

**The journey of a female Mathematics teacher in constructing her  
beginner teacher identity**

**by**

**Elriza Claassen**

**10137662**

**Submitted in partial fulfilment of the requirements for the degree**

**MAGISTER EDUCATIONIS**

**in the Faculty of Education**

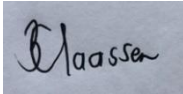
**at the**

**UNIVERSITY OF PRETORIA**

**2020**

## Declaration

I declare that the dissertation, which I hereby submit for the degree Master of Education at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.



.....

Elriza Claassen

2020

## Ethical Clearance Certificate



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA  
Faculty of Education

### RESEARCH ETHICS COMMITTEE

**CLEARANCE CERTIFICATE**

CLEARANCE NUMBER: **HU 18/10/01**

**DEGREE AND PROJECT**

MEd

The journey of a female Mathematics teacher in constructing her beginner teacher identity

**INVESTIGATOR**

Ms Elriza Claassen

**DEPARTMENT**

Humanities

**APPROVAL TO COMMENCE STUDY**

05 December 2018

**DATE OF CLEARANCE CERTIFICATE**

02 November 2020

**CHAIRPERSON OF ETHICS COMMITTEE:** Prof Funke Omidire



**CC**

Ms Bronwynne Swarts

Dr Yolandi Woest

This Ethics Clearance Certificate should be read in conjunction with the Integrated Declaration Form (D08) which specifies details regarding:

- Compliance with approved research protocol,
- No significant changes,
- Informed consent/assent,
- Adverse experience or undue risk,
- Registered title, and
- Data storage requirements.

## **Ethics statement**

The author, whose name appears on the title page of this thesis, has obtained, for the research described in this work, the applicable research ethics approval. The author declares that she has observed the ethical standards required in terms of the University of Pretoria's Code of ethics for researchers and the Policy guidelines for responsible research.

## Dedication

I dedicate this research to my husband, parents, grandfather, family members, friends, colleagues and students who all have played significant parts in me being able to grow as an individual but also as a teacher in the best way I could.

## Acknowledgements

- First and above all I thank my heavenly Father for granting me the opportunity to have completed this study. Without Him it would not have been possible.
- My beautiful husband who went on this journey with me. Thank you for your patience with me and always being there if I had to vent or run ideas. Your contribution is truly invaluable, and you are my ultimate inspiration.
- Dr Yolandi Woest for all your patience and insight. Thank you for guiding me throughout this process and being open to work with me even though I moved to a different country halfway through completion. I will forever be grateful.
- Dr Franklin Lewis you made it possible for me to see the full picture and pushed me to see what I did not want to see, and I will forever be grateful for that.
- My parents who have always wanted the best for me and supported me throughout my journey and especially my mother who transcribed my interviews for me without wanting anything in return. My mother never had the opportunities that I had after school and I could see her living vicariously through me and that motivated me to produce my best work.
- My grandfather who always shared his teaching memories with me throughout the years. I can trace my love of teaching back to him. I will strive to follow his example for the rest of my career.
- My three best friends, Michelle; Luriska & Vena, who stood by me and supported me during this journey. You have enriched my life and have shown me true friendship.

## **Abstract**

This study asked the question of how I constructed my beginner teacher identity as a female Mathematics teacher and why my journey unfolded in the way it did. With regards to beginner teacher identities I used work from Morrison (2013), Pennington & Richards (2015), Ballentyne & Grootenboer (2012) and Beijaard, Meijer & Verloop (2004). For work on the beginner female STEM teachers, I used authors including Spangenberg & Myburgh (2017), Else-Quest et al. (2013), Stromquist et al. (2013), Ahlqvist et al. (2013) and Rodriguez et al. (2017). These concepts were key to the understanding of this study. An Interpretivist epistemological paradigm underpinned this study (Wagner, Kawilich & Garner 2012). The conceptual lens used in this study was designed employing tenets of the Social Identity Theory of Tajfel & Turner (1979) as well as Albert Bandura's Self-Efficacy Theory (1994).

I followed a qualitative research approach and autoethnography as research design whereby the I, the researcher was also the sole participant of the study (Ellis, 2009). Co-constructors of knowledge were involved in this study to corroborate my personal. They comprised of close family members and a friend. Data generation methods included self-reflexive narratives about my experiences as a beginner teacher and my researcher's journal. Furthermore, I conducted semi-structured, face-to-face interviews with the co-constructors. In analysing my data, I used the method of thematic analysis whereby I would read my data and identify suitable themes based on my two secondary research questions. The main findings of the study showed that I faced situations that went against my pre-conceived expectations, formed in part by my family members and that the construction of my beginner teacher identity involved a process wherein I had to accept elements of my out-group as part of my in-group (Tajfel & Turner, 1979) to achieve a satisfied social identity.

## **Key Terms**

Beginner teacher identity; Constructing; Female; Mathematics; South Africa





## Language editor

244 Anderson street

Brooklyn

Pretoria

30 November 2020

To whom it may concern.

This letter is to confirm that the dissertation of Elriza Claassen has been edited for language correctness. She submitted six chapters for editing which were completed today. If there are any queries, please email them to the address below.

Sincerely

Prof EA Boomker



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

**Elizabeth A Boomker**

**Professor Emeritus**

BSc (Pret), MSc (Pret), DSc (Pret)

Pr. Nat. Sci.

Cell +27 (0)82 955 4035

[profeaboomker@live.co.za](mailto:profeaboomker@live.co.za)

## List of abbreviations

CAPS	Curriculum Assessment Policy Statements
DBE	Department of Basic Education
GDE	Gauteng Department of Education
GET	General Education and Training
HoD	Head of Department
FET	Further Education and Training
SMTE	Science, Mathematics and Technology Education
STEM	Science, Technology, Engineering and Mathematics
USA	United States of America

## Table of Contents

<b>Declaration</b> .....	<b>i</b>
<b>Ethical Clearance Certificate</b> .....	<b>ii</b>
<b>Ethics statement</b> .....	<b>iii</b>
<b>Dedication</b> .....	<b>iv</b>
<b>Acknowledgements</b> .....	<b>v</b>
<b>Abstract</b> .....	<b>vi</b>
<b>Key Terms</b> .....	<b>vi</b>
<b>Language editor</b> .....	<b>viii</b>
<b>List of abbreviations</b> .....	<b>ix</b>
<b>Table of Contents</b> .....	<b>x</b>
<b>List of Figures</b> .....	<b>xiv</b>
<b>CHAPTER 1: OVERVIEW OF THE STUDY</b> .....	<b>1</b>
1.1 Introduction .....	1
1.2 Background and context .....	3
1.3 Rationale for this study.....	7
1.3.1 Personal justification .....	7
1.3.2 Professional justification .....	8
1.3.3 Conceptual motivation.....	8
1.3.4 Scholarly motivation .....	9
1.4 Purpose and focus.....	10
1.5 Research questions.....	10
1.6 Clarification of key concepts.....	10
1.6.1 Construction.....	10
1.6.2 Beginner teacher .....	11
1.6.3 Beginner teacher identity .....	11
1.6.4 Female beginner teacher identity .....	11
1.6.5 Mathematics education in South Africa .....	12
1.7 Overview of research methodology .....	12
1.8 Overview of the conceptual framework .....	13
1.9 Quality measures.....	13
1.10 Ethical considerations .....	14
1.11 Research Assumptions .....	14
1.12 Outline of my study.....	14
1.13 Conclusion .....	16
<b>CHAPTER 2: LITERATURE REVIEW</b> .....	<b>17</b>
2.1 Introduction .....	17
2.2 The concept of identity .....	18
2.3 Various identities as part of the self .....	19
2.3.1 Personal and professional identities as part of the teacher identity .....	20
2.3.2 Social Identity as a function of professional identity .....	20
2.3.3 Personal, professional, and social identities as part of the teacher identity .....	21
2.3.4 Gender identity.....	22
2.4 Aspects of becoming a beginner teacher .....	22

2.4.1	Past experiences as the basis of own teacher identity construction.....	22
2.4.2	The influence of a new context on beginner teacher identity .....	23
2.4.3	Beginner teacher challenges resulting in leaving the profession .....	24
2.5	Challenging identities: Being a female STEM teacher .....	25
2.5.1	Becoming a female professional .....	26
2.5.2	Female stereotype-threats in Mathematics .....	28
2.6	Synthesis of findings .....	28
2.7	Grounding my autoethnography in theory .....	29
2.7.1	Social Identity Theory .....	30
2.7.2	Self-efficacy theory .....	31
2.7.3	Towards a conceptual framework: Merging theoretical frameworks.....	32
2.7.3.1	Conceptual framework designed for my study.....	33
2.7.3.2	Interpreting the conceptual framework (Figure 2.1) .....	33
2.7.3.3	Application of the conceptual framework to my study .....	34
2.8	Conclusion .....	35
<b>CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY.....</b>		<b>36</b>
3.1	Introduction .....	36
3.2	Research approach: A qualitative methodological paradigm .....	36
3.3	Research design.....	37
3.4	Paradigmatic stances.....	38
3.4.1	Epistemology .....	38
3.4.2	Ontology .....	38
3.5	Research methodology .....	39
3.5.1	Autoethnography as research methodology.....	39
3.5.2	Benefits of an autoethnography .....	41
3.5.3	Limitations and critique against autoethnography as research methodology .....	43
3.5.4	Dealing with the “pitfalls” of an autoethnography.....	45
3.5.5	Research methods and instruments .....	47
3.5.5.1	Choosing the co-constructors of knowledge .....	47
3.5.5.2	Critical conversations with co-constructors of my autoethnography.....	48
3.5.5.3	Self-reflexive narratives .....	48
3.5.5.4	Memory work .....	50
3.5.5.5	Artefacts .....	51
3.5.5.6	My researcher’s journal.....	52
3.5.6	<b>The process of data analysis</b> .....	52
3.5.6.1	Overview of the data analysis process .....	52
3.5.6.2	Thematic Analysis .....	53
3.6	Quality measures.....	54
3.6.1	Credibility.....	54
3.6.2	Verisimilitude.....	55
3.7	Ethical considerations .....	55
3.7.1	Basic ethical principles.....	55
3.7.1.1	Informed consent.....	55
3.7.1.2	Potential for harm .....	56
3.7.1.3	Honesty .....	57
3.7.2	Additional ethical principles when doing an autoethnography.....	57
3.7.2.1	Caring for my co-constructors of knowledge.....	58
3.7.2.2	Caring for myself as main participant in this study .....	59
3.8	Conclusion .....	59
<b>CHAPTER 4: MY AUTOETHNOGRAPHY.....</b>		<b>61</b>
4.1	Introduction .....	61
4.2	The foundation of my journey.....	61
4.3	Above the red line.....	67

4.4	Stepping into my first teaching shoes.....	68
4.5	My first struggle as a beginner teacher .....	69
4.6	My first big mistake.....	70
4.7	Defeated by the first examination.....	71
4.8	Malema in my class.....	75
4.9	The role of parents .....	77
4.10	Dolls and go-carts.....	78
4.11	My lowest low.....	81
4.12	Being a young female teacher at a high school.....	83
4.13	My mother as my example.....	86
4.14	Connecting with Grade 8F .....	87
4.15	Spreading my wings.....	88
4.16	The lack of successful communication .....	91
4.17	Maintaining discipline .....	92
4.18	Conversations with my mother and grandfather .....	94
4.19	My pride in the profession.....	97
4.20	Lack of collaboration .....	98
4.21	Class sizes .....	99
4.22	Setting up my classroom.....	100
4.23	Being taken advantage of .....	101
4.24	Behind with technology .....	102
4.25	Lack of leadership roles .....	104
4.26	Blessed with a good HoD .....	104
4.27	Male domination .....	106
4.28	Backwards thinking in terms of gender roles .....	108
4.29	Salary.....	110
4.30	Gift of being myself.....	111
4.31	Conclusion .....	112
<b>CHAPTER 5: DATA ANALYSIS AND INTERPRETATION.....</b>		<b>113</b>
5.1	Introduction .....	113
5.2	The process of analysing and interpreting of my data .....	113
5.3	Emerging themes and sub-themes from my data.....	114
5.3.1	<b>Familial heritage as influence on my teacher identity construction .....</b>	<b>115</b>
5.3.1.1	My ancestral line of White Christian Afrikaner teachers .....	115
5.3.1.2	An inheritance of commitment and dedication .....	120
5.3.1.3	Fear in the face of race .....	121
5.3.2	<b>Intrinsic factors influencing my teacher identity construction .....</b>	<b>123</b>
5.3.2.1	A passion for Mathematics Education .....	123
5.3.2.2	Performing above the red line .....	125
5.3.3	<b>Factors in the professional context influencing my teacher identity construction .....</b>	<b>128</b>
5.3.3.1	Authority in the classroom .....	128
5.3.3.2	Being a female beginner teacher .....	130
5.3.3.3	Collaboration with my superiors .....	132
5.3.3.4	The transition from being a student to becoming a teacher.....	134
5.4	Conclusion .....	136
<b>CHAPTER 6: CONCLUSION OF THE STUDY .....</b>		<b>138</b>
6.1	Introduction .....	138
6.2	Review of my study .....	138
6.3	Reflecting on my research methodology .....	140
6.4	Proposing answers to my research questions and research findings.....	141
6.5	Recommendations stemming from my study.....	143
6.5.1	Recommendations for policy .....	143

6.5.2	Recommendations for practice.....	144
6.5.3	Recommendations for future research.....	144
6.6	Challenges experienced during my study .....	145
6.7	Final reflection and conclusion .....	146
<b>7.</b>	<b>REFERENCES.....</b>	<b>148</b>
<b>8.</b>	<b>ANNEXURES .....</b>	<b>164</b>
	<b>Annexure A: Interview with my mother .....</b>	<b>164</b>
	<b>Annexure B: Interview with my grandfather .....</b>	<b>172</b>
	<b>Annexure C: Interview with my father.....</b>	<b>177</b>
	<b>Annexure D: Interview with my friend.....</b>	<b>183</b>
	<b>Annexure E: Interview with my brother in law .....</b>	<b>188</b>
	<b>Annexure F: Letter of Verisimilitude from my mother .....</b>	<b>191</b>
	<b>Annexure G: Letter of Verisimilitude from my father.....</b>	<b>192</b>
	<b>Annexure H: Letter of Verisimilitude from my friend.....</b>	<b>193</b>
	<b>Annexure I: Letter of Verisimilitude from my brother in law .....</b>	<b>194</b>

## List of Figures

<b>Figure no</b>	<b>Description</b>	<b>Page no</b>
2.1	Diagram of my conceptual framework where I used tenets from The Social Identity theory (Tajfel & Turner 1979) and the Self-efficacy theory (Bandura 1994)	32
4.1	Photograph of my brother and I as part of our school's orchestra at Laerskool Voortrekker Eeufees	48
4.2	Photograph of my grandfather with the cross country team of Hoërskool Gerrit Maritz in 1983	50
4.3	Photograph of my father as part of the school's marching band at Hoërskool Gerrit Maritz	50
4.4	Photograph of myself with the school's cross country team At Hoërskool Gerrit Maritz	51
4.5	Photograph of my brother's last school photo	52
4.6	Photograph of my father driving the jeepie	62
5.1	Table of themes and sub-themes	113





## CHAPTER 1: OVERVIEW OF THE STUDY

### 1.1 Introduction

“If you want to know me, then you must know my story, for my story defines who I am” (McAdams 1993:11).

Telling stories has always been something that draws my interest as “a good story moves us, teaches us and transforms us” (Gray & Stuart, 2015:393). According to Clandinin, Caine, Estefan, Huber, Murphy and Steeves (2015:22) we as human beings all live “storied lives”. This includes humans shaping their lives with stories of who they are and where they come from, both individually and socially (Clandinin et al., 2015). Although living a storied life can be viewed as something that occurs naturally, Gray & Stuart (2015) argue that there is more to storytelling than just an occurrence utilised in cultures worldwide for many years. Storytelling has also entered “educational and therapeutic practices as a technique for self-reflection and growth” (Gray & Stuart, 2015:393). I concur with both views of storytelling: firstly, that telling your story is something which occurs naturally, and secondly, that it can also be used as a technique to reflect on what has happened in your personal and professional life and which can contribute to your personal and professional growth. Telling my story has given me the opportunity to appreciate the restorative power of storytelling through reflecting on my experiences and allowing myself to grow as a teacher and a student.

Telling our stories reveals different parts of our identity. The identity of individuals can be viewed as interacting socially and also as being centred within society (Stets & Serpe, 2013). Identity is regarded as “a set of meanings attached to roles individuals occupy in the social structure, groups they identify with and belong to and unique ways in which they see themselves” (Stryker, 2002; Burke & Stets, 2009). Furthermore, “identities help organise an individual’s place in an interaction, guide behaviour, facilitate the development of stable social relationships and make interaction possible”, which all occur within “the context of social structure” (Stets & Serpe, 2013:35). I have concluded that our identities are not fixed throughout our lives, but that they are changeable and centred around the context we find ourselves in.

As my study reflects my story as a beginner female Mathematics teacher in South Africa, I adopted an autoethnographic research methodology whereby I looked inwardly (auto) at my own experiences and outwardly (ethno) at the environment and social culture in which my experiences occurred (Bochner & Ellis 2016). In other words, I told my story by taking into consideration the context in which my experiences occurred. My experiences are a product of both personal influences and external influences. Personal influences include my history and perception of Mathematics as a subject while being a student at high school and University level, and then while being the teacher in the Mathematics classroom. External influences include the expectations and actions of my Head of Department (HoD), School Management Team (SMT) and the Department of Basic Education (DBE).

My autoethnography is linked to the society in which I was born and the ways in which I experienced the learning and teaching of Mathematics as a learner and teacher. It is therefore centred around my experiences as a beginner female Mathematics teacher, while taking into consideration my context and the significant role it played in my story. It is important to mention that the line between autobiography and autoethnography is drawn when a person's writing "crosses personal and professional life spaces" (Denshire 2014:3). My story is therefore not only an autobiography, but an autoethnography as I share my very personal and professional experiences in the form of a story which includes the context in which my experiences occurred. These experiences were not only documented in the form of a story, but they were also analysed and interpreted as part of this study.

I have documented my experiences in the form of self-reflexive narratives, which rely on my own memory and memories evoked by interviews and critical conversations with my co-constructors as well as by studying artefacts including old photos. Co-constructors were family members and a friend. Verisimilitude was used as a quality measure to ensure the relatability and credibility of my story (Lombard 2020). I did not only share my story, but I also analysed and interpreted my story in order to investigate the influences on the construction of my beginner teacher identity. The analysis and interpretation of my story was done by using the process of thematic analysis, whereby I identified broad themes which would help

me in answering my research question. My conceptual framework includes tenets of the Social identity theory (Tajfel & Turner 1979) and Self-efficacy theory (Bandura 1994) which contributed to the analysis and interpretation phase. My conceptual framework also allowed me look at my themes and interpret my experiences on a deeper level. The process of using autoethnography is not an easy process as it demands serious introspection without identifying as the victim in my story (Chang 2013), but rather an individual who has to be open about all aspects, including difficulties, and through this find answers to my research questions.

## **1.2 Background and context**

Mathematics is regarded as “one of the key areas of knowledge and competence for the development of an individual in a globalising world” (Mokhele 2017:49). Gouwe, Mathipa & Netshitangani (2017:9122) refer to Mathematics as “a core skill in the life of human beings for it is central to acquiring and mastering the ability to count”. The perception that Science, Mathematics and Technology provide people with the opportunity to improve their quality of life and also their ability to interpret and make meaning of the world around them, exists (Iwu & Azoro 2017). There is also a general view that being educated in Science, Mathematics and Technology allows individuals to accumulate wealth and develop themselves materially (Iwu & Azoro 2017). Iwu and Azoro (2017) speculate that a learner’s achievement in Science and Mathematics can be regarded as a strong predictor of his/her later earnings and material wealth in life. For these reasons, Mathematics, with Science and Technology are regarded as fundamental subjects in primary and secondary schools across the world.

Mathematics as a subject has often had a high status among other subjects. In the eyes of society its importance is held in high regard by school administrators, educators, parents and learners themselves. It is regarded as a subject that would bring hope and promise for the future. However, it is also a subject that is often associated with anxiety, caused by pressure from teachers, parents and peers, which leads to poor academic performances. Mathematics is globally regarded as a problem subject with which many learners struggle (Mohd Rustam 2016). However, the subject is regarded as important because the performance of

learners in Mathematics will determine the health of a country's education system (Mokhele 2017, Capuno, Necesario, Etcuban, Espina, Padillo & Manguilimotan 2019). For countries like Canada and the United States of America (USA), their Mathematics performance ranking is extremely important. In December 2013 it was reported in a newspaper article that "Canada has dropped out of the top 10 in international math education standings, a decline that is raising alarms about the country's future prosperity" (Alphonso 2013). In the USA the same trend is being seen. According to Kerr (2016) the USA is showing declining Mathematics scores for their students' performance. In South Africa, Mathematics is regarded as a subject that yields poor performances but is still viewed as very important by parents and other stakeholders in the educational arena (Mlangeni 2019).

