Chapter 4

How does learning happen?: My personal learning story

The ignorant man is not the unlearned,
but he who does not know himself,
and the learned man is stupid when he relies on books,
on knowledge and on authority to give him understanding.
Understanding comes only through self-knowledge,
which is awareness of one's total psychological process.
Thus education,
in the true sense,
is the understanding of oneself,
for it is within each one of us
that the whole of existence is gathered.

Krishnamurti

Introduction

In this chapter I will answer the question How do I account for my understanding of learning as a biochemical process in relation to my own journey as a learner? I share my autobiography and autoethnography from the perspective of and through the lens of my personal learning. I focus on critical incidents in my own life-history such as the love and support of a caring family, the loss of self-esteem as a socio-economically disadvantaged learner attending an under-resourced school, rejection I faced as a learner entering Higher Education as an undergraduate, my learning whilst working in the Chemical Industry, growth as a lecturer in a Higher Education Institution and my post-graduate studies.

My story of my own learning has been presented here because I believe Parker Palmer when he says,

... the story of my journey is no more or less important than anyone else's. It is simply the best source of data I have on a subject where generalisations often fail but truth may be found in the details (Palmer 2000:19).

I have experienced various emotions during my journey as a learner from my childhood through to the present, both in formal and informal learning situations. According to Candace Pert,

these emotions exist in the body as informational chemicals, the neuropeptides and receptors, and they also exist in another realm, the one we experience as feeling, inspiration, love – beyond the physical. The emotions move back and forth, flowing freely between both places, and, in that sense, they connect the physical and nonphysical (Pert 1999: 307).

When Pert writes about the connection between "the physical and the nonphysical" (Pert, ibid), I am reminded of critical incidents that have had an incredible emotional impact on me and that highlight the feelings, inspiration and love that I experienced in whole being during my journey as a learner. These emotions range from the love and support of a caring family to the rejection I felt when a Higher Education Institution rejected my application to study there because, as a Coloured, I was of the 'wrong race classification.'

What was my context of my schooling?

During my years of Secondary and Higher Education (1974-1982) the apartheid policy of 'separate education' according to the National Party government in South Africa meant that different 'races' (Whites, Coloureds, Indians and Blacks) had to attend identified / designated schools and universities reserved exclusively for their use, so as to separate 'races' from each other in every possible way.

I use narrative as a form of inquiry to focus inward on my individual journey but also 'simultaneously point outwards and towards the political and social' as I share part of my life-story (Mitchell et al. 2005:4). When I reflect on my personal life I allow my body and my emotions - the bio-psychology of my being - a place in my theorising through making my actions and intentions transparent whilst reflecting on what is deep within my soul (Derry 2005). This process of reflection has brought me to become aware of what I know, and where the seat of that knowing is in my biopsychological being. My knowing has been influenced by my intuition, my emotions and my life experience which I share in this chapter (Derry 2005). I use the visual methodologies approach of Claudia Mitchell and Sandra Weber (Mitchell & Weber, 1999; Mitchell et al., 2005) which include use of photography and video. I find Jack Whitehead's (Whitehead 2009b; Whitehead 2009a; Whitehead 2011) use of multimedia in explaining, interpreting and analysing the evidence that is revealed by living theories methodology are appropriate to re-discover, re-call and re-live the emotions I felt and continue to feel during my journey as a learner (Mitchell and Weber 1999; Mitchell et al. 2005; Whitehead 2009c; Whitehead 2009a; Whitehead 2011). The re-discovery, re-call and reliving the memories of my learning are useful not so that I take refuge in the past or forget the present, but rather to "illuminate and transform the present" according to hooks (1989:17) as cited in Mitchell and Weber (Mitchell and Weber 1999). My narrative on my personal learning involves an exploration of school-in-memory work (Mitchell and Weber 1999) and as such the 'firsts' in my school life-history and seeking answers to questions like 'do I remember"...?' in the context of particular events happening during my schooling are significant. As I look "*into – not simply at -* photographs from family albums I am able to frame [my] sense of the past and shape the course of [my] future" (Mitchell and Weber 1999: 74). In looking 'into' photos,

They invite us to remember, speculate, fantasize... [they] contribute to some of our most lasting impressions of school and of our lives as school children, reminding us of what we once were, and what we are no longer...provid[ing] perspectives on who we have become...inviting us not only to look back on ourselves as former students, but also forward to ourselves in the [current teaching and learning spaces] (Mitchell and Weber 1999:75).

Looking through my photo album, I came across some photos that reminded me of my journey through formal education systems. I will share a few photos of my life-history highlighting the socio-political environment that influenced my own learning. In so doing, I have become critically aware of my own learning as a product of the bio-psychological processes which Pert identifies as the result of neuropeptide transmission (Pert 1999) and what Jousse calls "intussusception" (Jousse 2000).

My mother, Colleen, the eldest in a family of three girls and four boys gave birth to me, Delysia, in 1961 in a small rural town in the southern parts of KwaZulu Natal. I am classified Coloured according to my birth certificate which I have included as Figure 2.

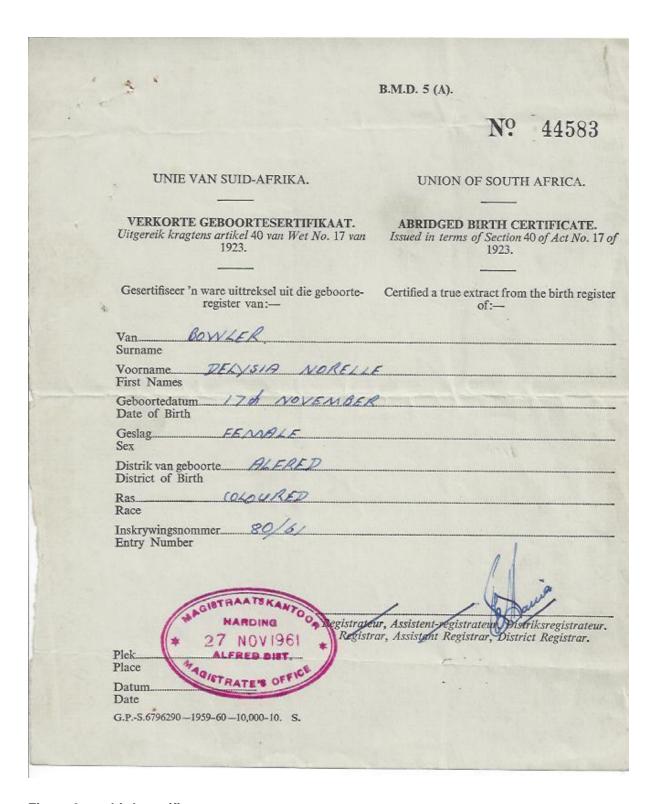


Figure 2: my birth certificate

I am the oldest grandchild in the family. My mother's youngest sister, Wendy, is three years older than I am, and her youngest brother, Neil, is two years older than I. Rowan, my brother and Lynne, my sister are nine years and fourteen years, respectively, younger than I am. For the first nine years of my life I grew up with my

