feels like 4th year teaches you to make decisions on your own. [Up to third year] it feels like the lecturers helped you along by feeding you baby food and helping you to walk, and now they've set you free and can not lead the way anymore.

In the final interview, it was apparent that Dalene had 'found herself':

I have found my design style by doing what I love in this year, and I think if I didn't do 4th year and just went straight into a job, I maybe would not have been so independent and positive... I think that every one should do their fourth year because it's a great experience and teaches you independence and to not be afraid to design on your own...It was a good learning process... and I am glad that I did it. I feel more prepared for the big world next year.

Dalene's own enthusiasm, passion and energy, reflected back during each assessment and tutorial, had provided the momentum for an enriching year for her.

Dana

This got me thinking when I was walking through the hospital, with oncology at the end of a long corridor. It was quite an emotional space – where I realised I wanted to make a difference for the children. I'm glad I ended up doing this.

Having been a very independent student during the three-year course, Dana found herself in her element in fourth year. Self-directed study suited her well, admitting that in third year one "often didn't think for yourself" because of the tightly dictated time schedule and being "directed by the lecturers in ways" because "maybe they didn't think you could do it ... That's it – in third year you get the brief and we know that you guys know where you want us to be, then the outcome would be more like you wanted it to be, and that's why we were more relaxed – and we weren't that critical about our work..." Dana maintained that she enjoyed doing "my own thing and thinking it through". She liked working independently and felt that because she had written up her own research, she had become more critical, and then it "comes out the way you wanted it to be". She had set her own goals in fourth year and kept herself to them, always questioning herself on her own satisfaction in what she had achieved.

She appreciated the consistent practice provided by the presentation format of assessment, treating them as part of her steady learning process. This increased her confidence even though it was just as hard for her as it had been for all the students:

It was great – I enjoyed the dry run – it really helped if you were going in the wrong direction. Helped me get my confidence up because we presented so many times. At the end of the year we were presenting something quite big - I really hate presenting – oh I hate it! But through all the presenting it helped me a lot.

The copywriting workshops had taught her about creative writing, a skill that she had not developed in third year. She acknowledged that she was not weak in the area, but that she had been insecure, saying that "I learned quite a bit" about the "different types

of writing” such as the story, sponsors letters and writing for parents of a child with cancer. Dana, much like many of the fourth year students, hadn’t realized that they had actually written their own brief for the ITM project in third year. She felt that this was because it was “not your own work, because it was in a group.”

Fourth year helped me quite a bit. I had things in my portfolio but I didn't feel ready [for industry]. Just doing this on my own was important...I think if I stopped at third year, I would have always been scared to show my work.... I think fourth year taught me to be confident about myself, even presenting the work myself. There's a difference presenting and just showing it. Having to present makes you have to overcome things like 'what if they hate it?'...

Even if its bad, then you can improve it. That sort of helped me feel more confident about my work and what I'm able to do.

Dana’s in-depth knowledge she had gained through the primary research had motivated her consistently throughout the year as she thought through how best to communicate with small children, their parents and hospital staff. Staff and practitioners learned alongside Dana, and because of her new-found confidence, a productive dialogue always characterized her assessments. As a quietly unassuming student who had previously seemed lacking in a strong sense of self and confidence, Dana felt a strong ‘sense of being’ and achievement by the end of the year. She presented an extremely well-designed, substantial and meaningful body of work, achieving a mark well over distinction.

Your opinions develop more – you get more confident about what you do. That's it. Maybe people are too scared to show what they think about something. Because it may not match with the other person's opinion, and they don't want to bring theirs forward...

Dana pointed out the importance of confidence in the creative act, recognising, in her experience, that some students' potential is hidden by their fear of revealing a less-than-perfect solution. Sir Ken Robinson (2006), maintains that all children are immensely creative and imaginative. He goes on to say that it is education that discourages the taking of risks and chances, which teaches people to be terrified of being wrong. Citing Picasso's opinion that all children are born artists, he agrees that we grow out of creativity as we grow up. He goes on to suggest that many "highly talented, brilliant and creative people" are lost because they don't know how creative they are – often having been benignly steered away from "what they are good at".