Every year the results of the matric examinations appear in almost every newspaper in South Africa. Every year the country is shocked by the performance of our learners in public schools, and more specifically by the performance of learners in Mathematics. In an article in *Daily Maverick* on 8 January 2017, Roberts (2017) wrote that Mathematics in South African schools is equated with poor performance and that South Africa ranked second last on the international league table of the Trends in International Mathematics and Science Study (TIMSS) of 2015/2016. He also stated that our academic performances are worse than fellow African countries and added that even though South Africa had been investing large amounts of money in the education sector, the Mathematics pass rates were not improving (Roberts 2017).

In December 2016 South Africans were outraged by lower standards, set by the South African Department of Basic Education (DBE), for grade 9 Mathematics learners. An article in *Mail and Guardian* stated that "Pupils who did not meet the 40% criteria in Mathematics will now be able to progress to the next grade provided they met all other pass requirements and obtained more than 20% in Mathematics" (Kronenberg 2016). The performance of learners in Mathematics is constantly the subject of discussion by teachers, parents, learners and journalists. Most often these conversations are based on negative facts and opinions. It is fair to agree that Mathematics is a problem in South Africa, and that there are various

reasons for this as is found in a number of studies (Tsanwani, Harding, Engelbrecht & Maree 2014; Visser, Juan & Feza 2015; Mapaire 2016).

In past years learners struggling with Mathematics in the General Education and Training (GET) phase, would not continue with Mathematics in grades 10 to 12 (Botha 2011). In an attempt to combat innumeracy, South Africa implemented a subject called Mathematical Literacy in 2006 (Botha 2011). In grade 10 learners could now choose between Mathematics and Mathematical Literacy. This subject is only offered in the Further Education and Training (FET) phase of high schools. The DBE refers to Mathematical Literacy as a “fundamental subject where learners are provided with learning opportunities to consolidate and extend their basic mathematical skills” (Botha 2011:1). The emphasis is on thinking and critically analysing real-life problems (Botha 2011).

The general state of Mathematics in South Africa can have an influence on the Mathematics teachers’ beliefs about the subject, as well as their teaching experiences and ways in which they teach the subject. Various studies have shown that the poor academic performance of learners in South Africa can be linked to the content knowledge of the teacher and how the teacher teaches the subject (Pillen, Beijaard & Brok, 2013; Tsanwani et al., 2014). It is thus safe to say that Mathematics teachers can easily be blamed for the poor performance of learners by educational role players. The question arises: How do Mathematics teachers deal with not only poor performance of their learners, but also the constant negative comments and opinions from parents, colleagues, and the media? What does this negative portrayal of their subject field do to the blossoming identities of beginner teachers and more so, *female* beginner teachers?

Beginner female Mathematics teachers often struggle with certain anxieties when it comes to teaching Mathematics. It is important to note that what the female teacher believes about mathematics will influence her identity as a Mathematics teacher and the way she teaches the subject (Lake & Kelly 2014). These beliefs about Mathematics can increase mathematics anxiety and lead to a decrease in confidence when teaching the subject (Lake & Kelly 2014). When I taught

Mathematics in South Africa, I was constantly faced with the opinions of my learners, their parents and the media regarding the subject and its current state in the country. These opinions have possibly influenced my beliefs about the subject. In South Africa, the general view is that boys outperform girls in Mathematics and that they will have more promising outcomes than girls (Spangenberg & Myburgh 2017).

Many communities in South Africa still relegate females to the traditional roles of getting married, having children at a very young age, and then looking after the children at home (Mlangeni 2019). There is little or no motivation to finish school, or to study for a degree and earn money to make a living. In these communities, females gain little respect from males. This is seen in classrooms where female teachers struggle to maintain discipline. Discipline was an aspect of teaching that was a challenge for me as I was a white, young Afrikaans teacher teaching teenagers who grew up in these communities and who had a biased opinion about me as their teacher. It can therefore be noted that the teacher identity of the beginner female Mathematics teacher is complex with many components that have an influence, even before the new teacher steps into the classroom.

To understand my current teacher identity as a beginner female Mathematics teacher in depth, I needed to understand how my initial identity as a beginner female Mathematics teacher was formed. Although Iwu and Azoro (2017) state that the number of women working in Science, Mathematics and Technology Education (SMTE) has always been, and still is, relatively low globally, they also emphasize the importance of both males and females in SMTE. It can therefore be established that there are relatively few females in SMTE, but also that the importance of females in SMTE should not be ignored.

As this study is autoethnographic in nature I thought it suitable to introduce myself to the reader, so that my readers can gain some insight into who I am as a person. I am a white female Afrikaner woman who grew up in a Christian household and went to Public schools that upheld Christian values. My home was in the northern parts of Pretoria during the whole of my school and tertiary career. I grew up in a family consisting of my parents, my brother and me. My brother unfortunately died

at the age of 16 years in 2007 after a short battle with cancer. I was 15 years old at the time and we were both in grade 10.

Both my parents grew up in the apartheid era and they instilled in me that the apartheid-policy was wrong and that all people should be treated as equals, no matter your race or skin colour. Growing up in a middleclass household did not always provide me with the full understanding of the external world, or the difficulties that South Africa was still facing, with regards to the inequality of the education system. I went to school at public schools that were offering education in both Afrikaans and English. During my primary and high schooling career I enjoyed learning Mathematics, even though I was just an average Mathematics student. I did fairly well in my other subjects and ended up second on the Top 10 Achievers list in my grade 12 year, with four distinctions. I was accepted to study Education at the University of Pretoria and my first year commenced in 2010. I completed my undergraduate studies in 2013 and started to work as a Mathematics teacher in January 2014 at my old high school. This is where my story as a beginner female Maths teacher begins.

### **1.3 Rationale for this study**

During my beginner teacher years I knew that I wanted to share my experiences with others and that it would help me to process everything that happened to me. My reasons for choosing to do this study can be divided into a personal justification, professional justification, conceptual motivation and scholarly motivation.

#### **1.3.1 Personal justification**

My experience of academic pressure and expected performance in mathematics is encapsulated in my self-narratives as a grade 10 mathematics learner at my high school in Pretoria:

*After our first term in Grade 10, she printed out every learner's mark for the first term and posted these outside her classroom on the wall. There was a red line drawn to indicate the expected mark of 60%. Above the red line was every learner who received a mark higher than 60%. Below the red line was every learner who received 60% and less. This was harsh. I remember a girl who was furious and cried. Luckily my name was above the red line, but this did not take away the fact*

*that I resented Mrs Angel<sup>1</sup> a little bit. I felt empathy for this girl. It was a public humiliation for many learners. We were told that everyone below the red line would not pass Mathematics and were persuaded to rather take Mathematics Literacy.*

I have always needed to perform *above the red line* and during my beginner teacher years I faced failure for the first time. In my self-reflexive narratives, I reflect on my first year as a teacher and my experiences regarding the examination results of my learners, after the June/July examinations. This was a critical moment in my career as a beginner teacher:

*I recall filling out a form that summarised my learners' performance. I remember my classes having an average percentage of 27% for the June Mathematics examination and the pass percentage was 40%. I felt so ashamed and I could not figure out what went wrong. I had a fail percentage of almost 40%, which meant that almost 40% of students in the grade failed their Mathematics examination.*

My identity as a female Mathematics teacher has therefore changed dramatically over the last 7 years. This change came as a result of experiencing a range of difficulties and challenges but was always coupled to a sense of success and determination with each challenge I overcame. Even though at times I felt hopeless and unsuccessful, it led me to grow into my teacher identity which produced various skills that I still use in my classroom today. This process of growth was an enriching part of my life and motivated me to study this phenomenon.

### 1.3.2 Professional justification

It would be beneficial for me, as a professional teacher, to explore how the traditional roles and background of female teachers in South Africa influenced my beginner teacher identity formation as a female. This includes my preconceived ideas of females in the classroom and my learners' pre-developed ideas of a female in the Mathematics classroom. I also seek to strengthen my professional teacher identity by completing this study and broadening my knowledge base.

### 1.3.3 Conceptual motivation

The key concepts in my study include beginner teacher identity, female gender identity and Mathematics education in South Africa. The concept of beginner

---

<sup>1</sup> This is a pseudonym used for my high school Mathematics teacher in grade 10-12.



teachers sparked my interest as I could relate to it, especially the difficulties that one faces as a beginner teacher and how those experiences can influence your career in the future (Vikaraman, Mansor & Hamzah 2017). Some of these experiences include facing a reality that is the opposite of what I expected, managing the classroom, handling emotional challenges and struggling to identify with my learners.

My personal identity has been an aspect that I have questioned, and I wanted to investigate as many facets of it as I could in relation to my teacher identity. Being a female has brought a lot of questions into my life, especially when examining it from a traditional perspective. I was interested in focusing on females in the Mathematics classroom, as I am a female Mathematics teacher, and I believe that female Mathematics teachers might face different challenges to those faced by male Mathematics teachers. Mathematics has always been part of my life and through the years I have collected good memories of it, as well as a few bad ones, but it is a subject that I have enjoyed and I wanted to explore the effect it had on my teacher identity.

#### **1.3.4 Scholarly motivation**

In conducting this study, I attempted to be an advocate for the beginner female Mathematics teacher. I hoped to give a voice to these teachers. These teachers have defeated the odds of becoming Mathematics teachers in a country where there are still gender roles prevalent in our societies (Mlangeni 2019). This study attempted to answer questions that could help future beginner female teachers in our country to develop a healthy teacher identity. It could help fill a gap in the literature by introducing the design of an autoethnographic study into the field of Mathematics. After doing extensive research, it was challenging to find autoethnographies that wrote about the experiences of being a beginner female Mathematics teacher. I thus identified this as a gap that my research could potentially fill. In filling this gap, the existing body of knowledge will be enriched due to the numerous aspects that I investigated. They also had an influence on the construction of my beginner teacher identity and could possibly contribute to the research of others. My research will add to the existing body of knowledge about

South Africa's current education system and how female beginner teachers fit into this system, together with the difficulties that we face.

#### **1.4 Purpose and focus**

The focus of this study is to understand how my journey towards my beginner teacher identity as a female Mathematics teacher unfolds. The purpose of this study is to make sense of my journey and explain why it happened in this manner.

#### **1.5 Research questions**

I was interested in investigating the influences which affected the construction of my teacher identity, as a beginner female Mathematics teacher, with the aim of answering my research questions:

- How did I construct my beginner teacher identity as a female Mathematics teacher?
- Why did I construct my beginner teacher identity as a female Mathematics teacher in the way I did?

#### **1.6 Clarification of key concepts**

The key concepts for this study included:

##### **1.6.1 Construction**

Construction for the purpose of this research report is seen as a process, wherein I was actively involved. It encompasses the construction of my female beginner teacher identity. The construction of a teacher's identity allows for a better understanding of oneself and one's learning and development (Pillen, Beijaard & den Brok 2013; Avraamidou 2014). The construction of my female beginner teacher identity was already in progress when I went through the stages of my teacher education program at university (Kaynak 2019). My female beginner teacher identity construction is an ongoing process which is influenced by both internal and external factors (Schaefer & Clandinin 2019).

### **1.6.2 Beginner teacher**

Several terms have been used by scholars in the field to describe a teacher at the start of their careers, and during their early years of teaching (Fraser, Greenfield & Pancini, 2016; Schmidt, Klusmann, Lüdke, Möller & Kunter, 2017). Other terms have been used interchangeably such as ‘beginning teachers’ (Fraser, Greenfield & Pancini, 2017), ‘novice teachers’, (Feiman-Neser, 2001) and ‘early career teachers’ (Fraser et al., 2017). These terms all refer to educators who are *new* to the teaching profession. In this study, the term ‘beginner teachers’ refers to me as the sole participant of the study and who has been teaching for three years or less.

### **1.6.3 Beginner teacher identity**

Teacher identity can be conceptualised as a “dynamic phenomenon” that a teacher starts to develop as an education student (Peker, Torlak, Toprak-Çelen, Eren & Günsan 2020:230). This identity then continues to develop as the teacher enters the workforce and interacts with the school and the broader community (Beauchamp & Thomas 2009). When the teacher enters the workforce as a beginner teacher, she is faced with a new environment that causes shifts in her teacher identity (Peker et al., 2020). For the purpose of this study, beginner teacher identity is seen as an identity that has already started to develop when the teacher enters the workforce and continues to develop as the teacher progresses in her career.

### **1.6.4 Female beginner teacher identity**

This study focuses on female beginner teacher identities, as I, the sole participant in this study, am a beginner teacher of the female gender. My focus was specifically on female beginner teachers as I could relate to them and I also believe that female beginner teachers face certain challenges that affect male teachers less, or not at all. In South Africa gender imbalances are still prevalent, and females are characterised with traditional roles (Bhana & Pillay 2012). In certain African countries, such as Liberia, it is still difficult for females to become teachers (Stromquist, Lin, Corneilse, Klees, Choti & Haugen 2013). Even in the USA, female teachers regard their home life as more important than their work life and do opt out of managerial positions (White & Massiha 2016). As a female

beginner teacher, I did face certain challenges, due to my gender, and I find them worth investigating.

### **1.6.5 Mathematics education in South Africa**

Mathematics can be described as “a core skill in the life of human beings for it is central to acquiring and mastering the ability to count” (Gouwe, Mathipa & Netshitangani 2017:9148). Mathematics as a school subject is seen as a key subject that will provide opportunities for learners (Gouwe et al., 2017). In this study I will focus on Mathematics as a school subject in South Africa.

## **1.7 Overview of research methodology**

My study was guided by the interpretive paradigm as it focuses on people trying to make sense of their life both culturally and socially (Elster 2007, Walsham 1995). This paradigm has at its essence the suggestion that people’s knowledge of reality is formed by social construction/interaction (Eliaeson 2002, McIntosh 1997). I chose this paradigm as it suited the purpose of my study perfectly, as I wanted to investigate my experiences within a specific social context (Kelliher 2005, Lin 1998). This also aligned with the qualitative research approach which I used throughout this study (Teherani, Martimianakis, Stenfors-Hayes, Wadhwa & Varpio 2015). This allowed me to look for “the richest possible data” and allowed me, as the researcher, to be subjective and has therefore influenced the way I collected and generated my data (Paltridge & Phakiti 2015:49).

For the purpose of collecting and generating data for this study I employed an autoethnography as my research methodology (Spry 2001). I used self-reflexive narratives (Bolen 2017) wherein I documented my experiences in the first three years of teaching at a public high school in South Africa. This served as my main data source for the study. To substantiate my experiences, I conducted interviews and had critical conversations with co-constructors, which included certain family members and a friend. I also made use of memory work, artefacts and my researcher’s journal to recall important memories for inclusion in my main data source. In conducting this autoethnography, I focussed solely on my experiences and as a result the main, and only, participant was myself.

When analysing and interpreting my data, I employed a thematic analysis (Wagner et al., 2012), which required me as the researcher to identify themes within the data set (Maguire & Delahunt 2017). I followed the method of thematic analysis developed by Braun & Clarke (2014), whereby data is analysed and themes, flowing directly from a research question, are formed. I therefore identified my themes in an effort to answer my research questions.

### **1.8 Overview of the conceptual framework**

The nature of my study required a combination of two existent theoretical frameworks. These were the Social identity theory (Tajfel & Turner 1979) and the Self-efficacy theory (Bandura 1994). By merging tenets of these two theoretical frameworks. I created a single framework which allowed me to analyse and interpret my data in a way that would answer my research questions. It also served as an instrument to guide my data collection and generation. The first section of my conceptual framework included tenets of the Social identity theory (Tajfel & Turner 1979), which reflected the way in which my social identity was constructed. This also provided the foundation of my female beginner teacher identity. In constructing my female beginner teacher identity, I utilised the four aspects of the Self-efficacy theory which included mastery experiences, vicarious experiences, social persuasion and emotional states (Bandura 1994). My conceptual framework therefore resembled the process used for the construction of my female beginner teacher identity, and was used to guide the analysis and interpretation phase.

### **1.9 Quality measures**

In implementing a qualitative study it was important for me to ensure that my results would be meaningful (Nowell, Norris, White & Moules 2017). When using an autoethnography as the research methodology, it is necessary to ensure the reliability and credibility of the study (Lombard 2020). This was confirmed by using verisimilitude, in my autoethnography, to prove that it was based on real life experiences (Dyson 2017). This is explained in more detail in chapter 3.

### **1.10 Ethical considerations**

In conducting an autoethnographic study I was faced with a few ethical dilemmas. These included making sure that none of the characters in my narratives were placed in a bad light and I therefore used pseudonyms to protect their identities (Chang 2008). When I wrote my stories, I also had to be careful not write as though I was looking for personal vengeance or making others out as bad people (Sikes 2015). I had to write my narratives as honestly as I could. When interviewing family members and a friend, I asked them to sign an informed consent form so that they knew what the study was about and that they could withdraw from being a co-creator at any time (Lapadat 2017). I also had to get Ethical Clearance from the University of Pretoria before collecting any data.

### **1.11 Research Assumptions**

It was important to investigate what assumptions other researchers had about concepts used in my study, as it gave me a clear indication of what these concepts entailed. The first concept that I investigated was identity and the many forms it can take on. Some researchers have identified identity as being unstable and ever changing (Rogers & Scott 2008, Starr 2010). Mathematics has been characterised as being important in the fields of Science, Engineering and Technology (Burton 2011). It is also seen as a school subject that creates many opportunities for learners after their school years and is regarded as an important subject that has economic power (Mlangeni 2019, Kusmaryono 2014, Setati 2002). Researchers have postulated that the number of females in SMTE fields is lower than that for males, and that girls would usually choose careers which do not involve Mathematics (Ojo 2018, Botha & Rasool 2011, Vithal 2012).

### **1.12 Outline of my study**

#### **Chapter 1: Overview of the study**

This chapter elaborates on the importance of autoethnography and how this methodology suits my purpose in this study. An overview of Mathematics as a school subject, locally and globally, is given, after which I elaborate on my rationale for attempting this study. This is followed by a statement of my purpose

in attempting this study, whereafter I identify my research questions. All the key concepts used in my study are clarified. I end this chapter off by providing an overview of the methodology used, overview of my conceptual framework, quality measures utilised, ethical considerations and research assumptions.

## **Chapter 2: Literature review**

Chapter 2 encapsulates all relevant literature pertaining to the research topic, including various facets relating to the identity development of a beginner teacher. This includes extensive studies into the concept of identity and various identities as part of the self, such as personal, professional, social and gender identities. I also cover the transition from a student into a teacher and shed light on all relevant aspects pertaining to it. A section on being a female STEM professional is included and is followed by a synthesis of my findings. The chapter ends with a discussion of my conceptual framework which was designed by using tenets from two theoretical frameworks.

## **Chapter 3: Research methodology and design**

Chapter 3 expands on the research approach, which is of a qualitative nature, and explains the research design of my study. There is also a discussion of the paradigmatic stances related to my study and includes epistemology and ontology. This is followed by an in-depth look into my research methodology of using an autoethnography with a focus on data collection and generation. The next section includes an overview of the data analysis process, followed by the quality measures used and all the ethical aspects considered.

## **Chapter 4: My autoethnography**

In Chapter 4 I provide the reader with my story in the form of twenty-nine self-reflexive narratives which include all my relevant experiences as a beginner female Mathematics teacher in South Africa. My narratives are divided into separate stories of occurrences that I remembered.

## **Chapter 5: Data analysis and interpretation**

Chapter 5 presents the data gathered as well as its significance towards the study. Here I have identified all relevant main themes and sub themes with an extensive discussion on each. The collected data is represented, analysed, discussed and finally an interpretation is given.

## **Chapter 6: Conclusion of the study**

Chapter 6 is the concluding chapter of this dissertation. In this chapter I link the data gathered with the research questions explored in Chapter 1. I also relate the findings of the study with existent literature mentioned in Chapter 2. Finally, I provide the possible contributions, as well as the challenges, of this study and recommendations for future research and practice.

### **1.13 Conclusion**

In conclusion, this chapter provides the background of the study, the rationale behind doing this study as well as listing the research questions which have guided my methods in the research process. It also describes the purpose of this study and clarifies the key concepts. Finally, the methodology utilised to guide this study is explained and an outline of the chapters to follow is given. The following chapter deals with the conceptual framework and elaborates on all relevant literature in the literature review.



## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction

A literature review includes “a critical appraisal of a subject” which is “essential when planning a research project and for placing research findings into context” (Winchester & Salji, 2016:308). A literature review helps identify existing research that supports one’s research or “corroborates your findings” so that one can place one’s research in the required field (Winchester & Salji, 2016:309). In conducting my own literature review I identified three broad terms which included identity (personal, professional, social, teacher), gender (females, stereotypes, gender roles) and Mathematics (teacher, STEM - Science, Technology, Engineering and Mathematics). I read multiple articles and journals about these three broad terms and identified those that were applicable to my study and included them in my literature review. When using these sources I had to be careful not to plagiarise and therefore either paraphrased what had been written or I used inverted commas to show that I used the author’s direct words. I also referenced all the sources that I included in my literature review. In writing my literature review I tried to make sure that my ideas linked throughout and that there was a coherent flow across ideas.

An important section in the literature review of a study is the chosen theoretical framework(s), which is also referred to as the “foundation from which all knowledge is constructed for a research study” (Osanloo & Grant, 2016). The chosen theoretical framework(s) of a study should not be mentioned only once, but should be demonstrated throughout the study, both implicitly and explicitly. The researcher’s chosen framework(s) should be a reflection of her inherent outlook on how knowledge is accumulated and how it came to exist (Osanloo & Grant, 2016). For this study I have employed two theoretical frameworks as a basis for my conceptual framework. Specific aspects of each framework work well for my study where either one, in its totality, does not really speak to the whole study. The theoretical frameworks chosen include the Social Identity Theory (Tajfel & Turner, 1979) and the Self-Efficacy theory (Bandura, 1994). Both these theoretical frameworks, and how they form the basis of the conceptual framework that was specifically designed for this study, will be discussed later in this chapter.

This chapter starts with the concept of identity and how unstable and changeable it. This led me to the next section that includes writing about various identities as part of the self, including personal, professional and social identities and gender identity. Aspects of becoming a beginner teacher, which includes past experiences as the basis, the influence of a new context and beginner teacher challenges resulting in leaving the profession, are examined. I also investigate challenges to being a female Science, Technology, Engineering and Mathematics (henceforth, STEM) teacher by looking into the evolving female professional identity and the female stereotype-threats in Mathematics. A synthesis of my findings as related to the literature and my study is included. This is then followed by an explanation of the conceptual framework that I have designed for this specific study.

## **2.2 The concept of identity**

To fully comprehend the complexity of the teacher identities of beginner teachers, one has to understand the concept of identity. The exploration of identity is not a straightforward process (Starr, 2010:4). It “demands a process of infinite interpretation, reinterpretation of experiences, circumstances and conditions emphasising the interconnectedness of past and present, lived and living” (Starr, 2010:4). Identity formation and development is not one dimensional involving a simple process, but is made up of many different facets which all ideally relate to the individual. Identity “changes and questions itself to form meaning” and is also adaptive, depending on the demands placed on it (Starr, 2010:4). Also, identity is the “sense” people have of themselves as individuals, “including the person’s self-image and self-awareness”, which is captured in the stories they tell about themselves and how these stories are projected and understood by others (Richards, 2015:117).

An individual’s sense of identity and image of the self is shaped by “values and beliefs” of how people should behave, or conduct themselves, in the presence of other people (Pennington & Richards, 2015:7). According to Pennington & Richards (2015), identity formation, which is an ongoing process, is an important part of growing as an individual and of finding oneself through interactions with others in various contexts. Moreover, identity is not “predetermined but is relative

to social context” and is subject to change (Pennington & Richards, 2015:7). However, when an individual comes into contact with new people, it may cause identity stress as the individual is unsure about their own identity, and can also “question who they truly are” (Pennington & Richards, 2015:7). This identity stress can be the result of others questioning, or rejecting, the individual’s identity and also by “extreme changes in context” (Pennington & Richards, 2015:7).

Rogers and Scott (2008) argue that the concept of identity is constructed from four tenets. For the purpose of this study, identity is viewed through the lens of these four tenets. Firstly, identity depends on multiple contexts and is therefore influenced by context (Lauriala & Kukkonen, 2005). Secondly, it cannot be formed without having relationships with others and without experiencing emotions. Thirdly, identity is subject to change and is unstable in its nature. Fourthly, it occurs over time and involves a process of construction and reconstruction through stories and lived experiences. This fits perfectly into the vision of my autoethnography which investigates and explores my experiences as a beginner female Mathematics teacher as well as how my beginner teacher identity was constructed. Another aspect that is important to include in this section is that a teacher’s experience can, not only be that of “active identity construction” led by the individual herself, but also of an “imposed identity” which is formed by certain preconceptions of a teacher defined by society (Beauchamp & Thomas, 2011:7). This again encapsulates the underpinnings of an autoethnography, which is that one’s story cannot be told without the role of context and is why I have included it in this section.

### **2.3 Various identities as part of the self**

Identity itself encompasses a multiplicity of ideas, factors, and contexts (Olsen, 2008; Sfard & Prusak, 2005; Beijaard, Meijer & Verloop, 2004; Danielewicz, 2001). In my study I have focussed on personal, professional and social identities as exemplified by Beauchamp and Thomas (2011). Each of these identities has its own influence on the beginner teacher’s identity and it is important to note that one does not exist without the other, but that they are interrelated.

### **2.3.1 Personal and professional identities as part of the teacher identity**

Personal identity can be defined as “those unique characteristics that distinguish one individual from others” (Woest, 2016:25). It is also the personal lens through which an individual sees herself as different to others (Woest, 2016). In constructing one’s identity, two main questions are asked, “Who am I?” and “What is my place in this world?” (Schwartz, Montgomery & Briones, 2006; Sokol, 2009; McAdams, Josselson & Liebich, 2006). Pennington & Richards (2015:10) emphasise the fact that the teacher’s personal identity is the “basis of teaching”, which means that teaching has always been part of the teacher’s personal identity. This is referred to as the *art*, or *magic*, of teaching which has led to the profession to be labelled as a *craft* (Freeman & Richards, 1993; Pennington, 1989; Zahorik, 1986). The personal characteristics of the teacher cannot be ignored as it is the basis of the professional identity. In other words, the teacher constructs a professional identity by interlinking her individual characteristics to those characteristics required by the “field as a whole” (Pennington, 1999:99-108). Moreover, the existing identity of the teacher is important because the teacher is expected to adapt to “disciplinary or professional knowledge” and also to embrace her individual identity (Pennington & Richards, 2015:10). Therefore, her personal identity forms the basis of her professional identity and her personal identity is also incorporated in her professional identity.

### **2.3.2 Social Identity as a function of professional identity**

The professional identities of beginner teachers also form part of their social identities (Woest, 2016). In constructing a social identity, the individual asks two questions: “Who are we?” and “Who are they?” (Carvalho-Malekane, 2015). The social identity is dependent on relationships with others in the community and can include factors such as one’s gender and race (Woest, 2016). Pillen et al. (2013) argue that professional identity can be used as a resource for teachers, thus giving meaning to themselves based on others and the environment around them. The professional identities of teachers have been described as “the person within the professional” (Day & Gu, 2010:26). Hence, the professional identity cannot exist without the social identity and the interrelated personal identity. This is also the view that is carried throughout this autoethnography.

### 2.3.3 Personal, professional, and social identities as part of the teacher identity

The beginner teacher's personal, professional, and social identities all encompass her teacher identity. For this study I view teacher identity as an umbrella overarching the personal, professional, and social identities which all contribute to the teacher identity. According to Sachs (2005), "teacher identity is not something that is fixed nor is it imposed; rather it is negotiated through experience and the sense that is made of that experience". Other important factors influencing teacher identity is the "subject and content of instruction, the methods and approaches to teaching, and the students and specific context" in which the teacher is teaching (Pennington & Richards, 2015:9). These factors should not be seen as "independent" but used, together with the "teacher's personal or autobiographical identity and specific educational and teaching experiences", to form and develop the teacher identity (Pennington & Richards, 2015:10). The expansion of the teacher's knowledge in a specific field also forms part of this developing teacher identity (Pennington & Richards, 2015). Another way of looking at teacher identity is by associating it with the subject being taught, for example, mathematics teachers have "mathematical identities" (Ballantyne & Grootenboer, 2012:369). Trying to understand the concept of identity, and how it relates to teaching and being a teacher, can be a confusing process as there are so many facets to identity and teacher identity (Hahl & Mikulec, 2018).

Various sources perceive identity as *who I am* and *how I see myself* in the world. Teacher identity is *who I am as a teacher* which includes the personal identity, professional identity, and social identity (Day, Kington, Stobart & Sammons, 2006; Beijaard, Meijer & Verloop, 2004). Teacher identity construction is also an ongoing process wherein the teacher is an active agent (Hahl & Mikulec, 2018). For my autoethnography I have built my teacher identity around certain facets, including the subject I taught and my identification with it, the socio-cultural context that I found myself in which included the people around me, and the fact that my teacher identity was constantly changing and adapting as a product of my experiences.

### **2.3.4 Gender identity**

My study focussed solely on me, as a beginner *female* Mathematics teacher and it was therefore important to include research on gender identity, as a person's gender is part of her identity construction (Bullough, 2015). Research on gender identity reveals that gender identity development is a complex process and affected mostly by context (Casad et al., 2017; Kornienko, Santos, Martin & Granger, 2016; Brinkman, Rabenstein, Rosén & Zimmerman, 2014). According to Egan & Perry (2001:451) gender identity can be seen as a “multidimensional construct” that includes an individual's “knowledge of membership in a gender category”; the feeling of compatibility to her gender group; feeling pressure to conform to her gender and “attitudes towards gender groups”. This autoethnography is my story and I identify with being a female both biologically and mentally.

## **2.4 Aspects of becoming a beginner teacher**

When becoming a beginner teacher, the beginner teacher is faced with various factors that play a role in the construction of her teacher identity. These include the past experiences, as every beginner teacher has a history, and perceptions that influence the process of constructing her teacher identity as a beginner teacher. They also include the fact that the beginner teacher finds herself in a new environment and situation that might be unfamiliar and difficult to navigate through. Lastly, starting off as a beginner teacher at a new school can be daunting. The teacher will face a multitude of challenges in her first few years and for some, it might drive them to leave the profession.

### **2.4.1 Past experiences as the basis of own teacher identity construction**

Oleson & Hora (2013:30) argue, in their study done on higher education faculty, that “they teach the way they were taught and that they are only doing what their mentors have done before them” . This argument can also be applied to beginner teachers in schools. Even though this is a valid point and seems true through the eyes of a teacher, one cannot rely on this statement only, and should include that the identity of a teacher is also influenced by other factors including, “knowledge of subject matter, social and political context, family influences and the knowledge developed over time about teaching certain topics” (Oleson & Hora, 2013:30).

Another important aspect of the existing identity of the beginner teacher is that people develop new understandings of what they already know (Bransford, Brown & Cocking, 1999) and this is established through “direct experience with the world” (Olseon & Hora, 2013:31). It is also argued that the teachers’ existing knowledge and experiences will lead her in making decisions about “pedagogical techniques and the interpretation of subject matter” (Schoenfeld, 2000:243-261). Furthermore, these existing knowledge systems are the basis upon which the identity of teachers as “professional educators” are constructed and developed over time (Beijaard, 2004:107-128). It is necessary to mention that identity is based on “personal histories” already established by the teachers (Boylan & Woolsey, 2015:63). It is therefore important to place emphasis on the already developed identity of the teacher, and the factors that have influenced it, because the development of this *teacher* identity is based on them. In this study emphasis is placed on my existing personal identity and the factors that had an influence on it, as it forms part of my beginner teacher identity.

According to Schepens, Aelterman & Vlerick (2009), the existing identity of the beginner teacher is influenced by a diverse number of factors which include the influence of mentors, immediate family, knowledge of pedagogy and subject matter, and one’s practical knowledge gained in the classroom. Furthermore, Oleson and Hora (2013) state that the pre-existing knowledge and beliefs of the beginner teacher are developed even before the teacher steps into the classroom. It is important to note that the beginner teacher does not enter the classroom with a blank sheet of knowledge and beliefs, but this teacher has a history and an existing knowledge base, built up throughout their whole lives. These experiences and knowledge become the building blocks for their developing teacher identities.

#### **2.4.2 The influence of a new context on beginner teacher identity**

Morrison (2013:91) states that “becoming a teacher is a complex process and the early career phase is difficult to navigate”. Although the beginner teacher enters the profession with existing knowledge and limited experience, constructing her teacher identity is not an easy process. The teacher is faced with a variety of unknown classroom experiences that challenge the teacher in various ways (Morrison, 2013). During this beginner phase of teaching, the teacher is in an

ongoing struggle between their pre-existing knowledge and limited experiences, and the realities faced in the classroom. This period in the life of the beginner teacher is termed “a time of survival” (Morrison 2013:91). Importantly, various aspects influence the development of the beginner teacher’s identity, including social and political contexts, professional networks, available resources, and the location of the school (Morrison, 2013). Morrison (2013:91) posits that the beginner teacher’s “understandings and perceptions are shaped by a long history of observation” which are formed from the perspective of a student, and not as a teacher. From the way in which these perspectives are formed, the beginner teacher can end up having a warped perspective of the reality of the profession (Morrison, 2013). Fantilli & McDougall (2009:814) have named this stage in the beginner teacher’s career as “the most difficult and hectic period of the teacher’s life”. Moreover, this period in the beginner teacher’s career is a time of “constant self-assessment in relation to a new body of knowledge, new experiences, unfamiliar expectations and burgeoning responsibilities” (Morrison, 2013:92). The beginner teacher thus starts her career in a new environment which she must navigate while, at the same time, her teacher identity is being constructed and influenced by this new environment.

#### **2.4.3 Beginner teacher challenges resulting in leaving the profession**

The fact that beginner teachers leave the profession within the first few years of teaching, cannot be ignored, and the reasons for them leaving are important. One reason for beginner teachers leaving the profession is the personal and emotional challenge faced as a teacher (Jones, 2006; Kyriacou, 1989). Jones (2006) states that another reason, for beginner teachers leaving the profession, is that they are not prepared for their roles. Anspal, Eisenschmidt & Löfström (2012) add to this by arguing that the unanticipated nature of teaching in the classroom conflicts with pre-existing perspectives and expectations. Jones (2006) identifies the aspect of classroom behaviour management with learners, and the desire, as well as the struggle, to know how to build relationships with them as another reason (Split, Koomen & Thijs 2011). In addition, the lack of mentoring programmes for beginner teachers who enter the profession (Joiner & Edwards, 2008), as well as the lack of connecting with other staff members on a personal and professional level, are reasons for beginner teachers to leave the profession (Pearce & Morrison, 2011).



Schutz & Lee (2014) identify the emotional challenges that novice teachers face as a reason why so many early career teachers exit the profession. Hence, leaving the profession as a beginner teacher is not something that is unheard of, and the reasons given above are also evident in my autoethnography.

## **2.5 Challenging identities: Being a female STEM teacher**

For the purpose of this study it is important to note that as STEM includes the field of Mathematics, the challenges that females in Mathematics face is cast under the same umbrella as Science, Technology and Mathematics. Being a beginner female Mathematics teacher brings challenges that male teachers might not face. Even though the numbers of females in STEM education have increased over the years, females are still seen as underrepresented in this field (Meadows, 2016; Challa, 2017; Else-Quest, Mineo & Higgins, 2013). Moreover, past research has tried to pinpoint the reason for the shortages with regard to gender, but research has shown that there are minimal gender differences, when it comes to STEM ability, between males and females (Else-Quest et al., 2013). Else-Quest et al. (2013:293) reports that the reasons for female shortages in STEM fields are negative attitudes and with this comes “more math anxiety, less confidence and self-efficacy of math, lower internal and external motivation in math and poorer math self-concept”. Therefore, the low numbers of females in STEM fields, has little to do with gender differences with regards to aptitude or ability, but rather attitudes (Else-Quest et al., 2013).

Challa (2017) mentions that another reason for a shortage of females in STEM careers could be that motivational factors, which influence career choices, differ between men and women. She also calls the shortage of females in STEM fields “the STEM gender inequity phenomenon” (Challa, 2017:21). Meadows’ (2016) research identifies three areas which contribute to fewer females attempting a career in STEM fields. She describes the three areas as “social and environmental factors, school climate and the influence of bias” (Meadows, 2016:29). The choice to continue with a career in STEM is linked to an individual’s STEM self-efficacy and “the perceived outcomes of pursuing such a career, which interact with contextual variables such as gender, ethnicity and socialization” (Else-Quest, 2013:294). Research by Else-Quest et al. (2013) states that the choice of a career

in STEM, by a female, is based on high levels of self-efficacy and a positive attitude towards Mathematics. This was also evident in my autoethnography.

### **2.5.1 Becoming a female professional**

According to Kim (2013), “caring” is one of a woman’s natural abilities in traditional society and is also part a teacher’s characteristics. Moreover, this was often regarded as a barrier which prevented female teachers from being regarded as professionals, “unlike their male colleagues” (Kim, 2013:309). Even though Kim (2013) implemented her study on teachers in the early childhood education setting, many of her findings can be related to females in education in general. Kim (2013) argues that teachers, people who ultimately serve children, are regarded as “a powerless group in society”, even though it is a known fact that teachers do make a difference in children’s’ lives and their learning (Bilim, 2014). They also do not get ample opportunities to build relationships with powerful groups of people. She also comments on the fact that female teachers are associated with lower grades of teaching and male teachers with the higher grades (Kim, 2013). Furthermore, females in education still have a lower social status in comparison to men (Kim, 2013). She also claims that women, as a group in education, will only achieve the same status that men enjoy by changing the system (Kim, 2013). She suggests that even though women are in the majority in the education field, they still hold a low status when compared to men as we live in a supposedly patriarchal society.

Females in the education sector face certain challenges which men might not face, and these obstacles cannot be ignored. This is part of the reason why this study focusses on me as a female beginner Mathematics teacher. Two studies, one in Liberia and one in South Africa, have similar themes. In the Liberian study the researchers focussed on the fact that females were under-represented in STEM fields and they discovered that various “cultural barriers” prevented females from becoming teachers (Stromquist et al., 2013:521). These obstacles included the following: the idea that women were born purely to become a wife, and join her husband’s family: the fact that women were involved in early sexual activity and teenage pregnancy; the expectation from the society that women had to start a family as early as possible (Stromquist et al., 2013). According to Stromquist et al.

(2013), female professionals often receive insufficient financial remuneration and work under difficult circumstances which include being placed at remote schools, late salary payments, and having to deal with overaged and large classes. In the South African study, it was found that females were still characterised by certain roles, especially within the household. These roles included taking care of the domestic work of the household, as well as the general care of the children and helping them with homework (Bhana & Pillay, 2012). They found that there is still a gender imbalance when it comes to domestic responsibilities (Bhana & Pillay, 2012). In this study, the participants mentioned that being an academic in the family did come with positive acclaim, but there were still cultural expectations that needed to be adhered to (Bhana & Pillay, 2012). These studies confirm that females in Africa, and specifically South Africa, are still labelled as subordinate and are bound by traditional roles, and that gender imbalances at home and at the workplace are still prevalent.

A study done in the USA suggests that women in STEM fields found it difficult to balance parenting and work (White & Massiha, 2016). They also include that men, rather than women, would opt for managerial or supervisor positions as women have a higher regard for family life than men do (White & Massiha, 2016). Females still face certain challenges which men might not as the expectation exists that they should take care of the household and focus on their careers at the same time. Relating this back to school level, research shows that “from an early age, females may be influenced by certain expectations and stereotypes about gender roles and suitable behaviours and interest for girls” (Meadows, 2016:32). A career in STEM can be labelled as one where males belong and not females (Beede, Julian, Langdon, McKittrick, Khan & Doms, 2011). In the past, in the Netherlands, school career advisors, as well as parents and teachers were more likely to advise boys to pursue careers in STEM than girls, and they would even advise girls against choosing a career in STEM (Jansen & Joukes, 2012). As can be seen, being a female professional brings with it many challenges that men might not face. This is an important aspect of my study as I too had experiences and expectations which my male counterparts did not. This extends from a socio-cultural perspective in my community to my experiences in the classroom.

### **2.5.2 Female stereotype-threats in Mathematics**

Research in stereotype-threat about the mathematical ability of women shows that the negative stereotypes about women's ability in Mathematics can interfere with their success in the classroom, as well as their standardised test performance (Ahlqvist, London & Rosenthal, 2013). This research also shows that minimising this stereotype-threat can enhance their academic performance (Ahlqvist et al., 2013). It is important to take note of the nature of the stereotypes which are linked to women. These stereotypes depict women as being "affiliative", regarding their outer appearance as of the utmost importance and completely "driven by their emotions" (Ahlqvist et al., 2013:1645).