grandparents and hence was considered the youngest of a family of eight siblings, and only later in life did I take on the role of oldest sister to two younger siblings.

Growing up in a small rural town in the early sixties meant that the opportunities for formal schooling were very limited. I actually cannot recall having attended preschool. I have no photographic memories and my mother confirmed that I did not attend preschool because there was no preschool education available. The school for Coloureds in Harding enrolled learners from Sub A⁵ through to Std 10 and both my parents taught classes from Std 5 through to Std 10 in that school. My grandmother, with whom I spent most of my early childhood, was a housewife and I recall she sewed most of our clothing.

Who influenced my learning in early childhood? How did I express who I was in those photos of my early years? What were the gestures that I had internalised over the years?

In these photos I examine the macroscopic geste – the exterior physical and vocal gestures - as a starting point to considering my microscopic geste (Jousse 2006). In examining the exterior physical and vocal gestures, I am looking at the expressive gestures of my body as a whole and of my hands as I 'ex-press – to press out '-myself (Jousse 2006:156). What do I press out? I ex-press what has been grasped from the exterior world and brought into me – that which I have intussuscepted and hence according to Jousse, "we can ex-press only that which has *im*-pressed itself in us" (Jousse 2004:38). So to understand myself as a learner I need

to become aware of, and to bring-into-consciousness, received, intussuscepted Mimemes⁶ in the face of, and confronted with the immediate concrete experience of 'the real' (Jousse 2006:148).

Sienart, E. and Conolly, J. Cape Town: Mantis Publishing.

⁵ The school system has changed the nomenclature. Sub A is now Grade 1 and Std 10 is Grade 12 ⁶ A Mimeme is the unit of stored intussuscepted Real played into us, held in memory, re-gistered and ready for replay. Jousse, M. 2006. *Be Yourself! Colonisation, Self-Colonisation and Decolonisation.*



Figure 3: Preschool going age in the 1960's- I am on the extreme left



Figure 4: Preschool going age in the 1960's- with schoolgoing siblings - I am in the front

I have selected photos taken in the garden at my grandmother's home. In these photos (Figure 3 and figure 4) I am about three to five years old, at the preschooling age. I am shown as a rather serious little kid, standing straight up, hands behind my back, all neat and proper, standing in line from youngest to oldest. I am firmly positioned in my place as the youngest and the expression on my face is serious in the first photo. Why did I act in that particular way in the photos? What had I learnt about how to present myself and from whom had I learnt?

Aristotle said that man is the greatest mimic of all animals and it is by mimism that he acquires his earliest knowledge. Mimism is according to Jousse (2006), the instinctive tendency of human beings to replay gestually - to mime- all the actions played into him/her by the universe as s/he is continuously in interaction with the universe.

I believe I had become 'in harmony with [my] milieu' and experienced awareness from the 'inside' of how I should behave when taking photographs. I believe I had learnt to conform to certain norms in my society since most photographs taken then were 'serious,' class photos or wedding photos. The norms of a child as 'being seen and not heard' and that I was not allowed to be 'playful' and 'out of line' when taking a photograph.

I can recall that from a young age, there was 'playtime' and there was 'school and homework time'. Playtime was when I had fun and could play with friends and this always seemed too short a time. School and homework time were serious times when no fun and laughter was permitted. Learning was a serious matter that had no place for laughter and games. Fear and anxiety were emotions that drove my achievement at school. Fear of not doing well at school and not being accepted made me work harder and harder.

So the photo shows how from a young age I was 'schooled' to being a serious person who regarded learning as a serious matter. The interaction I had with others who acted upon me influenced the way in which I dressed and gave a sense of belonging. We are all dressed in similar attire - shorts and shirts in the first photo so the sense of togetherness and uniformity is evident. My grandmother was a seamstress who sewed all the clothes we wore, even the school uniforms. So I am sure that it was easier for her to dress us all similarly.

In the second photo I am wearing a dress and the other two are in school uniform. I do not have a photo of my first day at school but looking at these photos I am reminded that I did not have a fear of starting school since I had older 'siblings' who were in the school already, and parents who were teachers. I was very excited and enthusiastic about going to school to the extent that I started school a year before the legal school-going age. I was excited to learn and be part of what my older siblings were doing. They were there for me at school and we spent time walking to and from school together and doing homework together, all as part of a serious endeayour.

The initial excitement soon changed to fear which drove my achievement from then on. I learnt the 'rules of being successful at school' meant consistent hard work which was rewarded, I believed by making the family proud of me. Indeed they were

proud since copies of all my school reports were neatly kept, and I still have them as reminders of my learning journey.

Extracts from my school reports for the early years stated "This pupil has produced very good work throughout the year. Her hard work has been her reward to her as she has passed Sub A⁷" (Figure 5 and figure 6 my Sub A school report)

⁷ The formal school year started with Sub A, then Sub B, and then Std 1 through to 10.