Confidence was, in many instances, the product of consistent exposure to 'double truths' (Bourdieu, 1992:225, in Shay, 2004:327), and the de-mystification of the assessment process. The year ended on a very positive note. It found it fascinating to see all students achieving a sense that they had ‘changed as a person’ – and to see that learning happens – in many more ways than we think.

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; it creates its own cracks. Learning happens, design or no design.

Wenger 1999:225

6

Framing

We all have certain values that we would like to embody in our practices, but that due to external/institutional and internal/biographical constraints we can find ourselves negating these values, imaginings and aspirations. It is the tension between our desire and our reality that drives us to improve our practice through thoughtful inquiry.

Whitehead 1989, in Geelan, 2006:19

Consistent with complexity thinking is the notion of one's complicity in the research event. My centrality as a researcher has been a significant feature of the research approach (Whitehead, 1989) allowing me access to what Austerlitz (2008) calls the 'unspoken' in teaching and learning interactions. I believe that validation is ensured through the reflexive process I employed, and in which my interpretations may be justified in relation to this situation and context. I recognized at the outset that my own approach founded in previous life and working experiences will have affected the way I designed the fourth year programme, and conducted the research.

Acknowledging the origins of my approach to teaching and learning in Chapter 1 as oriented toward feeling and emotion in learning, I aimed to understand how students responded to the updated fourth year environment through exploring students' feelings towards the conditions in which they worked. The first part of the research question had asked simply, *how students experienced the fourth year Graphic Design programme*. The second part of the research question asked *in which ways these experiences influenced students' approach to learning and self-realisation*.

The sub-questions designed to answer the research question were

- which practices and methodologies effectively supported student self-development,
- how students felt about industry collaboration on assessment and how they perceived this practice, and
- whether the Theory of Graphic design informed or supported students' approach to the practical design project and, if so, how.

Looking back

The first part of the analysis '...in colour' explored how emotion experienced throughout the year had marked the powerful positive and negative responses affecting students' creativity and engagement with their projects.

The second part of the analysis concentrated on finding the causes for the intensity of both positive and negative emotions, and the way this had affected learning. I found that *negative emotion* brought about by certain oversights in the design of the programme caused unnecessary emotional disturbance. The following areas need attention:

- Lack of knowledge of, or misunderstanding of the aim and purpose of the fourth year or BTech qualification, caused very diverse levels of expectation as discussed on pages 72 and 80. This needs clarification before students apply for the elective year. Progress was hindered by the confusion and frustration arising from the very different pedagogical approach.
- Procedural knowledge, for example, brief writing, declarative knowledge such as the articulation of design methodology and intent, and experiential knowledge through industry interaction, was achieved only at the end of the year. These forms of knowledge need to be developed earlier in the year, so as to allow the creative process to proceed unencumbered by uncertainty. Anxiety and fear had resulted from lack of knowledge and unpreparedness as exemplified on pages 54-55.
- Insufficient synergy between theory and practice due to the timing of the two subjects' content resulted in feelings of frustration (pp 57-59, 74 & 75). Students were not able to efficiently translate new knowledge gained through the research in time for assessment. This, in effect, caused them to defer to the experiential knowledge of the practitioners and educators, and resulted initially, in dependence on external input.
- The format of the industry/educator panel assessments was found to deeply affect some students' approach to their work (pp 59-64). Industry participation was too formal – intimidation could have been avoided by more informal discussion opportunities. The assessment points precipitated unrealistic demands of the students, their progress being assessed before enough knowledge of the context/ situation had been gathered. Lack of experience in presenting their work to industry initially produced a lack of confidence in their approach to presentations. It became apparent that there is a need for dialogue between industry and design educators with respect to setting of educational intentions, as practitioners' values differ on many levels due to personal business approaches and interests.
- Social or community learning was not formally facilitated. Feelings of isolation and lack of creative stimulus reduced the momentum or 'flow' required for creativity and transformational learning (pp 55-56).