In contrast, STEM professionals are characterised by "isolation, the irrelevance of physical appearance, and a strict adherence to reason and logic" (Ahlqvist et al., 2013:1645). If a woman cannot bring these two conflicting identities together, then the possibility of this woman having an interest in a STEM orientated career is low (Diekman, Brown, Johnston & Clark, 2010:1051). Therefore, the extent to which women view their gender and STEM identity as compatible, or incompatible, is a strong predictor of women's STEM participation and academic success (Ahlqvist et al., 2013). Pursuing a career as a female in the field of Mathematics did make me feel uncomfortable at times even though women were in the majority in my classes at university. One is aware of the stereotypes even if you try to ignore it. When I wanted men to take me seriously in the field of Mathematics, I would try to not look too pretty or feminine, so that I would not draw attention to my outward appearance.

### **2.6 Synthesis of findings**

After reviewing the literature for this study, I found various important aspects that relate to the construction of my beginner female Mathematics teacher identity, and the possible experiences that had an influence on this identity:

- Identity is influenced by multiple contexts, cannot be formed without having relationships with others and experiencing emotions, is subject to change and unstable, and is an ongoing process of construction and reconstruction (Pennington & Richards, 2015; Akkerman & Meijer, 2011; Starr, 2010; Rogers

and Scott, 2008; Day, Kington, Stobart & Sammons, 2006; Beijaard et al., 2004).

- The teacher identity is constructed through elements of the personal, professional and social identities and one cannot exist without the other (Woest, 2016; Carvalho-Malekane, 2015; Pennington & Richards, 2015; Morrison, 2013; Beauchamp & Thomas, 2011; Day & Gu, 2010;).
- Gender is part of the identity construction process and gender identity development is largely focussed on context (Casad et al., 2017; Kornienko, Santos, Martin & Granger, 2016; Bullough 2015; Brinkman, Rabenstein, Rosén & Zimmerman, 2014).
- There are various aspects that influence the teacher identity construction of the beginner teacher (Schutz & Lee 2014; Morrison, 2013; Oleson & Hora 2013; Anspal, Eisenschmidt & Löfström 2012; Schepens, Aelterman & Vlerick 2009; Schoenfeld 2000; Bransford, Brown & Cocking 1999)
- Females are still underrepresented in STEM fields and females face certain challenges which men might face to a lesser extent, and that includes cultural expectations and instances in the classroom (Meadows 2016; Challa 2017; White & Massiha 2016; Else-Quest, Mineo & Higgins 2013; Kim 2013; Stromquist et al., 2013; Bhana & Pillay 2012).
- Female stereotypes are still prevalent in today's societies and in order for more females to pursue careers in STEM, these stereotypes will need to be challenged (Ahlqvist et al., 2013; Diekman, Brown, Johnston & Clark 2010:1051).

## **2.7 Grounding my autoethnography in theory**

My autoethnography was rooted in my conceptual framework which was designed on the principles of two theoretical frameworks (Lombard, 2020). These frameworks included the Social Identity theory (Tajfel & Turner, 1979) and the Self-Efficacy theory (Bandura, 1994). This allowed me to approach the process of doing an autoethnography which included the analysis and interpretation of data, through my conceptual lens.

### 2.7.1 Social Identity Theory

The first theoretical framework that guided this study is the Social Identity Theory (henceforth, SIT) of Tajfel and Turner (1979). The SIT can be described as “the idea that an individual’s sense of self relates to the social groups to which they belong (MacKay, Hughes, Marzetti, Lent & Rhind, 2019:318). In this theory it is argued that the development of the social identity of a person relies on three cognitive processes (Ashforth & Mael, 1989). These processes include social categorisation, social comparison and self-esteem (Ashforth & Mael, 1989). According to the SIT the first process is for people to group themselves socially based on gender, age, ethnicity, religion and occupation amongst various other items (Ashforth & Mael, 1989). In categorising themselves in a certain group, the people are identifying themselves with other people in that specific group (Ashforth & Mael, 1989).

The second process involves the individual comparing themselves to people in the in-group and in the out-group (Ashforth & Mael, 1989). The in-group refers to the group which the person associates themselves with, and the out-group is the group with which the person does not associate themselves (Ashforth & Mael, 1989). The individual would rather belong to the in-group than the out-group, but also compares themselves to the out-group in order to feel better about their social standing (Ashforth & Mael, 1989). In research done by MacKay et al. (2019) they found that in an educational setting, it is easy for teachers and learners to classify themselves into an ‘us’ versus ‘them’, another way to label the in-group and the out-group, which can lead to conflict between teachers and learners. This has also been stipulated by Whitaker (2020) in writing about the ‘us’ versus ‘them’ mentality between teachers and learners in urban schools. This mentality leads to learners not being able to identify with their teachers and learn from them and teachers blaming the learners for poor results (Whitaker, 2020).

The third process of the SIT is called self-esteem (Ashforth & Mael, 1989). During the self-esteem process the individual forms their own social identity through positive reactions in the previous two processes (Ashforth & Mael, 1989). During

this process, the individual reflects upon her own identity in relation to the group she identifies with (Ashforth & Mael, 1989).

### **2.7.2 Self-efficacy theory**

The second theoretical framework that I have utilised in this study was the Self-efficacy theory of Albert Bandura (1994). The self-efficacy of a person is the person's belief in her own ability to perform a task successfully, or unsuccessfully (Bandura, 1994). "Self-efficacy beliefs determine how people feel, think, motivate themselves and behave" (Bandura, 1994:72). In a study completed by (Talavera-Franco, 2018:30), he found that if learners "lack strong self-efficacy beliefs" they might not be able to complete their chosen course or "drop out when their psychological state is vulnerable. If a person has a strong sense of self-efficacy, the person will have more confidence in completing tasks and goals successfully (Bandura, 1994). A person with a strong sense of self-efficacy will see a difficult task as a challenge that needs to be mastered, rather than a threat that needs to be avoided (Bandura, 1994). If the person experiences failure, she will quickly recover her self-efficacy (Bandura, 1994). People with a strong belief in their self-efficacy are attributed with an "efficacious outlook" that produces "personal accomplishments, reduces stress and lowers vulnerability to depression" (Bandura, 1994:72).

On the other hand, people with a low sense of self-efficacy usually doubt their own capabilities and "shy away from difficult tasks" (Bandura, 1994:72). They tend to concentrate on their deficiencies, give up quickly if the task seems too difficult, and are susceptible to failure (Bandura, 1994). They are slow to recover their self-efficacy after experiencing failure or a setback (Bandura, 1994). They are also more susceptible to stress and depression because they view failure as one of their attributes (Bandura, 1994). A person's belief about their own efficacy is influenced by four main sources (Bandura, 1994). The first is through "mastery experiences" (Bandura, 1994:72). This entails that the more a person successfully finishes a certain task, the more self-efficacy the person will have to do it again and will also be able to pursue more difficult tasks (Bandura, 1994). In contrast, if a person constantly fails to complete a task successfully, it will lead the person to

experience more failure and will decrease the person's belief of their own self-efficacy (Bandura, 1994).

The second source is through "vicarious experiences" (Bandura, 1994:73). This includes the individual observing other individuals to which she can relate, and if these individuals are successful at completing a certain task, the individual will also feel that she can be successful at completing the same, or a similar task (Bandura, 1994). If however, the other individual(s) is not successful, the person's belief in her own self-efficacy will also decrease and lead the person to believe that she will also not be successful at completing the task, but this is dependent on the person's belief of their own self-efficacy (Bandura, 1994).

The third way of strengthening a person's belief in their self-efficacy is through "social persuasion" (Bandura, 1994:73). If a person is verbally persuaded that she can succeed in completing a certain task, the person will put in more effort to successfully complete the task (Bandura, 1994). On the other hand if the person receives negative verbal persuasion about her ability to complete a certain task, the person's belief in their own efficacy will lead her to question her ability in completing the task successfully, and she will most likely believe the negative persuasion (Bandura, 1994).

The final method of influencing a person's self-efficacy beliefs is called "somatic and emotional states" (Bandura, 1994:73). This method involves a person's emotions and how they influence a person's belief in their own self-efficacy (Bandura, 1994). A positive mood will boost a person's belief in their self-efficacy, whereas a negative mood will diminish a person's belief in their own self-efficacy (Bandura, 1994).

### **2.7.3 Towards a conceptual framework: Merging theoretical frameworks**

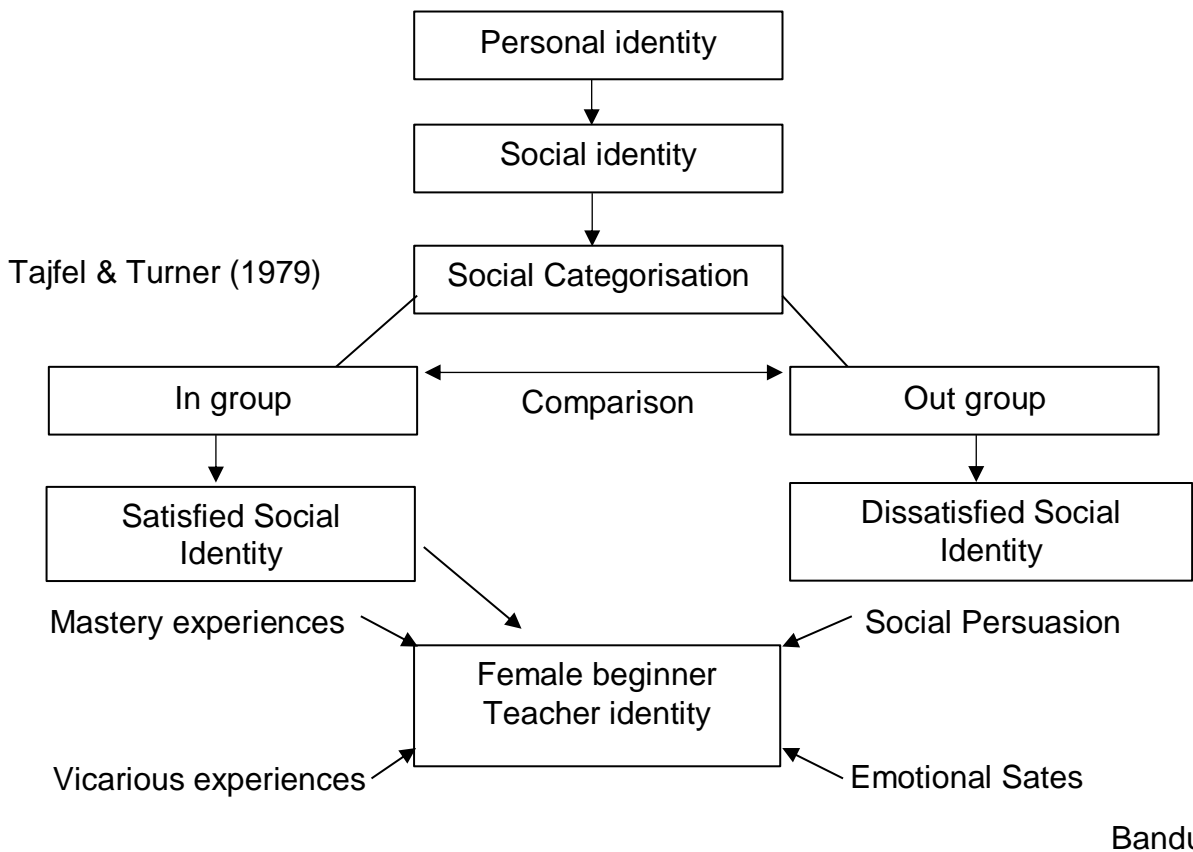
To use a theoretical lens for my study, I had to employ relevant tenets of these two theories and create a conceptual framework as both theories play a major part in my data analysis. I used certain tenets from each of the theories, and combined them to develop my own conceptual framework for my specific study. It was important to merge the theories as using only one theory in its totality would have



been inefficient. I used various tenets of each to fully cover all relevant aspects of my study.

### 2.7.3.1 Conceptual framework designed for my study

I visualise my conceptual framework as a theoretical lens for this study in the form of a diagram.



**Figure 2.1: Conceptual framework used**

### 2.7.3.2 Interpreting the conceptual framework (Figure 2.1)

In designing this conceptual framework, I started with selected aspects of the SIT (Tajfel & Turner, 1979) as it tries to “understand processes and relations within and between social groups” (MacKay et al., 2019:318). The focus of this study was on the teacher identity of the beginner female Mathematics teacher. The SIT makes no mention of the teacher identity but does include the personal identity and the social identity. As mentioned in the literature review, the individual inherently has a personal identity that is developed during the individual’s life. This personal identity is then influenced by the person’s social identity, which is influenced by the person’s community or society and relationships within it (Woest,

2016). In establishing the social identity, the individual categorises herself into an “in-group”, but she does make comparisons between the “in-group” and the “out-group” and will focus on the negative aspects of the out-group so as to elevate the in-group above the out-group.

After making these comparisons and identifying with the “in-group”, she will now have a satisfied social identity. This ultimately leads to the construction of the teacher identity, which is the focus of this study. This is where the Self-efficacy theory of Bandura (1994) plays a role. Self-efficacy plays a major part in the construction of my teacher identity as a beginner teacher. This became evident as I wrote my self-reflexive narratives, and from these I could identify with the four sources of strengthening a person’s self-efficacy. In the conceptual framework the teacher identity is constantly influenced by these four sources and these four sources ultimately strengthen the construction of my teacher identity. It also made it possible for my beginner teacher identity to develop. Inserting the ‘female beginner teacher identity’ can be viewed as my contribution to the research field as research using these frameworks in a similar context is rare.

#### 2.7.3.3 Application of the conceptual framework to my study

The conceptual framework fitted my study in an exceptional way as it focussed firstly on the development of my social identity in my new environment where I went through a process of comparing the in-group and the out-group (Tajfel & Turner, 1979). In analysing and interpreting my narratives, it was clear that in the process of developing my satisfied social identity as a beginner teacher, I went through a process of constant comparison between the in-group and the out-group. It was evident that my in-group consisted of my family and our shared views on education and the role of Christianity in education. It also included my expectations of the teaching profession. The out-group existed outside my new reality and included the learners, the current education system of South Africa, and expectations of my HoD and school management team. My reality was in conflict with my expectations. In establishing my satisfied social identity, I had to accept certain aspects of the out-group as part of my new reality.

The second part of my conceptual framework includes the final step in the construction of my female beginner teacher identity through the influence of the four major stages including mastery experiences, social persuasion, vicarious experiences, and emotional states (Bandura, 1994). While analysing and interpreting my narrative it became evident that these four stages were present in my experiences as I constructed my beginner teacher identity. These four stages therefore influenced the construction of my teacher identity as I used them to strengthen my self-efficacy which in return led to the construction of my beginner teacher identity.

## **2.8 Conclusion**

In this chapter I give a full review of current literature about the concept of identity itself, the various types of identity and the aspects regarding these types of identities. I also mention the aspect of being a female beginner teacher and specifically being a female beginner teacher in the STEM field. Afterwards, I summarise my findings from current literature. This is followed by an explanation of the two theoretical frameworks that I used in this study, namely the SIT (Tajfel & Turner, 1979) and the Self-efficacy Theory (Bandura, 1994). Furthermore, after evaluating the two theories, I developed my own conceptual framework, and this is also discussed and illustrated. In chapter 3 I provide information about the methodological approach for this study which includes the paradigm used, the research design, data collection and documentation, analysing the data, ethical issues and the quality measures used.

## CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

### 3.1 Introduction

Throughout this study I have explored the ways in which I have constructed my beginner teacher identity, as a female Mathematics teacher, in an attempt to understand the reasons and influences for doing it in this specific manner. This study was conducted through an autoethnographic lens where I was the sole participant. My co-constructors of knowledge were family members and a friend. The reason for using my co-constructors was to confirm or deny experiences that I had shared with them. They were also helpful in recalling memories that I thought I had lost over the years. The purpose of this study was to explore the influence that my experiences as a beginner female Mathematics teacher had on the construction of my beginner teacher identity. In order to fully execute this study successfully I had to draw on a specific paradigm, methodology and strategies. I have explored a wide range of literature which is applicable to this study and I identified the findings and limitations in current literature. I also introduced and described the conceptual framework which I used.

I will elaborate on my chosen research approach, here, and then explain the purpose of the research design and what it meant in terms of my study as applicable to my study. Next, I delve into my research paradigm. This is followed by an in depth look into my chosen research methodology of an autoethnography. I then move onto the process of data generation and collection which includes my chosen research instruments that were used to inspire my autoethnography. The final three sections of this chapter cover the process of data analysis, quality measures and gives an overview of my ethical considerations.

### 3.2 Research approach: A qualitative methodological paradigm

For this study a qualitative research approach was used wherein words as data were utilised and not numbers (Nieuwenhuis, 2016). Qualitative research seeks to understand the experiences of human beings in a certain context (Teherani, Martimianakis, Stenfors-Hayes, Wadhwa & Varpio, 2015). A qualitative approach investigates how human beings make sense of the world and also seeks to give a

voice to human beings by studying a certain phenomenon (Teherani et al., 2015; Astalin, 2013). In this study I wanted to investigate the way in which I constructed my teacher identity as a female beginner Mathematics teacher. A qualitative research approach allowed me to address reality from a constructivist view, which allowed for various interpretations (Teherani et al., 2015).

I did not use a quantitative research approach because an objective stance towards data collection and generation was not taken, and my findings were not generalised. However, my intention was for the reader to be able to identify with my shared experiences (Custer, 2014) as seen in a specific social context (Campbell, 2016). Hence, a qualitative research approach allowed me to explore my own experiences as a beginner female Mathematics teacher while I tried to uncover the major influences present during the construction of my beginner teacher identity.

### **3.3 Research design**

A research design refers not only to how data will be collected but it encompasses the complete plan of executing the study (Gorard, 2013). Cresswell & Poth (2016) are of the opinion that the research design process in qualitative research starts with the “philosophical assumptions” of the researcher and Nishishiba, Jones & Kraner (2013:49) refer to the research design as a “game plan” used to decide how the research question will be answered. This “game plan” should align with the “research objective, research question, type of research and the type of data required” (Nishishiba et al., 2013:49). This is further emphasised by Flick (2004) who stipulates that a research design should stretch from the data collection and generation to the data analysis, so that the research question can be answered.

The research design therefore touches on almost all aspects of the research process (Flick, 2004). The research design for this study was driven by autoethnography as method and was guided by my experiences in a social world, (Hokkanen, 2017) which can be “messy” at times, as it does not follow the linear process of traditional research (Munro, 2011:160). The research design for this study therefore supplies the framework needed for the research report which includes the theoretical framework, research question, paradigmatic stances,

methodological procedures and data collection and generation instruments (Flick, 2004; Mlangeni, 2019).

### **3.4 Paradigmatic stances**

When writing about the self and attempting a study like this, it is important to position myself within the study and also to understand how I see myself with regard to the research I would undertake (Berger, 2013). One way of doing this is to delve into the paradigmatic stances which relate to this study. This includes the epistemology and ontology of my chosen paradigm.

#### **3.4.1 Epistemology**

Epistemology is a section of philosophy that wants to know more about how one comes to know (Rehman & Alharthi, 2016; Creswell & Poth, 2016). I thus needed to select a paradigm that would suit myself and my study with regard to the way I see knowledge and the generation of data. I selected the interpretivist research paradigm as its focus is on the world as others experience it (Wagner, Kawilich & Garner, 2012). It seeks to understand and describe human nature (Wagner et al., 2012). It is also of the viewpoint that the researcher and the social world influence each other and that the interpretation of data will ultimately be influenced by the researcher's outlook (Rubin & Babbie, 2010). I chose to use this paradigm to guide the study because I was interested in the construction of my teacher identity while teaching Mathematics as a beginner female teacher. I was influenced by various aspects including my background, culture, gender and beliefs about Mathematics. I was therefore shaped by my own reality. I have investigated this reality and how it relates to my teacher identity.

#### **3.4.2 Ontology**

Ontology can be defined as “the nature of the world and what we can know about it” (Pitard, 2017:4). From an interpretive approach, ontology can be seen as “socially constructed” where researchers use words and pictures to describe their experiences (Pitard, 2017:4). The ontology of my study is formed by the interpretivist research paradigm. I used self-reflexive narratives and my researcher's journal to document my experiences. In writing my self-reflexive narratives and researcher's journal I was able to generate my own data which was

thus formed by my experiences. The data created a picture of how I saw the world as a beginner teacher as well as what I thought of my experiences and how I made sense of them.

### **3.5 Research methodology**

#### **3.5.1 Autoethnography as research methodology**

My research methodology is that of an autoethnography. The words of Medford (2013:859) perfectly encapsulate my motivation for choosing this methodology to tell my story: “No other form of academic writing affects me so deeply or causes me to think so critically”. An autoethnography produces creative, rich and evocative texts that aligns autobiography with culture (Short, Turner & Grant, 2013).