K.E. 103,	Report 2:					Class Teacher:	Report 3. This pupil has Produced very good work throughout the very	hard work has been a reward to her as she has passed Sub A.	Class Teacher: L. E. Borney Principal: N. R. E. LEWIS Date: S. H. Boc, 1967	
	Report	1 2 3	Arts and Crafts	Scripture	Days Absent 18	Report 1:Delysia has produced very good work all round.			Class Teacher: L. E. Baney Principal: M. B. B. LEVYS Date: 23 rd June, 1967	
	Report	1 2 3		Reading A 100%	Language Work	Afrikaans: Oral Work Recitation	Written Work	8 A 8		

Figure 5: Sub A report: inside

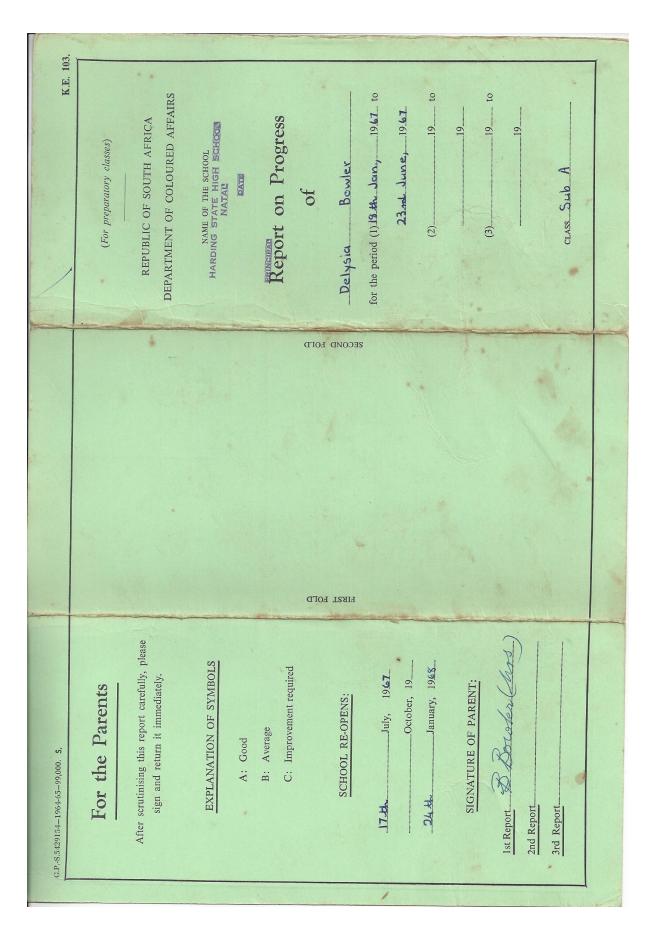


Figure 6: Sub A report: outside



Figure 7 Std 1 class

In figure 7, I am seated very seriously on the extreme left in the front. I was in std 1 and my report indicated that -"Delysia is a diligent little girl. She has made very good progress in all her work. Examination results were very pleasing" (Figure 8 and Figure 9: Report on progress of Delysia Bowler, 10 December 1969).

Figure 8: Std 1 report: inside

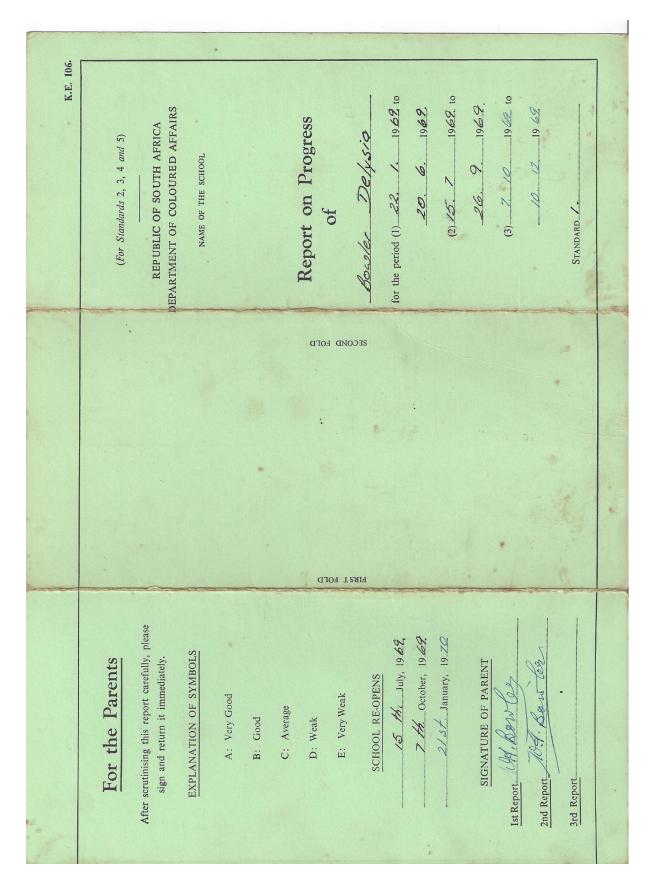


Figure 9: Std 1 report: outside

This trend continued with my school reports showing very good achievement in Arithmetic with comments such as "a steady and conscientious pupil"- Std 4, "worked very well throughout the year.. first out of 41 in Std 5".

I was hardworking, all through these school years. I had learnt and made progress in all my work. For me learning was not about playing. Learning was a serious business. School was not about fun. More so, there were subjects in the sciences which required even more serious engagement. I soon learnt that I had to do well in the 'serious' subjects to be successful. The fun subjects that did not really matter too much for my future were Languages, Arts and Crafts. I performed very well in Arithmetic, Environment Study and Health Education achieving full marks in the examinations whilst not achieving as well for the Languages, Arts and Crafts.

I felt good and confident that I was able to achieve well in school especially in mathematics and the sciences which were regarded by my peers as being difficult subjects. I enjoyed the acceptance that I felt from my peers and the sense of belonging when I was able to assist them in understanding the 'serious subjects'.

What did this acceptance look like at High School? What type of relationships did I have with my peers in the High School classroom?

I was in Std 8 in 1976 when the photo below was taken (see Fig 10). I see that we are seated on the teacher's desk in the front of the class. There are no books or papers on the table. There is no writing on the green chalkboard behind the table. There are no charts or posters on the walls behind us. There is a set-square on the ledge of the board and my friend is carrying a ruler. I recall that we stayed in the same classroom from the morning til the afternoon with the various subject teachers coming and going. This photo must have been taken between lessons or during a breaktime. We are relaxed in the photo pleased to be in each other's company. I was happy and safe in the school.