I found that *positive emotion*, as the motivating fuel that powers 'double-loop learning', can sustain the learner through many 'dips in the learning curve', and that empathy, through reflective dialogue, is a necessary skill in unpacking blocks in the way of a learning 'adventure' (Brockbank & McGill, 1998:191). The following are areas were found to encourage engagement, creativity and transformational learning:

- Informal learning opportunities were found to be beneficial (p 55).

Establishing and developing communities of practice for pragmatic, social learning is indicated as an important consideration, as this reduces feelings of isolation and 'stuckness'.

- The nature of the topics chosen were highly motivational, as was personal intention for the outcome (p 84). Industry appreciated the socially responsible tendencies of the projects, and provided positive encouragement. When the student displayed enthusiasm and passion for their topic, as well as strong work ethic, the assessments proved highly motivational (pp 26, 30, 52-54). Students then achieved a sense of belonging, a 'sense of being a designer' and a 'sense of transformation' (Reid & Solomonides, 2007) as their participation (Wenger, 1995) was invited and appreciated.
- Practice in presenting their work built confidence and enjoyment, a sense of achievement and happiness, which provided instances of 'double-loop' (Brockbank & McGill, 1998) or transformational learning (pp 65, 70, 82 & 84).
- New knowledge gained through rigorous research and the discipline of academic writing empowered the students and eventually afforded them agency and confidence in what they had learned, which showed in the ways they had applied this knowledge to their design projects (pp 64, 66, 69).
- Self-knowledge and development of strong identities resulted from the independent self-reliant form of pedagogy practiced in the fourth year programme. Personal growth was recognized as an outcome of the fourth year of study (pp 70, 78, 79, 80).

Serendipitous findings

These areas of discovery further challenged my beliefs and expanded possibility for the development of the programme.

- Students with a degree of experiential knowledge learned and performed differently to students with less exposure. There was a higher degree of self-responsibility and agency from these students earlier in the year, and they were less intimidated by the industry assessment panel than their less experienced counterparts (p 65). These students in the main, produced good results. However, this finding cannot be generalized. One student, having spent a few years working in the field, returning for the BTech qualification had adopted a 'surface approach' to his work, and failed the year (p 47). There is no evidence that extensive experience in the field will produce superior performance.
- Expectation of the fourth year (p 72) contributed to how the students approached their learning. Students identified as those who had previously been middle or lower achievers in third year had expectations that they would 'learn more and develop more skills'. As exemplified by the sample group, they achieved better results than was expected. Conversely, the previously higher achieving students had higher expectations of themselves, and relied on their way of coping in third year. Their identities were more closely aligned with their work performance, which

caused a higher degree of emotional intensity with respect to assessment, ultimately reducing effective performance. The design of the programme had not fully anticipated or supported their deeper approach to their projects (pp 72, 82, 85).

Acknowledging emotion's role

Austerlitz (2008:31), in his recent anthology of research into emotion in the design/art studio classroom points out skills that every practitioner should master, include awareness of embodied aspects of experience, dealing effectively with stressful criticism, moving between personal agendas whilst interacting with stakeholders, and “facing the emotional roller-coaster that all these create.” He maintains that it is the responsibility of higher education institutions to accommodate these aspects of teaching and learning “as well as those based on more visible skills and explicit knowledge”.

MacPherson (2001:213) claims that, as currently practiced, education ‘scaffolds attention’ away from sensory, bodily connections, towards a more disembodied and abstract literate and conceptual world. This view does not abstract thinking and literacy, but aims to “encourage more integration between sensory and conceptual knowing, to enhance, rather than suppress our connection(s)”. Sagan (2008:51) argues that to achieve a holistic view of the individual learner (and teacher) we need to acknowledge them as socially and psychologically constructed, emotional, and situated in space. This is a more challenging but authentic way towards student-centredness and is based on embracing actual diversity which means inviting and taking risks with emotional interactions. “It means questioning ownership (and indeed non-ownership) of creative learning spaces”.