The rise of Postmodernism in the 1960s opened the way for researchers to question their method of doing research in the 1980s, specifically in the social sciences (Ellis, Adams & Bochner, 2011). Autoethnography stemmed from anthropology and the social sciences because autobiographical narratives were familiar to the social sciences and anthropologists (Anderson, 2006; Atkinson, 2006; Best, 2006; Denzin, 2006). Autobiographical texts gave birth to autoethnographies as anthropologists were interested in the individual as based on their “life histories” which involved self-narratives of the participants (Chang, 2008:44). Autobiographies could also be found in confession tales (Van Maanen, 1988), ethnographic memoirs (Ellis & Bochner, 2000), and reflexive ethnographies (Tedlock, 2000). In using these writings, the ethnographer could explain his/her “ethnographic process”, personal experiences and feelings encountered in the field (Chang, 2008:44). This therefore opened the way for the implementation of autoethnographies. Autoethnographies might be empirical in nature and questions have been raised about whether it can be seen as real research. Despite this, its popularity has grown and autoethnographies have been published in the fields of education, social sciences, and health sciences (Hughes & Noblit, 2017).

Autoethnography finds itself in a war between subjectivity and objectivity (Chang, 2008). Some scholars, such as Anderson (2006), prefer autoethnography to be more objective and it is therefore referred to as analytic autoethnography that

“focuses on the development of academic explanations of wider social phenomena” (Mlangeni, 2019:36). On the other hand, Ellis & Bochner (2006) are of the opinion that autoethnography should be evocative and emotionally engaging and more subjective in nature. The second type of autoethnography is called evocative autoethnography. My study utilised evocative autoethnography.

Within *autoethnography* we find the word *ethnography* which refers to the study of a culture. Autoethnography can therefore not exist without culture and has also been referred to as “a fresh and innovative variation of ethnography and more” (Allen-Collinsen, 2013:281). In writing my story I found myself within a social context and could connect the “personal and the cultural” of my experiences (Alsop, 2002:2). Individuals and culture can be seen as interlinking concepts (Chang, 2008:44) when referring to autoethnography. In her review, Blanchard (2013) mentioned that the autoethnographer is the researched and the researcher, and that subjectivity guides the research process. She also added that the researcher is continuously involved with “cultural interrogation and analysis” (Blanchard, 2013:2). This means that autoethnography does not only rely on ‘the self’ and the interpretation thereof, but is linked to the cultural interpretation of experiences as well. Autoethnography would therefore only be an autobiography if the aspect of culture is not included.

Allen-Collinsen (2013) refers to autoethnography as the author making sense of her own lived experiences in relation to her culture. As I focussed on the self through self-reflexive practice, I opened myself up and made myself vulnerable to the text as I had to recall lived experiences which had the potential to be emotionally painful (Allen-Collinsen, 2013). Autoethnographers admit to the subjectivity of autoethnographic research as well as the ‘emotionality’ and the influence of the researcher (Ellis et al., 2011:274). As stipulated by Chang (2008), “autoethnography transcends autobiography by connecting the personal to the cultural” and the importance of connecting “the self and the social” should not be ignored. In writing my autoethnography I include my experiences within a certain context. I investigated my experiences within this context as it influenced the construction of my beginner teacher identity as a Mathematics teacher.



Finally, I agree with Chang (2008:48) that autoethnography rests on three legs namely, that it should be ethnographic “in its methodological orientation”, “cultural in its interpretive orientation” and “autobiographical in its content orientation”. Muncey (2005:78) suggests that “autoethnography celebrates rather than demonizes the individual story”. Chang (2008) adds that these individual stories are part of a bigger picture, or story, which is the societal story. By implementing this study I did focus on the ‘self’ and my experiences, but my story and experiences form part of a bigger story which is my familial story, my student at school story, my workplace story and my story as a White South African teacher.

### **3.5.2 Benefits of an autoethnography**

Chang (2008) lists various benefits of an autoethnography. These include the fact that an autoethnography offers a research method that is friendly to the researchers and the readers (Chang 2008). With regards to the researcher, it is friendly because she has constant access to the primary data source as the source is the researcher herself (Bochner & Ellis, 2016; Allen-Collinsen, 2013; Chang, 2008). Also, the autoethnographer works with “familiar data” which gives her an “edge” over other researchers in terms of data gathering and analysis (Chang, 2008:52). With regards to the reader, an autoethnography is reader friendly as the reader feels more comfortable with the “personally engaging writing style” rather than the more rigid scholarly writing style (Chang, 2008:52). Nash (2004) states that the reader can identify with the narratives written and they (the narratives) can also touch their lives. The words of Gergen & Gergen (2002) clarify why I chose an autoethnography as research design:

“In using oneself as an ethnographic exemplar, the researcher is freed from the traditional conventions of writing. One’s unique voicing – complete with colloquialisms, reverberations from multiple relationships, and emotional expressiveness – is honoured.”

I have always found stories based on real life events fascinating. To me this kind of storytelling is the most intriguing, as the event happened in real life to a real person. This is one of the main reasons why I chose to use an autoethnography as my research design. To me there is nothing more powerful than your own voice telling your own story. My aim throughout this study was to tell my story with my own voice, in order to engage with the reader and to hopefully have an influence. It

is important to note that the voice of the autoethnographer is one which the readers can respond to, which brings with it an added value that other designs do not have (Holman Jones, Adams & Ellis, 2013; Chang, 2008). In my researcher's journal I wrote the following:

“After defending my proposal I felt angry and defeated. I did get some positive feedback from one of the professors and I am glad that she was there. She identified my hidden purpose of doing this study and this was that I had this passion to share my experiences in an effort to bring about some form of change within myself but also to the education system in South Africa. She introduced me to the idea of using an autoethnography as research design as she felt it might be the best way to get my ideas out and feel satisfied at the same time.”

An autoethnography improves the cultural understanding of oneself and of others through self-reflection and self-examination (Adams, Holman Jones & Ellis, 2015; Chang, 2008). In understanding oneself better, a sense of “nationality, religion, gender, education, ethnicity, socioeconomic class and geography” requires a deeper understanding, and this is done through self-reflection (Chang, 2008:52). Gaining this deeper understanding will help an individual to investigate both their feelings and preconceived notions of others around them (Chang, 2008:52). Also, not only writing an autoethnography but reading other people's autoethnographies, can lead the individual to self-reflection and self-examination (Florio-Ruane, 2001; Nash, 2002). When I told others, outside my school, of my experiences and certain events, they were astonished at what happened and at times would find it unbelievable. I too would sometimes find it hard to believe, and would constantly question myself, my actions, and the actions of others in my school. When deciding what I would do my master's degree on, I would think back to my beginner years and try to make sense of my experiences. Using an autoethnography as research design provided me with the opportunity to look back and reflect on my experiences, and certain events, that occurred. I not only wanted to reflect on my experiences, but also wanted to make sense of those experiences. I wanted the opportunity to understand the influence of those experiences on my teacher identity.

Conducting an autoethnography and reading autoethnographies can transform the researcher and reader, even though it is not the sole purpose of an autoethnography (Anderson & Glass-Coffin, 2016; Chang, 2008). Autoethnographies also allow the reader to engage in self-reflection. This self-reflection in the education field may lead the reader to change their daily practise, to have a greater understanding of cultural differences, and it may also bring healing to the “emotional scars of the past” (Chang, 2008:53). Throughout my career I have tried to become a better teacher, and a better version of myself, by changing and adapting my teaching methods. Using an autoethnography as research methodology provided me with the opportunity to do an immense amount of self-reflection, giving strength to the reasons why an autoethnography was the best fit for my study. Also, since starting as a beginner teacher, I have had this desire to inform decision makers about my experiences, in an effort to have a say in the effective change of how Mathematics is taught in South African schools. This is something that has driven me to complete this study. I am also realistic, and I know that this might not happen, however if I manage to touch only one person with my experiences, that would be enough for me. . All three benefits of autoethnography mentioned by Chang (2008) drove me towards using autoethnography as my research methodology.

### **3.5.3 Limitations and critique against autoethnography as research methodology**

I cannot ignore the fact that this methodology has been, and still is, criticised by various researchers. Maréchal (2010) states that one of the earliest criticisms of autoethnography as research design is that it is filled with bias and is too personal. I do not completely agree with this statement as, when using an autoethnography as research methodology, one cannot help it being personal because it is based on one’s life. However, it is important that the autoethnographer makes sure that her study is not only about the self but must include the ‘ethno’. Throughout my study, I constantly had to remind myself of this, as focussing on one’s life at a specific point in time makes it easy to just concentrate on oneself and forget about the social context.

The autoethnographer can easily become the victim in her own story and miss the purpose of an autoethnography. As part of the purpose of autoethnographic research, the researcher should delve deep into her own experiences in a specific social context, (Spry, 2001), in an effort to answer a question or investigate a phenomenon. In doing this, the researcher can help a reader with a similar question or phenomenon, as they will be able to identify with the experiences of the researcher. It is important to make sure that one's reader can identify with one's study. As it is a personal process it includes aspects of the 'person' in the study, but the autoethnographer should be careful to include the aspects that surround the personal as well (Ellis 2004).

Using a different research methodology might not yield the same rich and descriptive data. The data for this study was generated and based on my own real-life experiences (Anthony 2009). Campbell (2017) wrote about three areas of criticism, against autoethnographers, that she found when discovering trolling on Twitter. The first area of criticism was that the writer could be narcissistic and therefore self-indulgent (Campbell, 2017). This means that the autoethnography could be equated to taking a 'selfie' and is thus subjective which leads to the 'contamination' of the research (Campbell, 2017). She responded by saying that this 'contamination' leads to a greater understanding, and engagement, by the reader as the author is conveying her feelings in a deeper way. In addition, she questions if objective research can truly be authentic research, as richer and more complex data is created when the personal and the academic intertwine, which is not seen with objective research (Campbell, 2017). She adds that the researcher should not only talk about herself but should include rich ethnological descriptions of her experiences (Campbell, 2017).

Campbell (2017) mentions a second area of criticism which is that autoethnography can be viewed as being unscientific. This has been highlighted by Delamont (2007; 2009) who opposes autoethnography and all that it encompasses. Delamont (2007; 2009) focusses on the fact that an autoethnography is only writing about oneself and that we, as human beings and researchers, are not interesting enough to do so. She also comments that an autoethnography cannot be published as ethical research as it does not

encompass the purpose of the social sciences, which is to study the social world and to move the discipline forward (Delamont 2007; 2009).

As a researcher myself, ethics are extremely important. I have come to realise this over the almost seven years of being a teacher. Throughout my study I have employed ethical measures and use pseudonyms when referring to people in my self-reflexive narratives. I also ensured informed consent from family members and a friend before conducting interviews with them. In my self-reflexive narratives, I tried to steer clear of portraying myself as a victim and from putting others in a bad light. I have told my story and how my reader interprets it will be their own. Delamont (2007) did not mention the fact that autoethnographers write about the self in relation to the 'ethno' and social context, and that without this it can only be seen as an autobiography (Ellis et al., 2011).

Criticism against this methodology cannot be ignored and is prevalent in existing research. In executing my study I aimed for a research product that was an honest representation of my experiences as a beginner teacher, which included not only my experiences, but my social-cultural context, and in doing this contributing to the existing body of knowledge. I believe that I am a true researcher and that my findings can be used to guide and inspire future research. I will elaborate on the quality measures used to strengthen the relatability and credibility of my study, which are in contrast to the existing criticisms mentioned in this section.

#### **3.5.4 Dealing with the “pitfalls” of an autoethnography**

In her book, *Autoethnography as method*, Chang (2008) illustrates certain “pitfalls” that the autoethnographer needs to avoid when implementing this research methodology. The “pitfalls” included five important points that I had to look out for throughout my study. The first pitfall includes the researcher focussing on the “self” while excluding others (Chang, 2008:54). Even though an autoethnography can be seen as a study of the self, the self still forms part of a certain culture and society which cannot be ignored, as that would cause the “ethnography” to be invalid (Chang, 2008:54). In other words, I had to remember that autoethnography “should reflect the interconnectivity of self and others” (Chang, 2008:54). It was also important to note that “self-indulgent introspection” would lead to a “self-

exposing story” and not autoethnography (Chang, 2008:54). It was therefore important to reflect on my experiences, and state of mind at the time, without excluding my social and cultural context.

Secondly, I had to constantly remind myself of the purpose of autoethnography, which is the “cultural interpretation and analysis of autobiographic texts” (Chang, 2008:55). Wall (2006:146) describes the intention of autoethnography as “to acknowledge the inextricable link between the personal and the cultural and to make room for non-traditional forms of inquiry and expression”. I had to remind myself that my experiences formed part of a certain culture, school and society which I had to include and analyse throughout my study as they contributed to the construction of my teacher identity.

Thirdly, even though personal memory is a unique source of information in autoethnography, autoethnographers should not rely on their personal memory as their only data source (Chang, 2008). This is because memory can be selective and can censor past experiences (Muncey, 2005). It was therefore important to not use a single tool only, for data collection and generation, as this could bring the credibility as well as the subjectivity of my study into question. (Holt, 2003). Chang (2008:55) clearly states that objectivity is not the purpose of qualitative research, but that autoethnographers must support their arguments with “broad-based” data. This can include interviews, documents, and artefacts with the purpose of complimenting the data gathered and generated from the researcher’s memory (Chang, 2008). In using multiple data sources, it allows me the opportunity for triangulation of data, so that my accuracy and validity can be strengthened (Chang, 2008). I therefore used my self-reflexive narratives, researcher’s journal, artefacts, interviews and critical conversations with a friend and family as the instruments for my data generation.

The fourth pitfall entails the misconception that confidentiality does not apply as the researcher uses her own autobiographical stories (Chang, 2008:55). Even though I wrote my own narratives about my experiences as a beginner teacher, I had to include several people who formed part of these experiences and I had to protect these individuals’ identities. I did this by using pseudonyms in my self-

reflexive narratives instead of their real names. Lastly, there is a common misperception of what an autoethnography truly is (Chang, 2008:56). For this study an autoethnography can be seen as a research methodology in which the focus is on the researcher's experiences in order to make sense of a specific phenomenon, but it cannot be ignored that my experiences formed part of a greater societal culture and this has to be part of the autoethnography. According to Chang (2008) it is important for the researcher to make the reader aware of what autoethnography means in terms of the specific study.

### **3.5.5 Research methods and instruments**

In collecting and generating data for an autoethnography, various methods can be used. This can include observations, interviews, other artefacts and voice or video recordings just to name a few (Hughes & Pennington, 2017). Data collection and generation within autoethnography has been labelled, using a range of qualitative methods, as "reflective journaling, videotaping, interviewing and fieldwork" (Hughes & Pennington, 2017:8). For this study I used a range of data collection and generation methods. These methods can be described as being either internal or external. My internal method included data, from my self-reflexive narratives and my researcher's journal, where pseudonyms were used for anyone who was mentioned (Bolen, 2017). . My internal data was also inspired by external data sources which included artefacts, interviews and critical conversations with a friend and family members (Chang, 2008).

#### **3.5.5.1 Choosing the co-constructors of knowledge**

In selecting co-constructors of knowledge for my study I included family and a friend who were part of my journey as a beginner teacher. I included my mother, father, grandfather, brother in law, and a former colleague and friend. I chose to interview these people as they were all present in my life during my beginner teacher years. My mother and father were always there to encourage me and keep me motivated, and they steered me into studying education after school. They also placed great importance on Mathematics throughout my life. My grandfather and I frequently talked about the school organisation and the curriculum expectations since he was also a high school teacher. We usually discussed his experiences as a teacher at Hoërskool Gerrit Maritz and how times

have changed. My brother in law helped me in setting up my classroom at the start of each school year and he would always listen if I needed to vent. My friend taught Mathematics at a neighbouring high school and we would compare what happened at our schools when we met up during cluster meetings.

#### 3.5.5.2 Critical conversations with co-constructors of my autoethnography

In writing my autoethnography it was important for me to interview role players that were present and involved in my life during my early teaching years. The interviews with these role players provided me with evidence that I was not portraying myself as a victim in my story or doing “self-indulgent introspection” that would lead to a “self-exposing story” and not an autoethnography (Chang, 2008:54; Campbell, 2017).

I utilised semi-structured face-to-face interviews (Newcomer, Hatry & Wholey, 2015). Even though this method can be time consuming and requires interviewer sophistication, I used this type of interview as I could set up questions beforehand but also allowed myself or the interviewee to move from the set question if it produced a rich response (Newcomer et al., 2015). I wanted the interviewee to respond with deep and rich answers, therefore I allowed for us to deviate from the questions. I conducted interviews with my mother, father, grandfather, my brother in law and my friend. These interviews supported my memories and also evoked memories.

During the process of analysing my story I had critical conversations with my mother and my grandfather about their pasts, and how their perception of their pasts was passed onto me. Having these critical conversations during the data analysis phase made me realise that their perceptions and my upbringing played a major part in the construction of my beginner teacher identity, during my beginner teacher years.

#### 3.5.5.3 Self-reflexive narratives

According to Chang (2008:139), “Telling stories is an ancient practice, perhaps as old as human history”. This quote made me realise that autoethnography has been with us for many years and its value cannot be ignored. Telling a story is



something that comes naturally to us as human beings and is a powerful tool with which to share lived experiences. Importantly, self-narratives can be seen as a broader trend of narrative inquiry and is used in both humanities and social sciences (Clandinin & Connelly, 2000; Ellis & Bochner, 2000). According to Ellis & Bochner (2000), self-narratives can be written in one of four categories including reflexive ethnographies, texts by complete-member researchers, personal narratives and literary autoethnography.

In this study I have used reflexive ethnographies as I have written about my own experiences, in a specific culture and social context, in order to look deeper into my interactions with others and so gain a better understanding of the phenomenon at hand. Chang (2008) makes it clear that all four categories have one underlying theme, which is 'the self'. In using self-reflexive narratives as one of my internal data sources (Chang, 2008), I had to remember that even though I wrote about my experiences as a beginner teacher, others also formed part of these experiences and therefore I included them.

According to Chang (2008) writing and reading self-narratives is a powerful tool in understanding "the self" in relation to others. In constructing my beginner teacher identity, I had various role players who influenced this identity. Thus, when writing my self-reflexive narratives, I could try to make sense of their behaviour at a specific point in time and see how they influenced the construction of my beginner teacher identity. Also, these role players did not only include people at that specific point in time, but also people from my past as they were responsible for certain beliefs which I carried over into my beginner teacher identity construction. These people included my teachers in primary and secondary school, my lecturers at university and my family and friends throughout my life. For example, my high school Mathematics teacher was my role model of what a good Mathematics teacher should look like, act and teach, at that time. Studying education and doing my teaching practice left me with a different idea of how a Mathematics teacher should teach and act. Once I had to stand in front of my own classes I had all these ideas from others that ultimately influenced my teacher identity construction.

Writing self-reflexive narratives led to “self-discovery” by understanding others in the culture through making comparisons and contrasts (Chang, 2008:34). Writing my self-reflexive narratives and thinking back to that time made me process certain experiences in a way that I had not done before. It forced me to look at all the role players, what their behaviours meant at that time, and how they related to me. In some instances, it made me angry or sad and in others, it gave me a sense of forgiveness and understanding of what had happened. The purpose of this study was to understand how my experiences as a beginner teacher, teaching Mathematics, influenced the construction of my teacher identity. In order to understand this phenomenon of the influence of teaching Mathematics on my beginner teacher identity, self-reflexive narratives provided me with the opportunity to examine others in my society, which ultimately helped me to understand myself and my experiences.

While using the form of self-reflexive narratives, I ignore writing with evocative language to reflect my emotions at that point of time. An aim of the autoethnographer is to write emotionally engaging texts which are then used as a “process of discovery” for the writer (Poulos, 2012:45). During the process of writing my self-reflexive narratives, I had to engage in an emotional reflection or “recall” of my experiences and feelings at a specific point in time, write them down and try to understand “a way of life” (Ellis & Bochner, 2000:737)., This ultimately was my experience as a beginner teacher and what that meant with regard to the construction of my beginner teacher identity. The process was emotional and frustrating at times, but it allowed me to work through those experiences from a distance, a few years later. This gave me a kind of retrospection that allowed me to truly and deeply think of those experiences and what it meant for my teacher identity construction.

#### 3.5.5.4 Memory work

Kuhn (2010) refers to memory as a process and an activity that transcends the social, cultural and personal. Memory is seen as a type of knowledge where one can reflect on a personal and a collective experience (Monaco, 2010; Denzin & Giardina, 2016). In writing my autoethnography, I relied on my memories of the experiences that I had as a beginner female Mathematics teacher and employed a

research instrument called memory work. Memory work can be seen as a journey where one can use relics of the past to make meaning of the present while keeping one's eye on the future (Monaco, 2010, Bochner & Ellis, 2016).