Figure 10 std 8 class

The photo was taken in 1976 which was the year when the school children at Black South African schools protested against the inferior schooling offered by the apartheid government. The choice of subjects offered at the schools was limited and there were up to 40 learners in one classroom. Significant subjects – the serious science subjects – were only offered through the medium of Afrikaans which was a foreign language for the majority of Black learners and this made it totally impossible for them to pass. The schools for blacks and coloureds in the rural areas were generally not well resourced especially in the sciences.

The school I was attending in Harding during the 1976 protests was not directly affected by the protest action of the students. The students at my school did not participate in the protest action even though the school was not well resourced and did not offer Physical Science. We were not fearful or resentful of the education we received even though there were shortcomings in the system. I needed to study Physical Science if I was to continue to fulfil my parents dream of me becoming a medical doctor. My mother who was a home economics teacher, as well as the school guidance teacher had convinced me at this stage that since I was achieving so well at school, and I was such a serious student, I could become a medical doctor. To have a child become a medical doctor, was the pride of joy for every Coloured family. Not a teacher. Not a nurse. Not a lawyer. A DOCTOR!

The sadness though, was that Physical Science as a subject required for entry into Medical School, was not offered at this safe, rural school. So I would have to leave

home at age 15, with a Junior Certificate⁸, to attend a school out of the community many miles away. I do not have a copy of my Junior Certificate but have a copy of my September examination results which would have been the last examination before the final examination in November. See attached Figure 11.

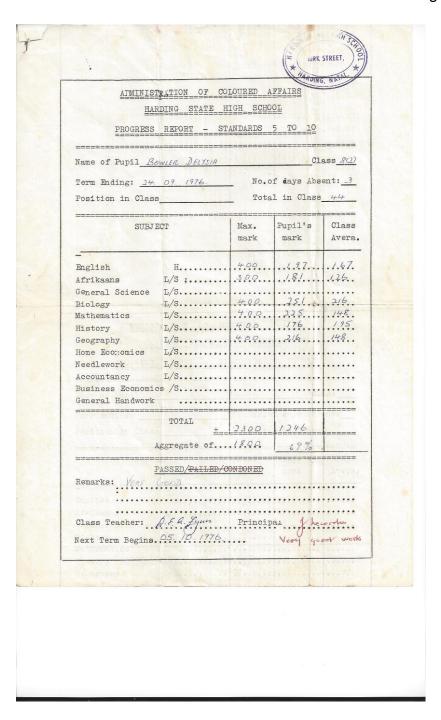


Figure 11: Std 8 school report

 $^{^{\}rm 8}$ A Junior Certificate, a national certificate, was issued on successful completion of Std 8.

I had to leave the environment where I was happy and felt safe amongst my peers. Things were changing. I was to begin a journey, on my own, in a new school, an urban school which offered Physical Science and new environment with new friends. My rhythm of life was being changed. I asked myself "How am I going to find a balance between all the new experiences – from rural to urban school, from no Physical Science to Higher Grade Physical Science, from an English monolingual environment to a bilingual – English and Afrikaans class, certainty of the familiar environment to uncertainty of a new environment with new friends? How will this change affect my achievement at school? What new relationships will I make among my peers? How am I going to cope in a much larger school with more students? Is it wise to move to another school for the last two years of my schooling?

So I left the rural school with a Junior Certificate which was issued by a National Department of Coloured Affairs examination department.

The interesting thing to note on my Junior Certificate was my underachievement in Mathematics and History. I did not fare very well in Mathematics because I believe that the teacher did not prepare us adequately for the assessment. If only I had known what to learn, I would have learnt it and done well. There were questions in that examination paper on topics we had never been taught in class. The teacher shrugged off my queries about the paper saying that we should learn to work things out for ourselves if we wanted to succeed and not just be dependent on the teachers all the time. This was a hard but good lesson which I took to heart in my new school.

At the new school in Port Elizabeth, Afrikaans, one of the official languages that was just a subject at my previous school, was now offered together with English as a medium of instruction at the school. I was rather fearful of the changes in my life. I was taking a risk. New friends. New subjects. New teachers. New community. "Will I be successful in orienting myself?" In this new school which was bigger, only from Std 6 to Std 10, even though there were more pupils than in the school in Harding, the class sizes were smaller as is evident in fig 12.



Figure 12 Std 10 class.

In Std 10, I was in a class with many more males than females, still all coloured and thankfully using English as medium of instruction. I came to the school with a specific plan to learn Physical Science and leave with good symbols that would enable me to enter Medical School. I was driven by the need to be successful as my family had made a huge financial sacrifice for my education. My mother always said "I will pay for your education as long as you achieve and when you achieve remember, no-one can take it away from you - it is your education".

I did do well at school and was able to quickly grasp the knowledge required to pass Physical Science. I was still very serious minded about school and did not make many friends even though there were only about 20 in the class. I was always in the top three of the class and received many book prizes at annual prize-givings. I was excited by this recognition of achievement which I had not experienced before.

So the change was good for me. I knew that I had to achieve. So I did achieve. I made a success. I learnt. The competition at school was strong with no time for playing games. It was im-pressed upon me all the time. Yet again school was a serious business: no time to play. I persevered at school. I missed my family but soon gained a new family in the people with whom I stayed.

Whilst in my matric year of study I started having great doubts about becoming a doctor. The thought of working with blood and in a medical of environment made me

feel rather queasy. I spoke with my mom and changed my ideas. I chose to study towards becoming a pharmacist which was in the scientific field and allowed me to work with people. The course was offered at University of Durban –Westville for Indians and at University of Western Cape, Cape Town for Coloureds. I did not want to be so far away from home in Cape Town. I wanted to be closer to my family that I had missed during the two years away from home so far away in Port Elizabeth.

Back to my Matric. I excelled in Mathematics obtaining an "A" symbol on the Higher Grade through the National Department of Coloured Affairs. See copy of matric results in figure 13.