Austerlitz recently concluded that we are only just beginning to understand emotion’s role, and that this is a researchable area open for understanding more about learning in design. “Many authors acknowledge that the creative process as an inevitable source of emotions, but they also recognize the duty of tutors to recognize these emotions as a valuable part of creating and learning” (2008:30).

Learning in design cannot follow set formulae and relies on individual, creative interpretation of a task and there will always be a wide diversity of learning approaches and individual interests on the BTech course in Graphic Design. Because of this, the role of the design educator becomes one of facilitator and coordinator of learning experiences. I consider conditions of the fourth year learning environment, by taking key words from Williamson (1998:198), who derives a theory of learning from a dialogical model of knowledge that predicts conditions for successful learning. I hold this model up as a useful benchmark.

Williamson contends that people learn best when conditions allow for

- *participation* in setting goals and methods that are purposeful and effective
- *security* in the knowledge they are being taken seriously; that they are valued; building trust in the motives of the facilitator
- *confidence* that challenging views and asking questions will not be met with humiliation or reprisal

- *support* in articulation of views; enthusiasm is reciprocated
- *being helped to be open to others*; be able to listen and to communicate effectively in a group
- *understanding failures* in learning so that meta-cognitive awareness improves; for heightened awareness of deeper structures of their own understanding and appreciation of their learning styles
- *assisted in developing strengthened critical awareness* of how other people think
- *self-actualisation, motivation to learn and personal growth*, which occurs when the ability to see the immediate consequences of their learning in application is achieved
- *encouragement to extend themselves in fresh ways*, gain insights into their past and their future possibilities in conditions where the joy of personal growth and deeper understanding of what interests them is acknowledged
- *experiencing themselves as agents*, able to determine their own fate and influence decisions that shape their lives.

Recommendations

We need to be careful before jumping to conclusions regarding the ways we should or should not change educational practice. Indeed, although identifying a 'problem' is halfway towards a 'solution', the other half requires in-depth knowledge of the implications of this perspective in specific cases of art and design courses."

Austerlitz, 2008:23

Austerlitz cautions that findings are not necessarily solutions. The findings did indeed 'identify the problem', and I made changes to the 2009 BTech programme. I believe that my knowledge of the affective in design learning has enabled me to address those aspects found to have inhibited students' positive states of mind and their predisposition toward creativity and engagement. Although these are in no way a conclusion, the following interventions were planned for the 2009 programme:

- The first semester is spent developing research proposals for the theory subject.
- Coursework addresses specific aspects of design such as sustainability, brief-writing using 'live' projects with short turnaround times, and design methodology exercises.
- Assessment is presentation-based, but treated as more of a discussion forum.
- Social learning is facilitated.
- All students attend a four-week internship and present their experiences on their return.
- The brief for the practical project is presented in July. Design work begins after submission of the academic report.
- Industry assessment and feedback is treated in a more 'seminar style' or dialectical manner.

In recognition that in-depth knowledge of the implications of this new perspective is required, I plan to conduct a new cycle of research to gauge student response to conditions in the 2009 environment. This thesis suggests, however, that ongoing research will play an important role in informing a way forward for not only the

BTech year, but for the development of a Master's course in Graphic/Communication Design. It will also reveal areas of strengths and weaknesses in the diploma course.

Happy design

Margie inspired me to question why it is that studying design at fourth year level should not be a happy experience. On reflection of her four years on the course she spontaneously offered her memories of her happiest moment, which happened in third year:

The Wellington shoebox was my 'happiest design' because there seemed to be no pressure – the brief was simple and all you had to do was be creative!

The design she referred to had been entered into the Loerie Awards – a national and prestigious annual event, where professional and student designers are recognised for creativity and innovation. Shortly after she made this comment, the design won one of only three gold student awards in the country.