In conducting memory work about my experiences, I selected major events that occurred in my life before I became a teacher and also events from after I started teaching. I selected these major events as I saw them as being fundamental to my story (Mlangeni, 2019). When writing my autoethnography I focussed on these major events, as I could recall from memory what had happened, in an attempt to allow my reader to interpret it, based on their lived experiences (Bochner & Ellis, 2016). Conducting memory work caused me some anxiety as I also had to remember the unpleasant memories of being a beginner female teacher (Rosenberg, 2016). Even though implementing memory work left me with unpleasant feelings at times, I knew that there was a reason in telling my story. My memory recall was sometimes limited, and is why I had to use artefacts, interviews, and critical conversations with my co-constructors of my autoethnography. This ultimately strengthened my memories and helped me to remember even more details.

#### 3.5.5.5 Artefacts

While attempting to connect my present to my past, I studied artefacts that I have kept throughout my life (Chang, 2013). Artefacts can be described as concrete evidence of one's past and can include, but is not limited to, photos, records, journals and newspaper articles (Chang, 2013). The artefacts that I utilised were photos of myself and my family, photos of my register classes when I was a beginner teacher, newspaper articles that included information about myself in high school, and a 1983 yearbook of Hoërskool (high school) Gerrit Maritz wherein I found photos and articles of my grandfather (a teacher at the school at that time) and my father (a student at the school at that time).

These artefacts helped me remember certain events in my life and guided me to draw similarities between myself and my ancestors. This played a vital part in my teacher identity construction and being able to study these artifacts gave me clarity about what I needed to include in my autoethnography. The artefacts used were

already in my possession so I did not need extra money or time to acquire them. The artefacts that I have used were not enough by themselves to answer my research question and were therefore used in conjunction with other instruments to recall my memories (Mlangeni, 2019).

#### 3.5.5.6 My researcher's journal

During this process of doing autoethnography and writing my story, I kept a researcher's journal where I recorded my emotions and feelings at certain stages. This journal helped me to reflect on events that had happened or ideas that I had to work through. Chang (2008) suggests that keeping a journal is an instrument that can strengthen the reliability of the autoethnography. This is true, but it was not my sole intention in using this instrument. My intention was purely reflective in nature in order to connect 'the self' with 'the cultural' in the best way possible (Winkler, 2018; Adams, Holman Jones & Ellis, 2015).

### 3.5.6 The process of data analysis

#### 3.5.6.1 Overview of the data analysis process

Analysing my data was not a process of objective analysis, but a process wherein I was analysing myself, my experiences and my writings. I needed to do a lot of reading in order to know how to analyse my generated data. Wall (2016) mentions that she read and reviewed countless autoethnographies before being able to look back at her comments and come to a conclusion which would improve and support this qualitative method of research and before making recommendations about it.

Looking at the analysis of an autoethnography Wall (2016) mentions that it is important, as the autoethnographer, to identify the key themes in the writing and to also discuss them. She states that it is important to discuss themes in the writing as it steers the writer away from being self-indulgent or narcissistic and towards understanding how the personal experience connects with the social context (Wall, 2016). She goes on to state that stories do have an importance in our lives, and that the purpose of autoethnographies is to connect the personal to the social/cultural context, therefore needing "thick description, analysis and theorizing" (Wall, 2016:6). In analysing my data I identified the prevalent themes and then provided rich descriptions by also including theory, in the form of

literature and my conceptual framework. I therefore aimed at what Wall (2016) suggested. The method I chose to follow in analysing my data was a thematic analysis. This method and how I employed it will be discussed next.

#### 3.5.6.2 Thematic Analysis

A thematic analysis was used to analyse and interpret the data collected and generated for this study (Wagner et al., 2012). “It is a method for identifying, analysing, organising, describing and reporting themes found within a dataset” (Braun & Clarke, 2006:83). I have chosen this method because it allowed me to look for certain themes, within my data, that would help me in answering my research questions. After I wrote my self-reflexive narratives, I read and reread them to identify certain themes and codes that repeated.

I used the six faced method developed by Braun & Clarke (2006) in applying the thematic analysis method. It is important to note that this method is not linear in nature and that it requires a continued back and forward movement when analysing the data (Nowell et al., 2017). It also requires constant reflection by the researcher while the codes and themes are being developed (Nowell et al., 2017). The six phases include: familiarising oneself with the data; generating initial codes; searching for themes; reviewing themes; defining and naming themes and producing the report. I had to read through all of my self-reflexive narratives, before coding any of it, so that I could gain a proper understanding of my data (Nowell et al., 2017; Javadi & Zarea, 2016).

After gaining a broad understanding of my data, I started to assign codes to my texts. This involved reading through my data again and then grouping the texts according to similarities that I identified. I then started to assign codes. When assigning codes, it is important to identify them clearly so that they do not overlap (Nowell et al., 2017). The next step involved grouping the codes into broader themes. The themes were identified by asking myself whether it will link with the research questions (Nowell et al., 2017). I used a mind map to categorise my codes with the relevant themes. All the codes that did not fit into a specific theme, were grouped together and labelled as the miscellaneous group.

In the fourth phase I had to look at the identified codes and determine whether the codes in a specific theme had the same pattern. This led me to merge themes and also create new themes that were more specific. Throughout this process I had to remind myself of my research questions, and if the code/theme did not link with the research question, I did not use it. Step five involved defining and naming my themes, after reviewing them in the previous step. This meant I had to first define the theme and then name it accordingly (Javadi & Zarea, 2016). The final step was producing the report. In doing this I did not only give an overview of the themes with direct quotes from the data, but I also included rich descriptions of what they meant in relation to the overall study.

### **3.6 Quality measures**

In order to produce quality control for my autoethnographical study, I did not look for trustworthiness, but rather relatability and credibility (Lombard, 2020). Relatability and credibility were established by using verisimilitude, which can be seen as the extent of the text illustrating “lifelikeness”, in other words the extent to which it displays or confirms real life (Dyson, 2007:41). When conducting research, it is important to ensure the quality of the research. Without quality the study can be invalid. It is in the best interests of the researcher to always pay attention to the prescribed quality criteria. I will now elaborate on the importance of credibility to ensure the quality of findings, and how verisimilitude was used to ensure the credibility and relatability of my study.

#### **3.6.1 Credibility**

Credibility has to do with how truthful and believable the findings are (Billups, 2014). The truth value includes whether the researcher has established confidence in the truth of the discussions with the participants, as well as the context in which data was collected (Klopper, 2008). Truth value is discovered through the experiences of the participant (Klopper, 2008). The credibility of this study was strengthened by using multiple methods of collecting and generating data, including my self-reflexive narratives, research journal entries, artefacts, interviews and critical conversations with my co-constructors. In the data analysis, certain overlaps will occur which will also improve the credibility of the study.

### 3.6.2 Verisimilitude

The interviews I conducted with my family and a friend were used to reinforce the verisimilitude of my study as it provided proof that I am a real person with real experiences (Adams, Jones & Ellis, 2015). Critical conversations with my mother and grandfather during the data process of my autoethnography were also used to reinforce the relatability and credibility of my study. The collection and generation of data, along with its analysis and interpretation, can be seen as a “collaborative effort” between the autoethnographer and co-constructors (Lombard, 2020:103). This therefore produced triangulation between myself as the autoethnographer, my co-constructors, and my story and in return boosted the relatability and credibility of my study (Hughes & Pennington, 2017).

## 3.7 Ethical considerations

Ethics can be seen as a method or procedure for deciding how to act and for analysing complex issues (David & Resnik, 2015). In using oneself as the main data source, ethical issues come into play as others are included in your stories even though they are not the participants in the study (Ngunjiri et al., 2010).

### 3.7.1 Basic ethical principles

In this section I will elaborate on utilising informed consent practises, the potential for harm principle, and on being brutally honest when writing my narratives. Before I could start with this study, I needed ethical clearance from the University of Pretoria, which I did succeed in securing. For this study I was the sole participant and certain family members, and a friend were used as co-constructors of the construction of my beginner teacher identity. The family members and friend whom I interviewed signed a consent form, set up by myself, where I provided them with essential information regarding the study and where I stated that their identity would be protected throughout the study. When referring to others in my self-reflexive narratives I used pseudonyms and therefore the person’s real identity will be unknown to the reader.

#### 3.7.1.1 Informed consent

Prior to conducting the interviews, I set up a consent form detailing the process to my co-constructors. Before asking them to sign the form, I read through it with

them so that they understood the process and felt safe within the whole process. I made it clear to them that they are not participants of this study, but rather co-constructors of my own knowledge for my narratives. I explained the background of the study and what it was about, the procedures of their participation, that their participation was completely voluntary - they can refuse to be included in the study at any point. Lastly, we went through the confidentiality section wherein I explained that their identity will be kept confidential throughout the study. I did make my intentions of the study clear to them and they appreciated me being up front and honest. All co-constructors signed their consent forms before commencing with the interviews. In setting up the informed consent forms I used clear and descriptive language so that they would not get confused when reading them.

#### 3.7.1.2 Potential for harm

Pseudonyms can be used to limit harm to people who are mentioned in the narratives and was utilised for this study (Foster, McAllister, O'Brien, 2006). The writer also has the option to publish under a pseudonym in an effort to protect herself and others mentioned in the narratives, but this comes with further implications linked to "credit and recognition" for the work (Foster et al., 2006:48). This study will be published in my own name as I feel comfortable informing the world of who I am, and I am also comfortable with all those mentioned in my narratives reading my study.

When including others in narratives it is important to stop and think how, in the writing of the stories, the potential for harm can be balanced with the potential good (Foster et al., 2006). In other words, the potential good of mentioning others in the narratives should be balanced with the potential for harm if their identities are not protected (Foster et al., 2006). Furthermore, when writing my narratives, I had to balance the potential for harm and the potential good when mentioning a specific occurrence and projecting the truth. If I felt that it could lead to more harm than good, then I would not mention it, or I would then write it in a different way while keeping my honesty intact.



### 3.7.1.3 Honesty

As autoethnography focuses on “the self”, the researcher needs to possess specific skills and qualities, including honesty (Foster et al., 2006:49). Doing autoethnography requires the researcher to delve deep into her past experiences and write about issues that she would normally keep to herself (Foster et al., 2006). This therefore requires the researcher to be brutally honest and expose herself to vulnerability and emotions (Foster et al., 2006). Being honest in an autoethnography requires a sense of truth and truthfulness (Medford, 2013). It does sometimes happen that the writer cannot remember the exact words of a person which are then replaced with something along the same lines provoking the same meaning (Medford, 2013). This is known as “mindful slippage” which can lead to ethical issues regarding the truthfulness of the narratives (Medford, 2013:859). “Mindful slippage” can, to an extent, be overlooked if the truthfulness of the story is intact, but when the writer completely changes the story to put herself in a better light, the story is not truthful and therefore unethical (Medford, 2013:859).

Medford (2013:859) stated that “when writing autoethnographically, we are forced to hold a critical mirror to our lives, and sometimes looking in that mirror by candlelight is more flattering than looking into the mirror in broad daylight”. Regardless, the honesty of the writer is crucial to autoethnography and when the writer is not completely honest in her narratives, her study will be regarded as unethical. I therefore strived to be completely honest in writing my narratives, even if it meant that I had to open myself up to emotional vulnerability and sometimes portray myself in an unflattering way. I have opened myself completely to my reader with regard to the process of constructing my beginner teacher identity.

### **3.7.2 Additional ethical principles when doing an autoethnography**

Utilising autoethnography as a research method, comes with certain ethical considerations as the narratives written by the researcher include roles played by others and these people are directly influenced (Sikes, 2015). When writing the narratives I had to be careful to not use my “narrative power” to “personally and socially” damage the image of those I have mentioned in my narratives (Sikes, 2015:1).

### 3.7.2.1 Caring for my co-constructors of knowledge

I have protected my co-constructors identities and have also informed them of their voluntary participation (Sikes, 2015). My co-constructors signed an informed consent letter before the commencement of the interviews. I was also aware of the role players in my story and protected their identities by utilised pseudonyms instead of their real identities (Lapadat, 2017; Wall, 2016; Mendez, 2013). It is unethical to include an “element of revenge” in my narratives, therefore I was careful when writing my narratives and constantly reminded myself of my research questions and purpose (Sikes, 2015:1) as it would keep me from portraying myself as a victim. Sikes (2015) mentions a list of possible guidelines to follow when conducting autoethnographic research. All are useful but I will only mention those which were applicable to my study. I was aware of “the potential misuse of interpretational and authorial power”, in other words I had to steer clear of using my power as the author to put others in my self-reflexive narratives in a false light, or leading the interpretation by the reader to an untruthful conclusion (Sikes, 2015:2). I have avoided “violent textual practices which shaped and tamed the lives that I used as data in order to present and privilege a version that served my purposes” (Sikes, 2015:2).

When writing my narratives there were people who had a negative influence on my teacher identity construction, and I documented it in my self-reflexive narratives, but I did not attack any person for my own gain. I tried to be sensitive and only write down the truth. When writing about such a person, I would sit back and think how I could write this section without portraying myself as the victim and attacking this person’s judgement or actions. I “respected participants autonomy” and their voluntary participation and documented their informed consent (Sikes, 2015:3). It is important to note that I was the sole participant for my study and that those mentioned in my narratives cannot be seen as participants. When including those role-players in my narratives, I used pseudonyms to protect their identities as far as possible. When writing my narratives, I was careful to not document anything I would not show to the persons mentioned in the narratives (Medford, 2006).

Everything that I documented in my narratives was the truth and I would gladly show it to all the role players mentioned in my narratives. I had to treat my autoethnography as something I wrote in permanent ink and be prepared to face my own and others' vulnerabilities. I wrote this autoethnography for a purpose and I will completely stand by all that was written. My stories should not harm others involved, but if it is unavoidable, steps should be taken to minimise harm. I was cautious when writing my narratives and did not try to put any role player or co-creator at harm. In an effort to minimise risk to the self or others, I could have used a nom de plume (Morse, 2002). I did not use another name to protect my identity and I am aware of the risks of using my own name, but I did use pseudonyms for those mentioned in my narratives to protect their identities. I had to assume that all persons mentioned in the narratives will read it one day, and I hope that they do.

#### 3.7.2.2 Caring for myself as main participant in this study

An aspect of being the sole participant is that the researcher is confronted with vulnerability (Ngunjiri et al., 2010). One of the reasons that makes autoethnography so "compelling" is the aspect of the storyteller being vulnerable when retelling her story (Ngunjiri et al., 2010). It is something that the storyteller cannot ignore. When writing my self-reflexive narratives, I was also confronted with being vulnerable and it is something that I did not enjoy. In an effort to look after myself during this process I focussed on the fact that this study could have the possibility to create more opportunities for myself and help me to understand the phenomenon at hand. Documenting my own experiences was uncomfortable at times and I would therefore read others' autoethnographies in an effort to console myself. This made me realise that my experiences were important and that others might be able to identify with them. In this process of being vulnerable, I also started to heal from my unpleasant experiences, as reflecting on what had happened and how that influenced me, only made me realise how far I have come and how those experiences moulded me into a better teacher.

### 3.8 Conclusion

This chapter covers all aspects pertaining to my research approach and design which included thorough examinations of my research paradigm and how that

drove my selection of my conceptual framework. It also includes an in depth look at my chosen research methodology of an autoethnography and my research instruments used to inspire my autoethnography. This includes the use of memory work, artefacts, my researcher's journal and interviews and critical conversations with my co-constructors. I then comment on using verisimilitude to establish the relatability and credibility of my autoethnography. Finally, I explore the ethical considerations that I had to overcome in making sure that my study would persist ethically. In the following section of this research paper I include my story in the form of self-reflexive narrative.

## CHAPTER 4: MY AUTOETHNOGRAPHY

### 4.1 Introduction

The autoethnographic researcher can be seen as both the “subject” and the “object” of the investigation, (Ngunjiri, Hernandez & Chang, 2010:2). This means that the researcher performs the investigation and is also at the same time the sole participant who is under investigation (Ngunjiri et al., 2010). Ellis (2009:4) wrote that:

“As an autoethnographer, I am both the author and focus of the story, the one who tells and the one who experiences, the observer and the observed, the creator and the created. I am the person at the intersection of the personal and the cultural, thinking and observing as an ethnographer and writing and describing as a storyteller.”

This is further substantiated by Ngunjiri, Hernandez & Chang (2010:2) who wrote that the researcher can be seen as both the “subject” and the “object” of the investigation. This means that the researcher performs the investigation and is also at the same time the sole participant who is under investigation (Ngunjiri et al., 2010). In this study I was the researcher and the sole participant (Jarvis, 2014; Oojorah, 2016). I wanted to understand the journey towards the construction of my identity as a female beginner teacher of Mathematics on a deep, scholarly level, which can be seen as the ‘auto’- study of the self, and teaching Mathematics at a public high school in South Africa, which is the ‘ethno’ – study of oneself within a specific culture or sociocultural context (Qutoshi, 2015). To gain this understanding, I generated my own data by writing self-reflexive narratives detailing my experiences. In this chapter I share my story, in the form of twenty-nine written self-reflexive narratives that include experiences which occurred during my first three years of teaching, as well as my history and background. These narratives were written from my own memory and memories evoked from family members, my friend, and other artefacts.

### 4.2 The foundation of my journey

In 2005 my parents sent me to Hoërskool (high school) Gerrit Maritz which is an Academic and Technical high school in the northern parts of Pretoria. My parents

left me with no other choice because of the long relationship that my family had with the school. The Afrikaans and Christian tradition of the school fitted our family's religious and cultural profile. I recall the conversation I had with my parents in my grade 7 year after visiting other high schools as possible options:

*Elriza: I think I want to attend Hoër Tegniese Skool John Vorster (High Technical school John Vorster). My two cousins are also attending there.*

*My father: (moving uncomfortably in his chair and increasing his voice volume while talking impatiently as he conveys his impatience and dismissive tone) It is too far for us to drive every day. We will have to leave at 6am in the mornings to miss the traffic and if you have activities in the afternoon you won't be able to attend*

*My mother: What about Hoërskool Pretoria-Noord (High school Pretoria North)? It is close to our house and you can even walk if you want to.*

*Elriza: No not for me, their open day was so boring. Did not impress me at all.*

*My father: I think Gerrit Maritz is the best option. You will have the option of doing the Academic or technical line. Your brother will definitely be doing the technical line. It is not too far from home and your mother and I could drive you every day. I am not going to have two children in different schools.*

*Elriza: Yes, I will see. They will be coming to our school next week to give us some information, I will then make a decision.*

A week later the vice principal of Gerrit Maritz, and two students, visited my primary school. My brother and I went to Laerskool Voortrekker Eeufees, a governmental primary school that has been in business since 1938. It is a school with a rich cultural heritage. I enjoyed all seven years that I attended, and I still think of it as my best school experience. The year before we were supposed to start with Grade 1, my parents were deciding which school we would attend. We lived opposite Danie Malan Laerskool (Danie Malan Primary school) which made it an obvious choice, but my parents did not want us to attend school with our cousins and the school had a reputation of having 'snobby' students. My parents went to Voortrekker Eeufees to enrol my brother and ended up having a meeting with the principal, Mr Swart.

I can still recall the conversation my parents had with Mr Swart from the many times my mother had told me the story:

*Mr Swart: Will you be enrolling both children for Grade 1?*

*My mother: No, just for Inus. He turns seven in January when the school year starts, so he will be ready for school then.*

*Mr Swart: And what about your daughter?*

*My mother: She will only turn seven in December next year, so she will be too young for Grade 1.*

*Mr Swart: How is she doing in pre-primary?*

*My mother: She is doing fairly well. She was recently moved up from her Grade RR class to the Grade R class with her brother. They said she was too smart for the Grade RR class. We were thinking of enrolling her in your school's Grade R class for next year and then she can go to Grade 1 in two years' time.*

*Mr Swart: Honestly, I think she will be bored repeating Grade R, which is not a good thing for her development. Let's enrol both for Grade 1 intake of 1998.*



Image 4.1 My brother and I were both part of the school's orchestra

This photo was taken at Voortrekker Eeufees Primary school in 2002. My brother and I were both in Grade 5. I am in the second row from the front, second in line and my brother is in the row behind me, third from the right.

The two students from Hoërskool Gerrit Maritz demonstrated a little robot they had built, and I was immediately convinced that this was the school for me. Even the speech given by the vice principal impressed me. It was the way he talked to us

that left an impression on me. Also, the two students' blazers were beautifully decorated in rows of awards sown onto their blazers and I remember thinking that I also wanted a blazer like that one day. At home that night I remember telling my parents that this is the school for me. We were all very excited. My mother and father just went on talking about the great school years they had there in the 1980's and that my grandfather had been a teacher and coach there. My grandfather was a teacher at Hoërskool Gerrit Maritz during the 1970's and 1980's and he refers to it as his best teaching experience. Hoërskool Gerrit Maritz was one of the top schools in Pretoria in the 1980's. My grandfather was the middle and long distance running coach in those days and this ensured them winning the Athletics Inter-high every year, until they finally reached the A-league in 1983 and were competing against schools like Menlo Park High School and Affies. In 1982 my granddad won coach of the year in Northern Transvaal (now Gauteng North). The prize was an all-expenses paid trip to Europe for 6 weeks where he attended various athletics meetings all over Europe. My mother has always been proud of her father for achieving this and my grandfather has always been very humble and seldom talks about it.