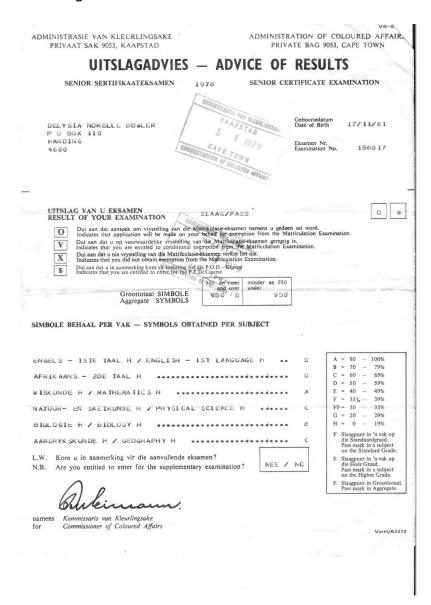


Figure 13: Matric results

Why and how did I excel? The teacher helped me to understand and enjoy the subject, but also I 'cracked the code', or 'learnt the rules of the exam game' at that time. I had learnt from my Std 8 maths teacher, back in my safe rural environment, that I had to "Get to know the rules of the games played in matric exams. Get into the examiner's head somehow. Learn what the teachers want you to know and you will be successful." I decided to work things out on my own and predict a possible exam paper, study the questions and answers and hope for the best. I managed through studying past exam papers, to notice a trend in the exam papers that were set for learners writing the Department of Coloured Affairs exams. The examiners used questions from other Departments of Education⁹ question papers of a year or two earlier. To my amazement my gut instinct as well as the 'code that I cracked' for the examinations about what was going to be in the paper was spot-on. It worked and I was successful.

My results for the other subjects were not that good because I wanted to prove to myself then that I could improve on my JC Mathematics mark. In terms of the Physical Science, even though I did not do it in Std 8, I was able to pass the subject in Matric and yes, with this education, I was able to attend University.

The risk of entering a new school so late in my schooling years had paid off. I had changed and grown into a new person with independence and ready to take on a new challenge.

What were the challenges I faced during my undergraduate years? What did I learn from these challenges?

I had applied to the University of Durban–Westville to study Pharmacy. Following my mother's gut instinct, we also applied for me to study a BSc at the then University of Natal, Durban - as she knew I wanted to be closer home. My heart was set on Pharmacy, with Chemistry as a second option, but not to study in Cape Town.

I was not prepared for the responses I received from the universities and state organs. I was horrified and deeply hurt. The correspondence from the universities

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⁹ There were the Department of Coloured Affairs, Department of Indian Affairs, Departments of Education for each of the four provinces- for white students and the Department of Education and Training for the Blacks.

illustrates the racist prejudices of that time. I felt angry and truly rejected. I have included some of the correspondence in figures 14-16.

I had to make a choice. If I wanted to study Pharmacy, I had to go to Cape Town. If I wanted to be near my family, I had to study a course which was not offered in Cape Town.



Figure 14: UDW response to initial application

Telegramadres: Telegraphic address: "COMASIA"

Navrae/InquiriesMr. H.J.P. Kotzê Tel. No. 48-3749 Bylyn/Ext.....



REPUBLIC OF SOUTH AFRICA

Verwysing/Reference:

No.19/39/5/3/1

DEPARTEMENT VAN INDIËRSAKE DEPARTMENT OF INDIAN AFFAIRS Oribigebou/Oribi House hoek van Proes- en Andriesstraat corner of Proes and Andries Streets Privaatsak/Private Bag X92

Pretoria 0001

Mr. D.N. Bowter Po. Box 110 Harding 4680

Sir,

APPLICATION TO ATTEND THE UNIVERSITY OF DURBAN-WESTVILLE

Your application of 1 August 1978 refer. Before the matter may be considered kindly inform me urgently -

The full reasons why it is not porsible for you to study at Western Cape.
 Your fathers monthly or annual income.
 The names and dates of birth of any brothers and sisters still at home.

Urgent Please

Yours Faithfully

SECRETARY FOR INDIAN AFFAIRS

Figure 15: Department of Indian Affairs response



UNIVERSITY OF NATAL

KING GEORGE V AVENUE - DURBAN, NATAL TELEPHONE: 352461 TELEGRAMS "UNIVERSITY" ALL CORRESPONDENCE TO BE ADDRESSED TO THE REGISTRAR

9th February, 1979.

in reply please quote: 29/1/PW/pk

Miss D.N. Bowler, P.O. Box 110, HARDING. 4680

Dear Miss Bowler,

With regard to your acceptance for B. Science studies in 1979, I have to point out that in terms of Government regulations your registration at this University cannot be confirmed until you are in possession of the necessary clearance from the Department of Education and Training/Coloured Affairs/Indian AKKMaximas/National Education.

Should you not have received this clearance by the official registration date, i.e. Wednesday, 21st February, you may delay your registration until Friday, 9th March, which is the last date for late registration and no late registration penalty fee will be payable.

I would advise you, if you have not yet received the necessary permit, to contact the relevant Governmental authority and impress on him the urgency of the matter. Without receipt of this clearance by the 9th March, I am not permitted to confirm your acceptance.

Yours sincerely,

for REGISTRAR

Figure 16: University of Natal response

So I had to follow a course of study that was my second choice, not my heart's desire. I was going to be a Chemist, not a Pharmacist. I was going to work with chemicals not necessarily with people. But before that, I would have to obtain special permission to study in an Institution close to home. I had to get to know the unwritten rules of how to get permission. I included a subject that was not offered at UWC in my application. Nobody checked whether I actually did enrol and pass that subject but I never did, and still successfully completed my undergraduate study in the minimum time at a university close to home, which really wanted me. I took a risk and it paid off.

I still feel angry about the fact that I had to obtain special permission to study at the university. The anger that I felt then, I still feel now when I need special permission to do things. I felt angry then and it was the anger that drove me to succeed in my studies. This emotion that I felt then and feel now as the "thoughts rise to the surface" (Pert 2008) confirms that much of the memory is emotion driven.

Throughout my years of University study, I had very supportive peers in my class (see fig 17 to 20) as well as a group of coloureds (see fig 21) who were senior students in the Faculty of Science and able to mentor me in a rather informal manner and help me work through the anger I felt. I realised that I was not alone. I felt that I belonged to the community. I experienced a compatible, rhythmic pulsating movement of the electric current between myself and those supportive friends (Pert 2008).