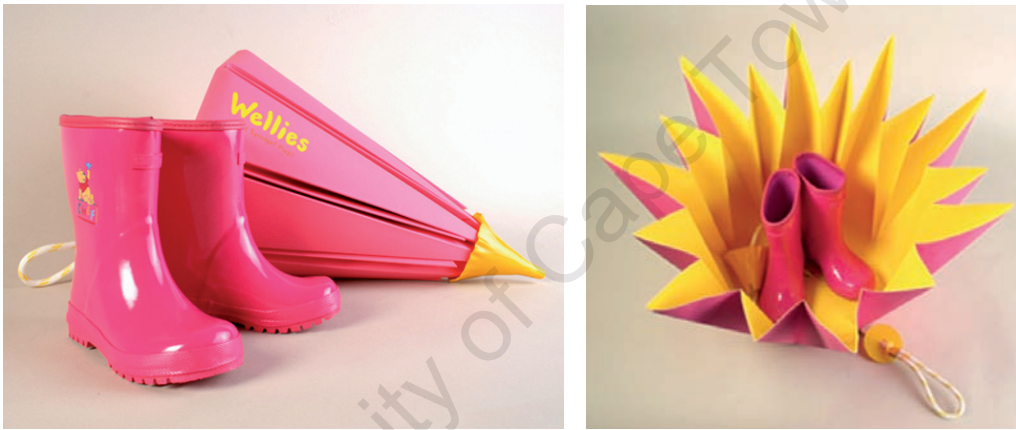


Illustration 12 Margie's award winning 'happy' shoe packaging design

Among today's most important Graphic designers are David Carson, Stefan Sagmeister and Paula Scher. A common theme, on reflection of their long, creative and productive careers, is how moments of happiness have usually lead to good design:

It often happens spontaneously, intuitively and accidentally or incidentally... is mostly achieved through those parts of human behaviour that don't make any sense... Design is about invention, change, rebellion, not perfection...

Scher, 2007

I have come to recognise, through my own, and my students' experience that real learning often happens in spontaneous, accidental, and playful ways – memories of which never fade, providing the motivation for future engagement.

As adults, most of us have forgotten our deep selves and the profound wisdom they possess. Except in rare moments of childlike spontaneity when we are exposed to something that touches us deeply, we forget that our selves have a knowing centre. We forget how to respond to that what is within. We lose faith in ourselves and turn to external rules for guidance.

Zohar, 2001:209

I circle back to my recollection of learning, during the master's coursework, as the delight at the point of knowing – an embodied, sensory and emotive experience. Anthropologist Michael Taussig (in MacLure, 1999:154) calls this knowing

... a sudden laugh from nowhere – the catching of breath, the delighted laugh, the stirring of curiosity... like Tromp l'oeil... 'something peculiar about similarity/familiarity' a sense of momentarily being shaken out of oneself, of sudden disorientation... Its perception is in every case bound to an instantaneous flash. It slips past, can possibly be regained, but really cannot be held fast, unlike other perceptions. It offers itself to the eye as fleetingly and as transitorily as a constellation of stars.

Damasio calls this consciousness 'a feeling of knowing' (2000:173).

In conclusion, I highlight the words of professional designers who attended the DACUM forum. Graduate designers are expected to be in possession of a “deep and genuine interest in and passion for their field of study” and “an infectiously positive and happy disposition” for the task of creativity and innovation (DACUM, 2008).

I have come to believe that a creative learning environment that inspires commitment, delight and joy in designing in the fourth year, will prepare future communication designers emotionally to be able to rise to challenges we know to exist – and indeed, those we don't.

... And yet there are few more urgent tasks than to design social infrastructures that foster learning.

Wenger, 1999:225

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Appendix A

Work Integrated Learning

(E-mail invitation sent out to prospective design companies, followed by form overleaf.)



WORK INTEGRATED LEARNING - An opportunity to develop fresh South African talent In partnership with Cape Peninsula University of Technology

As you know, developing a young designers' potential and talent is no easy feat. Employing a designer with the right credentials, talent, work ethic and skills is not always that easy either, and even harder if they have no experience to speak of. Since any design discipline needs people with mounds of focussed creative energy, and a knowledge of how a business works, we invite you to be an education partner to our Fourth Year (BTech) Graphic Designers.