Image 4.2 My grandfather with the cross-country team of Hoërskool Gerrit Maritz. This photo was taken in 1983 for the school's yearbook. My grandfather sits in the front row, third from the left.





Image 4.3 My father was part of the marching band of Hoërskool Gerrit Maritz. This photo was taken in 1983 for the school's yearbook. My father stands in the third row, third from the left.

Both my parents come from humble beginnings and throughout my years of growing up, we were middle-class people. By the time my brother and I attended primary school, we had moved from Middelburg, Mpumalanga to Pretoria North and my parents, together with my mother's uncle, started a motor fitment centre. They were in business from 1997 until 2004. In 2005 my parents went on their own and opened their own motor fitment and service centre in our backyard. After my parents closed the business with my mother's uncle and opened their own business, we did not do well and struggled financially until they eventually closed the business in 2011.

My high school years were a lot less carefree than my primary school years. We struggled financially at home. Then my brother was diagnosed with cancer in 2007 and passed on 5 weeks after his diagnosis. Despite this I did well academically, culturally and on the sport field. I was often part of the Academic team which included the top 10 students of the grade and the Merit team which were the top 10 students in the grade with the most merit points. The merit points were awarded for participating in sport and culture. I was part of the athletics and cross-

country team and was even coached by my grandfather for a while. I also played Softball and was part of the Revue with my brother before his death. I managed to become a school leader in 2008 and finished my duty in my Matric year in 2009. Being faced with financial hardship during my high school years and the death of my brother in 2007, motivated me to make a success of my life, come high or hell water. I just wanted to get away from the school and not be known as the girl whose brother died of cancer. Since the death of my brother people would look at me differently and it made me uncomfortable that this was now part of my identity and that everyone in school knew about it. It was as if people were afraid to come close to me or be my friend like I had a disease or something. People could not look at me for just me and going to school was a constant reminder of what I had lost. I was looking forward to starting fresh where no one knew me and where I can make new memories.



Image 4.4 I was part of the cross-country team of Hoërskool Gerrit Maritz from 2007-2009. This photo was published in the Rekord North on September 14, 2007.

We were all part of the Gauteng North cross country team.



Image 4.5 This is my brother's last school photo.

This photo was taken at the start of 2007, we were both in Grade 10 at Hoërskool Gerrit Maritz.

#### 4.3 Above the red line

The Mathematics class was my favourite class. I found inspiration from my teachers who expected the best from us. My Maths teachers were strict teachers who were prepared and I always learned something, and I liked that. Maths class, especially in grades 10 to 12, was always quiet. Mrs Angel (my Maths teacher from grade 10 to 12) knew how to teach in such a way that everyone was quiet and listening. Even though we were all giving our attention, we were reluctant to ask any questions. This was because she was a very strict teacher, and everyone knew that she did not take any nonsense from any learner.

After our first term in Grade 10, she printed out every learner's mark for the term and put the papers up, on the wall outside her classroom. **There was a red line drawn in the results.** Every learner above the red line had a mark higher than 60%. Every learner who received 60% and less was below the red line. This was harsh. I remember a girl who was furious and who started crying – she became head girl of our class in grade 11. Luckily, my name was above the red line, but this did not take away the fact that I resented Mrs Angel a little bit. I felt empathy for this girl. It was a public humiliation for some. We were told that everyone below the red line would not make it up to grade 12 in Maths and were persuaded to rather take Mathematics Literacy. Many learners did this, but some refused.

#### 4.4 Stepping into my first teaching shoes

In my second year at University I experienced my first practical where I taught Mathematics to Grade 9's. I thought that it was a good experience, but I really wanted to experience teaching English and Afrikaans as subjects as well, as they were my two other majors. In my second year I did my practical teaching in English to Grade 10s. I did like teaching English, but discipline was a problem as learners thought that it was not an important subject. In my fourth and final year at Uni we had the opportunity to do practical for 6 months. I completed all six months of practicals at Hoërskool Pretoria Noord (Pretoria North High school). For the first three months I taught Afrikaans. I liked it but it was not challenging enough, and discipline was a problem again. During the second half of my practical I chose to teach Maths to grade 8's and 10's. I enjoyed it so much and really loved every moment of it. The learners were incredibly kind, and they enjoyed being taught by me. My mentor teacher Mr Prins was such a good mentor. He gave me the opportunity to find my feet as a future Maths teacher and he gave me the freedom, while guiding me, to teach as I liked to. He also gave me the opportunity to set up and mark tests and assignments, which was good preparation for my first year of teaching.

I really loved the school and wanted to teach there after my studies. The teachers were kind and professional and the school was well organised, and I loved that. The learners had good self-control and discipline was not a problem, and the school also had good results each year. There was just a good vibe at the school. It was the first school where I felt that I belonged. We did have a lecturer once who said we need to "choose" our school and not just work somewhere. He advised us to investigate the school and see if it could work for us. That stayed in my head and so I managed to secure a post as a Maths assistant teacher after my practical and could thus get even more experience at that school. I worked there for the last term of 2013. I enjoyed it so much and I was getting on really well with the rest of the Maths department, and especially the Head of Department (henceforth, HoD).

I had hoped that I would be able to secure a teaching position for the following year, but unfortunately there were no posts available. I even went to talk with the

principal and asked whether there would be a post for the following year, but he said he could maybe give me something in Afrikaans but nothing in Maths. So, I could stay on teaching a subject that I did not want to teach, or I would have to go. I thought long and hard about this, but the answer was clear. I said thanks but no thanks and started to hand in my Curriculum Vitae (CV) at various schools. The first school where I dropped off my CV was my old high school, Hoërskool Gerrit Maritz.

At first, I was reluctant to do this as I never imagined going back to the school, but at the same time a job was a job, and I desperately wanted one. Also, the school was a five-minute drive from my house. One day later I received a call from the principal who invited me to an informal interview the next day. During the interview, the job was offered to me and it was a departmental post – something I wanted as it would ensure financial stability - with a medical aid and pension fund. My mind was set on stability and this post ensured it. I accepted the post, and I looked forward to starting my career as a teacher at my old high school where my grandfather was once a teacher. My grandfather's first teaching job was also at this school in 1973.

#### **4.5 My first struggle as a beginner teacher**

In my first year of teaching I was allocated five grade 9 classes and had only the Mathematics learner's booklet compiled by the Department of Basic Education (DBE), and the Curriculum and Assessment Policy Schedule (CAPS) document to guide me. When I was offered the job, I made an appointment with the Maths HoD, Mrs Angel, this was towards the end of 2013. I was nervous about working with my old Mathematics teacher, but she made me feel comfortable and welcome. We were sitting in her office and she was very friendly. I asked her if she could tell me which textbooks they used for the grade 9's. She said that they did not use a specific textbook, but that they used a booklet compiled by the DBE. As she said that, I remembered a Maths teacher at Hoërskool Pretoria-Noord saying that those books were also sent to them, but that they did not use them as they were not up to standard. Setting that aside, I thought that I would investigate

whether I could use these books or not, since it would be my only option at Gerrit Maritz.

As I worked through the booklet, I soon realised that it was not sufficient for my learners or for myself. The booklet contained various errors and it was not accompanied by a teacher's guide which would guide me on what I needed to focus on and why. The activities given were at a very low standard and instead of practicing a few basic skills and then moving on to questions needing more insight, it just focussed on the skills which did not develop the critical thinking skills of my learners. This meant that I had to find other activities that would do that, otherwise if they had just focussed on basic skills, they would struggle to think critically in the higher grades. I asked my friend, An, who had already taught grade nines which textbook she would recommend, and I bought it together with the teacher's guide.

In my first year I was given little direction by my HoD, Mrs Angel, who was also my mentor at the school, on what to teach and how to teach. I went purely on my own instincts, the textbook (which I had bought) and my CAPS document. Fortunately, doing my practical at Hoërskool Pretoria-Noord had given me some experience as to what to teach and how to teach it because the school had had more resources such as proper textbooks, worksheets, and power point lessons.

#### **4.6 My first big mistake**

Even though my classroom was opposite my HoD's classroom, I did not receive a classroom visit until the third term in my first year of teaching, when it was mandatory for the whole school. I think this was the case, as my HoD's class was opposite mine and she did once tell me that she could see what I was doing every day and that there was no need for regular class visits. For the first two terms my tests and assignments were moderated by a fellow teacher and I did not receive any negative comments or criticism. By the third term this teacher had left the school and my HoD started to moderate the tests and assignments which I had set up.

My self-confidence in my work came crashing down. I have never had so many lines crossed out and notes written on any of my work before. I was completely

confused. During my practical time, the tests and assignments I had set up were up to standard, and my mentor teacher demonstrated where I could make changes as we went through it together. He allowed me to have my own input and creativity, to some extent, so that I could still claim some sense of ownership. Now, as a qualified Maths teacher both my format and content were wrong. I had to change the whole paper. When I set up tests at Hoërskool Gerrit Maritz I remember feeling that the layout was so boring and restrictive. I remember thinking that it had looked exactly the same when I went to school there, almost five years ago. I also remember thinking that I did not want to use this format as it was very unimaginative and the complete opposite of what I had done during my practicum.

This should not have come as a surprise to me because my HoD was Mrs Angel. I knew that she was strict and that she only believed in one way of doing things. One way of teaching, one way of learning, one way of marking and one way of doing Mathematics. I have always respected her and always will. She had 30 years' experience teaching Mathematics and she was brilliant. I could go to her with any question regarding the content of Maths and she could help me immediately without consulting a textbook. I just could not help wondering if she had guided me from the start of my first year, that some of the mistakes I had made would have been avoided. If I was given proper instructions on how to teach certain topics, what I needed to focus on, and how our learners truly learn, maybe I could have grown faster in the right direction, instead of trying to figure things out as I went along. Maybe this was her strategy - throw her in the water and she will learn how to swim. Is this truly the best method? Not just for me as a beginner teacher, but what about the learners I was teaching? It just did not make sense to me – did she maybe have a lot of confidence in me and trusted that I was ok, even though I might not have been?

#### **4.7 Defeated by the first examination**

In my first year of teaching I experienced both highs and lows. One of the worst moments was my learners' June examinations results. Up to that point I did not know what I had let myself in for. I was not expecting such poor results. I recall marking the term tests of my classes and how I would just draw lines through the

pages with my red pen as the learners did not even attempt the question. My husband, then boyfriend, was sitting next to me in our house and he saw this and asked me what was going on. I just said that it was no problem as it was less marking for me. Looking back I realise that I should have started to be concerned right there before the exams had started. I felt a sense of worry, but I also thought that it might be like this because it was the start of the year, and my learners had to get used to me.

The poor performance of my learners changed my whole perspective of myself as a teacher, and especially as a female teacher in South Africa, as I had expected my learners to do well and I was not prepared for how poorly they did. Almost all of my teachers in my life were female and whenever I had male teachers, I did not do as well, so I expected the same from my learners, I thought that they would do well with me as I was the opposite of a male teacher. I was well prepared for my lessons, I maintained a good level of control in my class, I also ensured that my classroom was neat and tidy and I cared about my learners' needs and happiness.

The performance of my learners reminded me of my Grade 11 year. I recalled my own experience with my male science teacher in grades 11 and 12 and how poorly we all did. In my Matric year, the final mark our Dux learner got was 65%. This was bad as all her other subjects were all above 90%. He also did not teach us. Lesson after lesson he would sit behind his desk and instruct us on what pages to do in the textbook and then if we had questions he could not help us, we had to figure it out ourselves. Unconsciously I associated male teachers with poor results and poor pedagogy. This was not applicable to all my male teachers.

As a result of my learners' poor marks, I had to change my perspective of teaching and also my classroom practice. I also had to rethink my communication with my learners, as something had gone terribly wrong for them to achieve such poor results. I did not expect such poor results. My perspective of female Mathematics teachers had been linked to success. I felt disappointed and almost ashamed of myself because I was female.

The self-doubt crept into my mind:



*Maybe they were right, maybe I am not a good Mathematician and teacher of Mathematics, maybe young females do not belong in this field, maybe I should have chosen another subject to teach. All my doubts and fears that I had, crept up in my mind and I could almost feel completely numb. All the comments made by men at this school who could not believe that I was a Mathematics teacher came to my mind and I could see their doubtful faces. Their idea of who I was not, came true. The smirks on their faces were in the back of my mind. Maybe I have lied to myself and believed in something that was not there? Almost like the parabola not having a turning point or Pythagoras' theorem without his squares. I felt as far removed from Mathematics as I have ever felt before. I could not solve the equation of my purpose as a Mathematics teacher.*

I recall filling out a form that summarised my learners' performance. I remember my classes having an average percentage of 27% for the June Mathematics examination and the pass percentage was 40%. I felt so ashamed and I could not figure out what went wrong. I had a fail percentage of almost 40%, which meant that almost 40% of students in the grade failed their Maths examination. I remember it being a 2 hour examination that the Department sent us and it included questions on number, geometry and algebra and I remember my learners were stressed about it a long time before they had even written the examination. I remember that every time I would tell them that they would write a Departmental test, the whole class made a 'booing' sound, and they were very unhappy about it. It was as if they had given up even before they had tried. They would ask why they had to write a Departmental test or examination and they said that those tests were unfair and that they hated them.

My perspective of life has been influenced by my mother who would usually say "if you work hard and put in the effort it will pay off", "as long as you do your part everything will be in order" –That was what I had been doing in the first two terms of my first year of teaching. I bought a splendid and informative textbook and made worksheets for my learners to ensure that they were working at the expected level. I even covered the book with a thick plastic cover so that it would look good and labelled the book with my label maker – I was so proud of myself in taking initiative and I thought that my learners would appreciate it, which they

actually did. I told them that I was making them some worksheets from a textbook and they were so grateful. They told me that they did not like the booklets from the Department. They preferred my personalised worksheets above the prescribed departmental workbook.

I worked with a data projector introducing fun activities and videos to my learners and I thought I would get reasonably good results from them. They were so impressed to see that I was using a data projector. I had limited disciplinary problems because I was very strict with my learners and my methods seemed to work with them. I kept record of absentees and those not doing their homework, which happened a lot. I gave extra classes and called parents if I had any problems with learners. Although I was doing everything according to the book, I still failed. I measured my success against my learners' results. I felt such a great sense of failure -something I had never felt before. I did not discuss my sense of failure with anybody because I was too ashamed. I just kept it to myself and worked through my emotions. It sounded crazy to say that "I failed" because I was not the one who did poorly in the examinations. It felt as if I had put in all this work and effort for nothing. According to me my efforts did not work, and I was a failure.

I had always been a competitive learner, to some extent. If I felt challenged and knew that I would be successful in the end, I would definitely put in a special effort, in order to win. I always aimed for 80% and above for my subjects and even though I sometimes had to settle for a 70% I did not get depressed, I only worked harder the next time. I was definitely not a quitter. Keeping this in mind, one might now realise why these poor results made me feel disappointed, shocked, humiliated, and defeated. Never in my life had I failed and here I was, a qualified Mathematics teacher, failing at teaching a subject that I had always loved. I felt so ashamed that I could not even mark the examination papers in the staff room. Throughout the whole three-week exam period I sat in my class marking these papers and dealing with feelings I have never felt before, alone by myself.

Gathering all the courage I had left in me; I took my results to Mrs Angel. She did not even flinch, she just said: "We will just have to add marks". Another senior teacher was sitting next to her in her office, and she said, "Do not worry, all the

marks look like this, even mine”. She was a Biology teacher who had also taught at the school for almost 30 years. I thought, “Was that supposed to make me feel better?” How was this okay? Was this the norm for examination results? I was shocked and relieved at the same time. I realised that my picture of reality and what was going on in the school were different.

#### **4.8 Malema in my class**

In my first year of teaching I was able to control my learners and my learners seemed afraid of me as they would adhere to my class rules and be quite nervous if they wanted to talk to me. That was after all what my mentor teacher, also my HoD, had instructed me to do as she herself had been a very strict teacher who was not interested in building relationships with her learners. By chance, I had one of the most difficult learners of the school in one of my classes. The teachers called him Malema, because of his resemblance to a certain political figure in the country at that time. He resembled Julius Malema<sup>2</sup> in his physical features and the influence he had over other learners. He was fearless and specifically did not like the white staff at the school. He was in the ninth grade which made him still a child, but he acted as if he were an adult, completely immune to any rules of the school, not to mention my classroom rules as a first year teacher. In a sense I was afraid of him. I felt afraid and intimidated because he could do whatever he liked and got away with it. He would have this smirk on his face when teachers would reprimand him and it scared me.

It was one of those days where one’s patience was completely exhausted, and action had to be taken. I decided to move Malema to the front of the class, facing the side wall of the class, with his back to the board. If he wanted to pay attention, he had to move his table and chair before he could take part in the lesson. He complained to me about it in front of the whole class, but I said: “You see now, if only you had paid attention from the beginning and not disrupted the class then you would not need to move your table and chair to participate in the lesson.

---

<sup>2</sup> Julius Malema is a political figure in South Africa who is head of the party, the EFF (Economic Freedom Fighters). He is well known for his physical appearance of having a bald head and an extended stomach. He is very good at influencing the youth of South Africa and has a negative reputation with the white people in South Africa as he has verbalised his dislike of white people on numerous public occasions.

When your behaviour improves, you may be seated at your original seat". After that he did not complain, and I thought that I might have finally found something that would work with him.

The feeling of success was short lived when one of our deputy principals, Mrs German called me in to her office. To my surprise Malema sat there. She asked me to be seated and explain the current situation with Malema. I explained my side and Malema was asked to leave the room. Mrs German informed me that Malema felt victimised and that he could not learn in the class because of where he was seated. She also informed me that what I did was wrong and that I was revoking his right to education by seating him in front of the class.

After hearing all of this I wanted to explode! What about him not wanting to learn and disrupting the class in such a manner that he was taking education away from the rest of the class? What about him never having his books at school? What about him never working in class, coming late for class every day and never doing his homework? What about him humiliating me in front of the class by calling me horrible names in his language? Did she think this was my first intervention with him? What about all the demerits, all the one-on-one conversations with him, trying to motivate him and help him? What about all the patience I had shown him? What about my fear of him? At that moment I realised that Mrs German was completely on his side. She gave him power over me, and it humiliated me! She did not tell him that he was wrong and that he needed to apologise and show good behaviour in my class. No, instead she instructed me to handle him with caution and not to 'victimise' him. At first, I was taken back and extremely upset. Afterwards, I realised that I could allow this to bring me down or treat it as an obstacle in the road.

The next day I seated Malema next to my overhead projector in the front of the class, then I told him that the camera in the classroom was directed fully on him and that if I treated him unfairly or victimised him the camera would record it, but also that the camera would record any of his misbehaviours and that I would report it to Mrs German immediately. After that I never had a problem with him. I learned that I could either allow a situation to have power over me or reverse that power

and use it to my advantage. I also learned to never ask for any help from Mrs German.

#### **4.9 The role of parents**

Growing up in a household where my parents taught me that my teachers were always right and I was wrong, made it even more difficult to work with parents that believed their child was always right and the teacher is wrong. I remember when I would complain about a teacher in primary or high school to my mother, she always took sides with the teacher and would tell me to think of it from the teacher's perspective. I hated it because in my heart I really felt that the teacher was wrong. Sometimes it helped to think of it differently but at other times it did not. So, I grew up believing that teachers were always right, and I needed to respect them. I assumed that all children were brought up this way and expected it from my learners in my beginner teacher years. This was not always the case.

I recall an incident where I took a cell phone from a grade 8 learner while he was supposed to be studying for his examinations. During the examination period junior learners had an hour study time before they actually wrote the exams, they were not allowed to have their phones with them. This boy was on his phone and I asked him to hand it over, and he did. I then booked it in at the office. At the end of the school day his mother was at school, demanded the phone back and wanted to speak to me. When she saw me, she said: "No wonder these kids don't respect you, neither would I, look how young you are". My confidence just dropped, and I felt incredibly inferior and furious simultaneously. Her words confirmed what some thought about me. They regarded me as young and incapable.

In my first year of teaching, Mrs Angel advised me to keep record of everything. This included homework not done, late-coming, absenteeism and extra classes not attended. By showing this to the parents, it immediately changed their perception of me. They realised that although I was young, I was doing my work and that their child was taking a chance. Unfortunately, for some parents this was not enough, and they still blamed me for their child's poor performance. What they didn't realise was that their attitude became their child's attitude. Their child fell into the habit of blaming the teacher for their own poor performance, even though

he/she did not pay attention in class, did not do their homework, did not attend extra classes and did not even ask the teacher for help. In my first years of teaching this was one of the difficulties that made me want to give up the teaching profession, because once the child was influenced by his/her parents, it was very difficult to change their attitude because they believed more in their parents than in themselves or in me.