I am still in contact with some of my peers and we still encourage and support each other in our endeavours and the life-affirming flow of loving energy (Whitehead 2009a). I also had the support of my family who were with me at graduation (see fig 22). This was a proud family moment as I am a first-generation university learner in the family. My family supported me throughout my spiritual life, in my physical life, mentally and emotionally. My mother had a three year teaching diploma obtained at a Teacher Training College when she was 20 years old. Through this same family support, she completed her fourth year of her teacher training course while I was at University. (see fig 23)



Figure 17 Senior Chemistry students in study room



Figure 18 Delysia in study room



Figure 19 peers outside chemistry building



Figure 20: working in lab

Working and socialising – whites and coloureds.
Entry into a privileged world



They all made it, I can too...

Figure 21 Coloured mentors



My familyalways there

Figure 22 my family at graduation



My mother, a Lifelong learner

Figure 23 Graduation- my mother 4th year teaching diploma

My lecturers at university were predominantly rather 'old,' White males in their late fifties as reflected in the graduation photo (fig 24). At that time, only 'they' became lecturers which was set aside for an elect few all of the same race classification. At

some of the Universities, this is still true even today. I never for one moment ever thought of myself as sitting there too one day as a lecturer. At that time, I thought I was going to be a Chemist working in Industry.

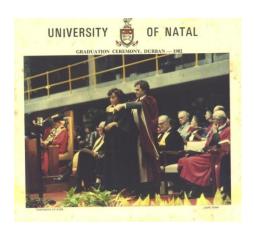


Figure 24 graduation stage

What did I learn whilst working in the Chemical Industry?

After completing my undergraduate studies, I worked as a Chemist for about two years in a multinational company and did not have much interaction with people. I realised that I needed to interact with people, to feel that relational dynamic energy (Whitehead 2009a). Chemicals and chemical equipment were too reactive for me, not interactive enough. I value engaging with people. But I also love technology and technical things. The laboratory environment that I worked in as a Chemist did not inspire or motivate me. I became bored.

I applied for a job as a technical trainer in the same company and really enjoyed training workers in the production environment. I felt the need to understand more about education to be effective as a trainer in the industry. I was also influenced by my mentors that I met whilst studying at university since two of them were science and mathematics teachers respectively. They had successfully completed a post-graduate qualification in education. Hence I enrolled for a correspondence post-graduate diploma in education whilst still a trainer in Industry.

Whilst enrolled for this diploma, I had an opportunity to apply for a position as a lecturer in chemistry at a Technikon¹⁰. I had become familiar with the education

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¹⁰ The Technikons are now called University of Technology and they still have a career focussed programmes but also now offer degrees and post-graduate qualifications.

offered at the Technikon through assisting and supporting my colleagues in the laboratory to solve problems they experienced whilst they were registered students at the Technikon. They were registered for a Chemistry Diploma on a part-time basis. I felt very privileged to be able to assist them at that time even though I was not a formally trained teacher or lecturer. I also was very interested in learning about this very practical course they were studying. The course was very relevant for working in the laboratory. This also had a great influence on me applying for the position at the Technikon as a Chemistry lecturer. I was so excited as at this time. I was getting married and planned to start a family of my own. I felt that a position in education would allow me to be a mother as well as pursue a career that would not be too demanding. I would be a whole new person breaking new ground. I have included a copy of an article that was in one of the local newspapers.

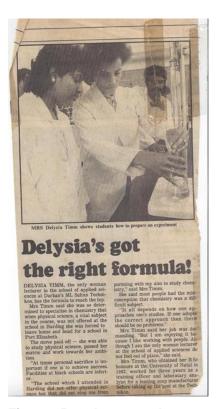


Figure 25: Only woman lecturer

What did I learn as a teacher within a Technikon?

I was the first Coloured female lecturer to work in the Institution reserved for Indians only, as well as the only female Chemistry lecturer at that time (see newspaper story in Figure 25. I experienced similar feelings to when I changed schools. I went from a very comfortable zone to something new and unfamiliar, to follow my heart. I took a

risk to work in an environment which was different to what I had been in before. I entered where I was 'not supposed to enter'. I was taking yet another risk in my life. I loved the challenge presented by the new job.

I discovered that my heart was in education.

I soon learnt that I needed help in understanding the learning processes happening in my classroom. This was very different to what I had experienced as a trainer. There was this varying learner background in terms of work experience in the relevant field and different levels of interest in the subject that I was faced with in my classroom. I did notice soon enough that I needed different strategies for dealing with each class of learners in the part-time class. I had learners who had a vast experience of working in the Chemical Industry. In the full time class, the learners were directly out of school with no experience of the Industry. In spite of the differences, they both had to be taught the same content because they had the same assessments at the end of the course.

I also taught Chemistry to learners at all levels of the National Diploma Analytical Chemistry. These learners were eager to know and understand more about Chemistry since it was their chosen career.

I also taught Chemistry to learners for whom Chemistry was only an introductory subject for their Diploma in a field of Health Sciences or in a field of Engineering.

I was the only female lecturer in the department and the only Coloured at a time when South Africa was still experiencing the hurt, pain and tensions of Apartheid. The learners in my classes were mainly of Indian origin and spoke English as their mother tongue at home. However over the years, this learner profile has changed to mainly Black South African for whom English is a second or third language or even a foreign language. Many of these learners came from schools that were underresourced with respect to facilities as well as teachers. They were from families of very low socio-economic status yet rich in culture and tradition. They were first generation tertiary learners who found it very difficult to 'fit in' to the Technikon environment.

So faced with all these differing experiences in the classroom, how did I cope?

I experienced different flows of energy and values in the different classrooms. In some of them there was compatibility and a relationally dynamic and receptive response towards me and in others there was incompatibility of the rhythmic, pulsating electric current between us (Pert 2008; Whitehead 2009a). I felt that this was due to the students deeply emotional experiences they had whilst studying Chemistry at school level.

My own personal experiences of studying chemistry at school – how I had to change schools due to chemistry, how studying chemistry at university was not really my first choice as mentioned previously – all came back to me when I walked into the first Chemistry 1 class that I lectured. Many of them were from schools that were under resourced – no chemistry laboratories and had unqualified science teachers (Bloch 2009). I could identify with their feelings from my own learning of chemistry.