In the interest of producing quality graduates who are able to contribute productively to business as soon as they are employed, developing mutually beneficial partnerships with business is essential. As such, we are planning an internship period of four weeks which translates into seventeen working days (public holidays and a day back for a seminar here excluded). This is deemed an appropriate period of time for the learning experience to be substantial and meaningful to the student, and if made as positive as possible, a rewarding experience for you.

We invite you to engage with further information provided in the PDF attachment here, which outlines the BTech qualification in Graphic Design.

This also illustrates what you can expect of the student, what they will expect from you, and how you can help manage this learning experience in their preparation for a life of inspired design involvement.

What to do:

Please consider the internship options outlined on the Word document supplied, and email or fax back to

(DETAILS REMOVED)

Appendix A /continued. Work Integrated Learning reply form (details removed).

Cape Peninsula University of Technology – Faculty of Informatics and Design

BTECH GRAPHIC DESIGN: WORK INTEGRATED LEARNING ACCEPTANCE April - May 2009

COMPANY: <Your company name here>

Undertaking by the company:

(If you are able to accommodate the student, or students for four weeks, this would be preferable as they will be able to contribute more effectively over a longer period.)

- The company is willing to accommodate ONE BTech student from **April 20 to May 15 2009.**
- The company is willing to accommodate TWO BTech students from **April 20 to May 15 2009.**

OR:

- The company is willing to accommodate ONE BTech student ONLY from **April 20 to April 30 2009.**
- The company is willing to accommodate ONE BTech student from **May 1 to May 15 2009.**

Please note:

- No reimbursement is expected, but a student may not be expected to work overtime without payment and written agreement.
- Hours should be agreed upfront and punctuality should be expected.
- The student is to inform you of when they have a lecture or meeting at CPUT.
(This will be minimal over the four-week period.)
- The student will personally deliver an CV in hard copy, and a profile on CD by way of introduction a week before the work period commences.

Further comment :

<Please insert you comments here>

Please return this advice by **Friday 27 March 2009** so that arrangements can be made timeously, and all parties have clarity. Thank you for your confidence and cooperation!

Please email, telephone advice or fax printed form back to:

DACUM Workshop
(Graphic Design)

Report-back for Language and
Communication Purposes

All the invited graphic designers agreed that students have to be equipped with certain personal skills and attitudes before they can hope to find employment after the completion of their CPUT studies. In other words, they are expected to enter the work place with these skills and attitudes already in place.

NOTE:

The number of asterisks in brackets indicates how many times these aspects were mentioned and, therefore, how important they are. Not that the other aspects are not that important, but these, in particular, were emphasised over and over again.

a) Personality / Character / Self-development

- deep and genuine interest in and passion for their field of study
- an infectious positive and happy disposition
- integrity (strong morals and ethics)
- self-discipline (**) (esp. re quality of work and time management)
- understanding of self: strengths / talents / weaknesses (must grow into their own personality)
- critical analysis and evaluation of own efforts (**)
- acceptance of criticism from others and ability to deal with failure (**)
- willingness to
 - (i) learn from own mistakes (**)
 - (ii) learn – in general!
- must be observant and aware of world around them: trends, changes in technology.
- intelligent
- resourceful – smart thinking / working (**)
- flexible, & comfortable with change and the unpredictable
- fearless and ready to challenge the norms (**)
- confident enough to market themselves effectively (**)
- very real sense of responsibility towards project, client and society (**)
- hard-working
- ability to manage stress (**)

b) People skills

- must be team player
- tolerant and patient

cont./

- body language must express interest and enthusiasm during briefings, etc.
- “ego-less” (term used by designer) in order to LISTEN attentively to client and understand what motivates him / her
- taking “ownership” of client’s wishes / dreams / objectives / problems (**)
- “read” client / audience correctly
- willing to guide client firmly but tactfully where necessary
- give and accept criticism in a gentile manner
- presentation of oneself (appearance, etc.) very important

c) Skills relating to work itself

- time management (*****)
- punctuality and meeting deadlines (***)
- planning skills
- working under great pressure
- flexibility and adaptability to change (**)
- multi-tasking
- must be comfortable with trans-disciplinary work (not just graphic design, but other fields, too.)
- be UNIQUE - the BIG IDEA

Appendix C – JP Interview, September 2008

An unplanned interview, where a conversation was an opportunity to ask the practitioner her opinion of the attitudes and preparedness of graduates (from all design institutions) that she has employed.

Although I took notes, I had no recording device and asked her to follow up with a written summary of what she had said. This is the written summary of her response.

Designers must understand they are part of the TEAM - they must jointly accept responsibility and ownership and be part of the planning and decision making when being briefed by the client – they are often spoken 'at' - not to. The conversation is often one sided (from the client or art director) and no 'discussion' or two way dialogue takes place.

Graduate designers find it difficult to communicate or to assert themselves – hence they walk away from the brief uninformed & frustrated and unable to proceed with the project. As a result they are unaware of the schedule, budget implications etc, and so produce a concept that is far removed from what the client had in mind. The project is rejected and the designer is unable to handle this rejection. Again – they need to negotiate or exchange design solutions to resolve the problem. They lack communication skills.

A good idea is to draw up a checklist – every list differs per job, but the basic rules and questions apply, so they can be customised.

Designers must listen, ask questions and fully understand what is expected – so they can make informed decisions.

I have a weekly 'show & tell' presentation session in my team. They rotate on a weekly basis on presenting to the rest of the team. They have to research, prepare, present, field questions, negotiate solutions and handle criticism – while remaining calm and professional. This has helped them when presenting outside of the design team to other departments (or clients).

Designers must let go of their ego – and not design for themselves, but for the correct market to fit the brief. Designers tend to draw from life experience i.e a privileged white, middle class income, running water, tv, internet, 2 cars, levi jeans, books. They need to research the market and do brand analysis constantly. Also they need to be aware of the cultures, language, superstitions, region, ignorance, traditions, poverty, gender stigmatisation that exists around them. Understanding colour psychology is another important but under-estimated aspect of design – again, cultures vary within Western, African or Eastern interpretations.

Networking is important – designers need to have all kinds of support structures in all business, social genres and industries. Get out and talk to people!

Appendix D – Example of e-mail questionnaire response August 2008.

Q: Do you think formal presentation to industry is a good thing?

D: I think that formal presentations is a good thing, because in the industry they can ask you anytime to explain your project and you must always be prepared. It is a bit nerve wracking but if you know what you are doing then it's fine.

Q: What do you learn from them?

D: You get so caught up in your work that you sometimes forget the important things, by presenting your work and looking back on what you've done you can see if you made progress or not. The presentation helps you to be more confident about your work and to explain to the industry how the project works. If you don't prepare for the presentation you might say unnecessary things and leave the important stuff out.

Q: Are you feeling ready and prepared?

D: I am very excited, a bit nervous but fully prepared; this is the last fight so I'm going to give it my all!

Q: Is there a better way to present your work?

D: I like power point but I would have liked to show some stuff as it really is. Like the catalogue; it's a bit difficult to really see the full result on power point.

Q: If so, how would you prefer to present it?

D: I would use power point but also have the elements there so that the lectures can look at it from nearby.

Q: How did you feel after the last industry presentation?

D: I felt that it was a success but I wish I prepared the speech more because I left some important things out that had to be said. There were good responses and I got a good mark which I'm very happy about. I feel that it's better that we have a formal presentation this time because now you can think about your work and describe it in full detail.

If you know what you are doing and are confident about it you don't have to stress, hope everything will go well, I am so excited because it will be fun to see the project in whole at the presentation! It was a good learning process this year and I am glad that I did it, I feel more prepared for the big world next year!