I realised that I did not know much about teaching and education though I knew Chemistry. I was still studying towards the Higher Diploma in Education, and while the course was interesting, it did not help me understand what was happening in my class since it was more applicable to the school environment and not to the Higher Education environment.

Most of my colleagues in my department that I taught with at that time knew their Chemistry, but had very little understanding of Education. They taught the way that they had been taught even though there were marked differences in the learner profile and course demands. I found that it did not work for me to teach the way that I had been taught, especially considering that the University I attended had an almost homogeneous, predominantly white, advantaged and privileged learner profile in the class. Another significant difference was that all the assessments at the University I attended were designed and conducted within each University autonomously.

At the Technikon where I taught, up until the mid-nineties. All the learners from all the different Technikons wrote a common examination. The final year examination was set by external lecturers from other Institutions. So in teaching, I was soon 'trained' to prepare the learners for the external examination. I had to 'complete the syllabus as per National instruction' so that my learners were not disadvantaged.

I felt very uncomfortable and uneasy. I felt that there could be a better way of teaching to ensure that the students were actually learning or engaging with the content. I was not happy to continue without getting some assistance to establish a better relationship with the learners in my classes. I could see that the learners were suffering, perplexed and fearful of failure. I too was also suffering, perplexed and fearful of failure in the classroom. I believed that there was a need for understanding and care, a need for human relationship between myself and the learners, a dialogue needed, similar to what Oliver Sacks refers to when he is treating patients not as "cases" but as people (Sacks 1990).

The Technikon at that time had a unit with one person in it responsible for staff development and curriculum development across the campus. I soon found out where the person was since I kept asking my Head of Department for assistance. He eventually sent me off rather sceptically, to that unit with the words "Go and see if they can be of any help to you". The person responsible for Academic Development was Mr Graham Stewart¹¹.

In my conversation with Graham Stewart, I got excited since I quickly realised that I was not alone in my concerns about how I could improve what I was doing. He listened to what I had to say, understood my difficulties and together we worked out a plan. I felt encouraged.

The plan included an annual workshop for the Department of Chemistry during the end of year exam period to help us develop strategies and skills to deal with some of the problems we faced in the classroom. Soon these workshops were held twice a year and later on, they became more frequent as the Technikon employed more persons in the Academic Development unit. I learnt much from these workshops and on reflection, that is where the seeds for my involvement in academic development were planted.

My knowledge and practice of teaching really evolved over the years. I was largely influenced by my interaction with the staff development unit. I was willing and eager to try something new in my class - to do things differently for the sake of improvement.

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¹¹ Mr Graham Stewart is now Professor Graham Stewart, a Deputy Dean of the Faculty of Arts and Design and continues to be a powerful developmental force to the good.

As time went by, the Technikons were given more control to design and conduct their own assessments and I was able to contribute to these developments in the Department of Chemistry. But it was not only in and for the department that I contributed. I eventually became the person that co-ordinated the development of the Chemistry curriculum across all the Technikons: Our institution was the convenor Technikon for Chemistry. This meant that we had the responsibility of facilitating the development of a shared Chemistry curriculum for all the Technikons. As I interacted with the Industry representatives and colleagues from other institutions who were part of the process of curriculum development, my passion for engaging in learning, teaching and assessment issues developed.

What have I learned from my post-graduate journey?

The qualifications offered at the Technikons soon changed from only National Diploma's and National Higher Diploma's to Masters Diploma's. This meant that my Honours qualification was not sufficient for me to teach at the Masters level. I needed to improve my qualifications to a Masters qualification. I was faced with a dilemma: "Do I complete a Masters in Chemistry or in Education?" By that time, having completed the postgraduate Higher Diploma and having taught for twelve years, my passion for Education was just as strong as my passion for Chemistry. The Technikon insisted that if I was to develop my teaching career within the Chemistry Department, then I had to register for a Masters in Science. At that time I wanted to stay in the Chemistry Department. However, I wanted to include Education in my studies since my primary role I saw as being an educator and not as a Chemist. I needed to find a university that would be able to include education as part of a Chemistry post graduate qualification.

At that time, this notion of a multi-disciplinary qualification was still frowned upon by most of the universities. How could I want to do combination of such different disciplines whose epistemologies were generally regarded then as being so different, especially in South Africa? I could register for a Masters in Education and consider the science of Chemistry, and teaching of Chemistry as a science. However this would then mean I could not supervise or be involved with a Masters Diploma is Chemistry in the future, I would need to move and teach in the Department of Education. I did not want to do that. I wanted to teach Chemists and not teachers.

Through my networks across the tertiary institutions, I eventually found a University that offered a Masters in Science with a specialisation in Chemistry Education. I really enjoyed all aspects of the programme that was course-work based with a mini-dissertation. I completed a Chemistry research project as well as a mini-dissertation that included the teaching of Chemistry. I was in my 'Element' to use Ken Robinson's concept (Robinson and Aronica 2009).

Being in their Element takes [people] beyond the ordinary experience of enjoyment or happiness...they connect with something fundamental to their sense of identity, purpose and well-being. Being there provides a sense of self-revelation, of defining who they really are and what they're really meant to be doing with their lives. The Element is different for everyone. The Element has two main features, and there are two conditions for being in it. The features are aptitude and passion. The conditions are attitude and opportunity...An aptitude is a natural facility for something. It is an intuitive feel or grasp of what that thing is, how it works, and how to use it. Finding and developing our creative strengths is an essential part of becoming who we really are...many people are good at something but don't feel that it's their life's calling. Being in your Element needs something more - passion. People who are in their Element take a deep delight and pleasure in what they do. Attitude is our personal perspective on ourselves and our circumstances - our angle on things, our disposition, and our emotional point of view. Many things affect our attitudes, including our basic character, our spirit, our sense of self-worth, the perceptions of those around us, and their expectations of us... without the right opportunities, you may never know what your aptitudes are or how far they might take you... a lot depends on the opportunities we have, on the opportunities we create, and how and if we take them. Being in your Element often means being connected with other people who share the same passions and have a common sense of commitment. In practice this means actively seeking opportunities to explore your aptitude in different fields. Often we need other people to help us recognise our real talents. Often we can help other people to discover theirs. (Robinson and Aronica 2009: 21 - 25)

The Masters course was offered by distance-learning which meant that I did not have any face-to-face sessions with my lecturers. The only time I had face-to-face sessions was when I met with my supervisor for my mini-dissertation. So I had to be a self-directed learner.