Appendix E – Example of a tutorial Interview with student. May 2008

Q: Was [practitioner] there for your presentation?

A: I sat in – he wasn't there when I did my presentation, it was only K. But it was a good thing... I liked the fact that she was critical... because I think we need constructive criticism, you know. 'Cos you need to tell us where we're going wrong so that we can improve on it... because we have to learn... I think it was good.

Q: What did she say that really stood out for you?

A: She explained I needed to be more visual, but I don't think she understood that we were only at a certain point, and we hadn't really decided on art direction yet, or visual clues, we're still figuring our way through the project (referring to the strategy, which was underdeveloped). But it did kinda make sense... what she said.

Q: Is it very different in fourth year? We're not there all the time.

A: Yes it is! Its your own pace...

Q: Do you feel like you're holding back?

A: (Hesitantly) I think so... think so... Yes... yes – I'm not sure what to expect... what's expected of me... at a certain point. Like I know there's a progress presentation next... but the thing is what progress do you expect from us... how far do you expect us to be? Do you expect to have scamps, do you expect us to have our strategy sorted? Do you expect us to have concepts all laid out? Ja, we just got the idea that it's a progress review, but we just don't know... I'm not sure what's expected at what point. (Sounds frustrated) That's how I feel...

Q: Does it make you uncomfortable that you don't know?

A: Ummm... not extremely uncomfortable... I just like to have some knowledge of what it is we're supposed to be doing.... I understand we're supposed to work that out for ourselves... but um... its kinda hard for me.. because I haven't done it before. Like last year it was all set out for us – do this by then and so on...

Q: What about doing yourself a time management plan and deciding what you will do what time and so on...

A: (Laughs) I don't think I'll stick to it because I know that I've done it for myself! And I won't be disciplined about it!

Q: Maybe one should say – I'll be expecting you to come with visuals and research and everything. When I see you we can decide what you'll be working towards in the first phase ... what you need to design. Working backwards, we need to work out what you can produce at your pace. In the end the responsibility is yours.. we can help, but only you can drive the process.

My reflection during transcription:

At the end of the year he had worked hard and seemed to get back his original motivation. At the last presentation he told the story of why the project had so much personal meaning for him... The story had surprised me. It spoke of how he had been in the same boat as the school children he had designed the campaign for. He knew how it felt to be making career choices with no knowledge of what a Graphic Designer does. He was passionate about it because after having three year of graphic design he finally

understood what it was about, and was glad he'd made the choice. Here personal journey and memory of experience had driven his motivation. In re-interpreting his attitude to his process, I realised I could have tapped in to his original motivation – if I'd known how personally referenced it was. This is a valuable starting point in these self-motivated projects, and by constantly referring back to the intrinsic motivation, one can possibly sustain this momentum.

Q: What have you decided about the name? (A had also been approached by people running the Winter school and had applied pressure to do this as a real project.)

A: That's why I'm having trouble. You know when I think about it, I think about it in ways ... but then I have to consider that... it's a CPUT thing Not sure if you know what I mean....

Q: Explained the hierarchy of names and how it could work. Gave him example of a similar example.

A: Agreed, the name could work, but the project is directed at three different target audiences.

Reflection:

Because the student and myself were unclear on the institution's brief, this did not help A make a decision about the name. We were finding a way forward, but in one hour a week, A could not make decisions because of the needs of the stakeholders. I tried to make him realize it was hypothetical. M, R and A were caught in this added pressure of having to write a real brief for companies that had little information to work from.)

Q: When you have fully understood what it is you are doing, when you've owned it, when it's yours, we are looking to see if you know what it is you are doing..

A: Yes... yes... That's what I'm trying to grab onto... get a grip on...

Q: Its hard... its about how you see yourself...

A: That's it...

Q: Well – you're in between being a student and becoming a professional...

A: I can speak of experience when it comes to the high school pupil, but I can't speak for industry...

Q: Agreed he would not know anything about the industry target audience

A: I have interviews and focus groups lined up...