Well, who was the 'self that was me' at this time? Whilst juggling through the roles of, amongst others, wife, mother, daughter, educator and learner I did the course part-time.

Whilst registered for this course, I experienced major changes in my life. I changed jobs, and both my biological and step-dad died within nine months of each other. The change in jobs happened whilst doing my coursework aspect. I accepted a two-

year contract position, in the same institution, in the academic development unit. This position was as the Effective Learning Centre co-ordinator where I would have an opportunity here to engage with learning, teaching and assessment issues whilst helping academics to develop innovative learning materials. I was excited to take this contract position since my position in the Department of Chemistry would still be there after two years, if I wanted to return. So I saw this as an opportunity to test whether my passion for learning, teaching and assessment would grow or just fade away.

All of this was happening in the same time period that both my fathers died. The loss of both my dad's was a traumatic time for me since I was present at both of their deathbeds. The one died as a result of cancer and the other one from a ruptured aorta. I had a good relationship with both of them and felt the losses deeply.

How did this affect my studies? Well the double loss came at a time when I had just received feedback on my mini-dissertation. Both examiners had written extensive comments. I did not even read them carefully. I thought there was no way I would be able to address their concerns. The mini-dissertation lay on my desk for over a year, uncorrected.

I just could not pick it up and make the changes. I did not believe in myself that I was able to do anything. At a time like this in my life, all that lay between me and getting the MSc was the completion of the mini-dissertation. It was a dear colleague of mine in academic development unit, who, each time she came into my office, kept on asking me when I would complete. Eventually I gave her the documents and said "Please advise me what to do here. I just cannot believe that I can do it". She read the comments through and said "Take the comments one line at a time and respond to them". From what she could see, I had the ability to make the changes and resubmit.

For that whole year, no-one from the university where I was registered had contacted me. My supervisor had left the University. She was in a new job and I knew that if I was to be awarded the MSc, it was up to me.

It was this colleague from my own institution who assisted me to eventually decide to spend one week to make the necessary changes and resubmit. She believed in me. I felt that this was a negative experience for me that ended up positive. We made a connection and since then, she has been my mentor and friend. I finally graduated with a Masters degree in Science (Chemical Education). I have included photographs of my family – my husband and two sons, and me at my graduation in figure 26.



Figure 26: My family at my MSc graduation

In 2002, my Technikon merged with another Technikon and we became the Durban Institute of Technology. When my two-year contract position came to an end, the Institute extended it and eventually converted it into a permanent position in academic development. So I became fully involved in advising and guiding academic staff in their learning, teaching and assessment practices. It was during this time that there was another change and the Institute became a University. The requirement to teach in a university was that I had to read for a Doctorate. The same colleague who influenced me to continue with my Masters study was the one who approached me to read for a Doctorate in Technology with a specialisation in Education, and she became my supervisor.

I was taking yet another risk. I registered for a doctorate in the last year that the qualification was offered at the Institution and also at a time when there was huge uncertainty regarding my position in the academic development unit. It was not only I who was under threat. All of us who worked in the unit were challenged in the same way because of the merger and the status change. The unit had no permanent head of department, no defined structure and hence was not recognised by the university even though we provided valuable academic development support for the academic

staff in the Institution. In the midst of all this, I was asked to lead the unit. I was excited by the opportunity presented to lead the unit but was also fearful of failure I was taking yet another risk.

I still had much to learn. I experienced mixed emotions. I drew on my deep reserves of feeling and intuition as I was faced with leading the people in the unit. I had to discover my aptitude and demonstrate 'an intuitive feel or grasp' to lead the unit. Many of the decisions I made were based on my intuition which I felt in my whole being not only in the frontal cortex of my brain that was associated with rational thinking (Robinson and Aronica 2009:22). I had the passion. I had the opportunity and the attitude to learn all I could, so soon I was in my *Element*. The relationships with my colleagues were life-affirming and we shared some deeply emotional times. It was during these times of intense emotion that I truly learnt about myself as a leader, and how to lead.

One of these times was in 2007 when the staff and I were told that we had to lose at least six staff from the unit which we believed was already too small to fulfil all the professional development work that we were required to do in the university. The staff and I were angry and upset by this proposal which would see the staff relocated to the faculties who did not have suitable space for them. The six staff were to leave the building that we all occupied as a unit. There was no space for them in the building which was to be taken over by another unit. I knew that it was wrong since the staff were not given any opportunity to present their point of view. However I knew that we risked losing staff from the unit unless I used the opportunity to find a new perspective on the situation. I had to be creative and innovative about the situation. I recalled that the unit had unused space in another building on a different campus that was not well utilised, and of which the University Senior Management were not aware. I thus proposed to Management that we would move out the building to another space. They were happy to get the space they needed and were no longer interested in moving the staff to the Faculties. So my intuition was correct in that it was not necessary to lose the staff. I had learnt that it was important to trust my intuition. The life affirming relationship with my colleagues grew more and more and we became very supportive of each other as we grew to trust each other.

Conclusion

In this chapter, I have presented an account for my understanding of learning as a biochemical process in relation to my own journey as a learner. I have shown how during critical incidents of my own learning I have experienced "thought-filled emotions and emotion-filled thoughts" (Conolly 2001:126). My learning has involved the taking of risks, learning the rules of the game to succeed in my studies, experiences of rejection and the love-filled joy and joy-filled love of family and collegial support and a sense of achievement.

I believe this account is significant as I am reminded by Kathleen Pithouse-Morgan, a scholar of self-study,

A thorough and contextualised investigation of the self can inform educational engagement in general – as the general is embedded in the individual (Pithouse-Morgan 2010).

Also, from the Krishnamurthi quote at the beginning of the chapter, "for it is within each one of us that the whole of existence is gathered" (Krishnamurti 1968:17).

Through engaging in the emotional impact of critical incidents, I have come to understand myself and the process of learning in deeper ways (Ellis and Bochner 2000).