Fortunately, there were still parents that believed in my abilities as a teacher and when I asked for their help with their child, they were prepared to help me, wherever and whenever. These parents were one of the reasons that made me stay in the teaching profession, that made me realise that not all parents were bad and that I needed to focus on the good ones in order to help their children to perform better in Mathematics. It also made me realise the power of working with parents. Once the learner realised that I was working with his/her parents, their attitude towards me improved and I had a better relationship with that learner. This also influenced the learner's academic performance for the better.

#### **4.10 Dolls and go-carts**

I grew up with my brother and two male cousins. I was therefore surrounded by boys. I wanted to play with what they were playing with, or do what they were doing, and my mother would buy me dolls to play with and even a doll house, which I also enjoyed. My grandmother on my mother's side told me that girls need to be ladies and that I should also be a lady. I remember feeling good about being a girl, but I also felt that I could still be a girl and a lady even though I liked to play with boys' toys or do the things they liked to do.

Growing up as a girl in my community automatically associated me with certain roles including playing with dolls and baby dolls and playing house-house. If you wanted to play with cars or computer games, you were labelled a tom-boy, which does not have a good standing in the community in which I grew up in. My mother and grandmother urged me to act like a lady. I remember this because of the comments my mother made about other girls. If my friends played Rugby with their brothers, she would say that it did not look good and that Rugby was not for girls. Instead, my mother encouraged me to play Netball, which I started to enjoy, and in

grade 4 I wanted to play Softball because all my friends played it. Although my mother was not fond of Softball, I ended up playing and loved it. My mother eventually approved of it after she was satisfied that other girls liked playing it. On the other hand, my father loved riding motorcycles and going camping. When I was younger and in pre-school my father worked a lot so he did not spend a lot of time with us, so seeking his approval as I liked spending time with him,, I became interested in riding motorcycles and immediately fell in love with it. My dad bought a motorcycle for himself and one for my brother. My uncle also had one and I would go on riding excursions with my father, brother, and cousins.

My mother did not approve of it because I was the only girl among all the males. She allowed it more regularly when she could come along, or I would invite a friend and my mother would make it a family outing over the weekends, with my uncles, aunts, cousins and grandparents joining in. She became more comfortable with me liking to ride motorcycles and go-carts, but she reminded me to not go too fast. Even with just riding my bicycle with my brother, I would be the one pushing the limits and wanting to go faster than everyone else. I recall the day my brother received a new motorcycle. We were at my parents' business quarters and my brother could not get it to start. I asked if I could have a turn and my father rolled his eyes but said that I could try. I only tried once and was successful. I even managed to 'rev' it up a little – I can still see my mother cringing - and my father and brother could not believe their eyes. They were shocked and then they laughed and said thanks, and I left them to it.

My mother's reservations towards the go-carts and motorcycles were not without reason. When I was in grade 3 my parents, brother, brother's friend and one of my friends went to ride motorbikes and go-carts for the day, at an open section behind the Mahem Raceway. It was a Saturday. My parents went for a ride on my dad's motorbike and my brother with his friend went off for a ride in the Jeepie (a yellow miniature version of a Jeep) – just thinking about the Jeepie brings me a lot of joy. . We even used it at our primary school once for a fundraiser. We had a trailer and could fit more people in for a ride. It was so awesome! We had such great times with it. Thinking about that experience makes me feel like a kid again.



Image 4.6 A photo of my father driving our Jeepie behind Mahem Raceway in Pretoria. This photo was taken in the year 2001.

Only my friend and I were left behind, and we wanted to ride on the go-cart. I was sitting in the front as the driver and she was sitting behind me with one of my baby dolls also coming along for a ride. As soon as I pulled out of our section, I saw a whole bunch of motorbikes coming from the right and I remember some of them passing us but the next thing I can remember was my mother dragging me out from underneath the flipped go-cart and me asking her what happened. My friend was sitting next to our 4x4 and crying from pain - her nose and leg were broken. The guys from the motorbikes helped us to load everything onto our trailer and we were off to the hospital. I was sitting in the front on the passenger's seat with my father while my mother and my friend were on the back seat. My mother held her hand and tried to console her as she was in a lot of pain. There was a medic on the scene, and he was able to splint her broken leg. At least I only had a bruised head and knee and had to get some stitches on my lower leg. When we got home that night my brother had washed my baby doll for me as she was full of blood due to the accident.

When I went to high school and had to choose my subjects and career path, one of my subject choices was Electrical Technology. I selected it to make it possible for me to study Electrical Engineering after school. My father warned me that, "being an electrical engineer is part of a man's world, and you are a girl". Ignoring him, I still took the subject and loved it! It was my favourite subject in school, and I



performed well in it. My father, however, was still persistent and persuaded me to rather apply for a teaching degree. A lot of factors were involved in this decision, including the fact that my parents did not have the funds to send me to university, and that the government provided scholarships for learners who wanted to study for a teaching degree. I was also not accepted for Electrical Engineering at the University of Pretoria, but I was accepted for my second choice, Education.

Even though many factors led me to teaching and I believed that it was the right decision for me, I still wondered why my father was so persistent about me not studying electrical engineering. He himself had a diploma as an instrument technician and is still working in the profession today. One would think that he would have encouraged his daughter to pursue a career in that direction.

#### **4.11 My lowest low**

It was in my second year of teaching, towards the end of the year, late in the third term. I had five grade 8 Mathematics classes that year and it was such a challenge! One of my English classes in particular was the most challenging. It was 8F and they were terrible from the start. From day one I struggled with them, they would enter my class being unruly and very noisy. They refused to settle down and be quiet. Eventually they would sit, but still refused to be quiet and listen. I went on with my lessons every day, trying to teach and hoping that they would eventually pay attention. I felt particularly sorry for the good students who really wanted to be there and learn. One day I was fed up and I called in the disciplinary official, who was also my previous science teacher. He was a big white man with a high-pitched voice as he had a throat operation which impacted his vocal cords. He also struggled to breath at times because he was overweight. His voice and his size was in complete contrast which opened the door for learners to mock him. He cared a great deal about me and was really mad at the learners for misbehaving. He had a talk with them in front of me and I felt so ashamed and helpless, because I knew that in my moment of weakness, I had just made it worse for myself. The learners kept quiet and listened to him, but when he left it only became worse. It felt as if I had given my authority away.

The term went on with me trying to teach a class who refused to be taught. I tried everything in my power. I first spoke to learners individually to find out why they were acting like this, but it did not help. I phoned parents numerous times just to be shouted at the next day by their children. The learners whose parents I phoned would verbally attack me in class about why I had phoned their parents. If I phoned their parents again after them attacking me, their behaviour became even worse. Yes, a few learners' behaviour improved, but it was temporarily. I also wrote demerit letters according to the school's disciplinary system.

Unfortunately, these learners did not care about having a high demerit score or sitting in detention. I discovered that they behaved like this in all their classes. It was as if they had decided to disrupt all their classes. Like me, the other teachers tried to work with their parents, but without any success. After we had exhausted all our efforts, we reported it once more to the disciplinary office. The following day our principal informed us that we were emotionally unintelligent and that we needed to fix the problem ourselves. I was so angry! I was disgusted with his comments and while sitting there I could feel my face frowning and turning red, my body shaking as I felt anger taking over my body and my mind. I could not believe that after all my efforts, this was his response. I felt defeated. And I knew he had said this because he also did not know what to do and it was easier to blame us.

I had given up at this stage. I really did not know what to do. On Fridays I had the 'pleasure' to have grade 8F for the second period as well as the last one. One Friday during the second period the class had surrounded me and confronted me about them writing a test about work they had not yet done. I felt intimidated and scared and remembered saying to myself that I had to get out of the class before they hurt me. Grade 8F was always behind the other classes because I could not teach them properly. Being at the end of the third term, I had given up on trying to change them. I always gave an invitation for those who did not understand something to come and ask me after school. I even gave extra classes to the good students in that class. They were up to date and were not part of those who surrounded me.

Feeling afraid and intimidated I ran out of my class and reported the incident at the disciplinary office. The disciplinary head called out those students and heard their side of the story. During the last period that Friday the female disciplinary officer, Mrs. Preacher, came to my class with those learners. One of the boys, T.S. shouted at me in front of her and said that I was wrong and that they had the right to surround me and confront me. The more I tried to explain to her, the more he shouted at me. I finally gave up and let him finish shouting. I told her then: "See, this is what I have to deal with every day". I felt completely defeated and incompetent. She gave the boys a warning, just for them to do it to another teacher a few days later. Nothing happened to these boys. That Friday afternoon was the first time I cried about my working situation. It was also the first time I really wanted to quit. I told my husband (then boyfriend) that I did not want to work there anymore, and he told me that I should find a job at another school. My father-in-law comforted me that day, which made me feel so much better.

#### **4.12 Being a young female teacher at a high school**

In my second year of teaching, I had 8F for a Maths lesson and I remember asking them to keep quiet so that I could start teaching, when Mr Goldy (the gangster and leader of the class) responded with something in his home language and afterwards some of the students giggled. I had no clue what he said. On that particular day, I had a lot of patience and did not address him in front of the whole class. I just ignored it and went on with the lesson. After class I kept one of the good girls in the class behind and asked her if she would be comfortable in telling me what Mr Goldy said. She said that he commented on me being a young white female teacher and that no one would want to listen to me. I was taken aback as I grew up in post-Apartheid South Africa and so did Mr Goldy. I thought that people were not racists anymore and why he would say something like that was something I did not understand. I had studied education and I was just trying to teach him Maths so that he could be a successful person when he grew up. I remember feeling that I had earned the right to be here no matter my age, skin colour or gender. It really made think about teaching in South Africa differently. I remember thinking that maybe there were bigger issues out there than just me trying to teach them Maths in grade 8.

In my second year I also had this terrible boy in one of my Afrikaans grade 8 Maths classes, Lucifer. He came from a very bad and impoverished area in Pretoria North and did not have any manners. He came to school ready for a fight every day. Some days I would challenge him and other days I would just ignore him. Nothing worked with this boy. It really felt like I had the devil in my class, and it was really difficult. I had recently moved him to the back of the class, hoping that he would just leave me and the rest of the class alone. The rest of the class were good and wanted to work. This class had the cutest girls with the best manners. Lucifer started shouting at me from the back of the class and he used swearing words. I had asked him to stop and just work with us, but he kept on insulting me, using the most terrible swear words, calling me a “dumb bitch” and saying that my class is “fucked up”. I asked him to leave but he just refused and kept on bad mouthing me. He did this every day. It was torture. I remember one of the nice girls looking at me with such sympathy in her eyes after one of his ‘sessions’ that I realised how bad it was and that I should stop engaging with him.

After every class with him I would shake uncontrollably and would feel extreme anxiety as I was not used to this kind of language and hatred. I started by talking to him before he entered my class every day and sometimes it kept him calm and on other days it did not. On the days that he would be calm, he would just lie down on his desk and sleep. I still wonder what went wrong with him and what I had done to evoke such hatred. After the June exams that year Lucifer was expelled from our school and I was so relieved. A few months later I saw him at a supermarket, and he greeted me with such perfect manners, that I could not believe my eyes, or ears. I just quickly said hallo and I moved on, as all of those bad feelings just came rushing back.

In my second year of teaching I was called into the deputy principal’s office, Mrs German. She informed me that one of my students, Charlotte, had made a comment about my appearance and another learner had reported it to her. Charlotte reportedly said: “She is definitely a virgin because her thighs are tight against one another”. This made my heart drop. I could not believe what I was hearing. I felt humiliated that the learners had spoken about me in such a way. It was so personal. While processing all these feelings Mrs German also added that

according to her it was indirectly my fault that this learner made this comment, because my shirt was too short. In that moment I could not fully grasp what had happened. I just replied with an “Okay” and I left.

After leaving her office I became extremely angry and I felt disappointed that she had said this to me, especially because my shirt was quite long and over my thighs. I went straight into a defensive mode and completely lost my trust in her. I thought that she would understand the situation especially as she had more than twenty years’ experience in the teaching profession. After this I realised the importance of having the support of your management team especially as a beginner teacher. I felt very alone facing these learners every day because I did not feel supported by the management, as this was not the first time that Mrs German had let me down. The girl who had said this about me did not receive any kind of punishment or reprimand and the next day she was back in my class.

In my third year of teaching I had five grade 9 classes – all the classes I had the year before for grade 8 Maths. There was a new boy from another school, Ginger, in one of my Afrikaans classes. He had particularly good manners and I did not have to struggle with him. I thought that he was very mature for his age and I could have a normal conversation with him. One day I was doing a lesson sitting on my highchair next to my overhead projector explaining and writing on the projector. I would on occasion turn my body to look back to the board as I was explaining. Halfway into the lesson I noticed the learners giggling each time I would look backwards. I asked the class what was wrong, but no one replied. Two of the good girls stayed behind class and said that each time I would turn around Ginger would place his hand between my legs and as soon as I would turn back around he would remove his hand, moving his hand higher each time. He was sitting in front of the class to my left as I was facing the class. I immediately felt like I was going to be sick and I almost vomited. I remember feeling extremely embarrassed and victimised.

I remember wondering whether he would have done this to a male teacher. It completely freaked me out. I could not understand why he did this as we had a good relationship. I immediately reported this to the disciplinary office, and they

handled it. The next day I moved him to the back corner of my class. He apologised profusely but I was too disgusted to ever have a good relationship with him again. I just tried to ignore him as far as I could.

#### **4.13 My mother as my example**

My mother was very old fashioned and traditional in certain aspects, and I did not agree with all of it. My mother has been the epitome of an obedient Christian Afrikaner woman. This means that she would put her families' needs above her own and would side with my father even if he were wrong. On a normal weekday morning when we still attended primary school, she would draw my father's bath for him and put his clothes on the bed, ready for him to just put on. She did this while she was working fulltime at their business. She would also ensure that our lunch boxes were packed and participated in morning Bible study with us. She also participated in '*die broodjie projek*<sup>3</sup>' at school where she would make sandwiches and drop them off at the school so that the poor children had sandwiches to eat with their soup at break time. When she returned home at night-time with my father, she would cook us all dinner and would dish up for herself last, which meant that she got the least amount of food. While she was cooking, she made sure that our homework was finished and quizzed us on our times tables – I loved that because I would be quicker than my brother and get them all right.

I admired her care for others and especially those struggling in our community. She would help out where she could and if we knew someone at school who needed a lift home after school, she would gladly drop them off at their houses. At the time my brother and I got annoyed by it, but we knew it was for the greater good and I know now that my mother wanted to instil this caring attribute of hers into us. If I had sports at school my mother would be there to support me. For seven years she sponsored my Netball team's bibs and I did not even play for the A-team. I was a B-team Netball player. This generosity also extended into our family. My mother would help her parents out financially and buy them groceries each month. If my mother's siblings needed financial help, my mother would help

---

<sup>3</sup> The food project - a food program where mothers of the school would make sandwiches for the children who were in need. The school would provide the soup. This would often be the only meal these children had for the entire day.

them. I think she enjoyed being able to help and it made her feel like a true Christian Afrikaner woman.

I am glad that I inherited some of her good attributes and that I can see them in myself. When I complained as a child and teenager that life is too hard, my mother would refer to the Anglo-Boer War and the women and children in the concentration camps and would say that there were worse things in life than my complaint. She would refer to those women as being extremely strong both mentally and physically, and what they went through made them 'tough'. She would also say that she could never measure up to those *tannies*<sup>4</sup> and that they were big and strong women. I did not, however, agree with everything she did or believed. She has always been obedient to my father and never corrected him when he was in the wrong. Their marriage has never felt like an equal partnership to me, and from a young age I would talk against it and promise myself that I would have an equal partnership in my marriage. It just felt as if my mother's point of view was sometimes not respected by my father, and my mother just accepted it because she was his wife and should be obedient.

#### **4.14 Connecting with Grade 8F**

During the last few school days of 2015 (my second year of teaching), very few learners came to school, because they would rather prepare for their exams at home. This was such a nice time at school, because my classes were only half full and I could actually teach properly without any disruptions. The learners who were not interested in learning and disrupted the classes, stayed at home, which made it a blissful time. During one of the final periods, I asked 8F why they couldn't always be like this and why they were so disruptive throughout the year. They told me that one of the boys in the class, Mr Goldy, was actually part of a gang and that he was much older than them. He would instruct the class to be disruptive and if they would not, he would threaten them. So out of fear, and also wanting his approval, the boys would do as he said.

---

<sup>4</sup> My mother referred to the boer women who went through the Anglo-Boer War as *tannies* which translates to aunts.

I could not believe my ears! Never during my school years had I ever heard of something like this or been part of it. How can one learner, who has failed grade 8 twice, have so much power? How can the learners listen to him? In my head I thought that this boy has nothing, he comes from nothing, he is failing grade 8 again, but he has this class wrapped around his little finger. These learners told me that they were afraid of him and wanted to change classes because of this, but the school refused. Why did the school not do anything about this? He was clearly a bully. After having this talk with 8F, I understood their behaviour better. I wish I had found this out earlier, because then I could have come up with a solution that would have helped.

Even though 2015 was my worst year at this school, I learned a valuable lesson. I learned that knowing my learners was crucial. Another important lesson I took away that year was that if you can't beat them, join them. My method of discipline did not work for this group so I had to think like them, and make them think that they were one step ahead of me, when actually I was using that to my advantage. I would have the same group the following year, so finding a new way to enforce discipline was crucial. What had worked for me in 2014, did not work in 2015, because the learners were so different. This was another lesson I learned. Not all learners are the same and you need to read your learners carefully and adjust, otherwise you will be the loser.

#### **4.15 Spreading my wings**

I remember 2015 as the worst year in my career with so many lows. Most of it was due to having really difficult learners to teach, but the principal also let me down. I remember that, in the middle of the year, the principal called my friend and I into his office. He wanted to congratulate us on securing permanent departmental posts and my friend and I were stoked. He also made us sign papers to say that we accepted the offers. I remember being so happy and thinking to myself that I had done it - I had managed to secure a stable job with a stable income. I was so proud of myself.

At the end of term 3 the principal just quickly mentioned to me while passing him in the staff room, that he needed to talk to me about my post. I said yes you can talk



now, he said that my post was being taken away from the school and that I might be appointed permanently the following year. I was surprised because I thought I was permanently appointed but he told me that I was not, I then said but what about the paper I had signed with my friend? He said no that was for something else and then he left. I felt so angry that he lied to me! There I was thinking that I had a permanent position. He actually lied to me and I was furious! It felt like it was the final straw! The one thing that had kept me positive at this school had not even been there all along. I remember trying to figure out what game he was playing and that I was so stupid in believing him! My friend did have her permanent post, but for some reason I did not.

I made the decision that I wanted to work at a better school where I could trust my principal and know that I had his support. So I sent out my CV to multiple schools, but nothing happened. I heard about a Mathematics post opening up at Hoërskool Pretoria-Noord where I had done my practice teaching. I had loved my time at that school. It was an all Afrikaans school with great learners and great teachers. I grew so much at that school and I always wanted to return to the school. I applied for the position and was invited for an interview. This was during the November examination time in 2015, and I was also writing examinations as I was in my first year of my honours degree.

I went for the interview, which was tough. It was in front of a panel of nine people which included the principal, HoDs and members of the SGB. Walking out of the interview, knowing that I would not get it, I thought that it was still a good experience. I compared it to my current school, where I did not even get an official interview. I only saw the principal briefly, one day after which he offered the position to me. It was very unprofessional. But because I desperately needed a departmental post, I took it.

After the interview I went home and later received a call from the Hoërskool Pretoria-Noord's principal offering me the job. I was so relieved and excited! Finally, I got to go back and work with better learners and staff. Even though I was filled with excitement, a part of me was filled with fear. I had not informed my principal or HoD that I had applied for this job and now I had to go and tell them. I

wanted to tell the principal first and thought that he would be mad at first but would let me go and sign my transfer paper. I was wrong! When I went to tell him, he became very upset and chased me out of his office. I went to the bathroom with my friend and cried,, as we did not expect him to behave in this way. Fortunately, I could go home as I was still on study leave. In the meantime, the principal from Hoërskool Pretoria-Noord phoned him and told him that he had their second option to trade for me. But my principal was not interested.

The following week he called me in, with the deputy principal, and informed me that he refused to sign my transfer and if I wanted to take the job, I had to resign from my departmental post. So I said that I thought my appointment was temporary, to which he replied that I was permanently appointed. I was confused, I did not know whether I had a permanent post or not. At that time in my career, having a departmental post was very important to me as it gave me job security as well as good benefits. The principal from the Hoërskool Pretoria-Noord informed me that he could give me a School Governing Body (SGB) post but could not promise me a departmental position. Opting for job security and benefits, I had to set aside my grievances with the school and my personal happiness. I ended up staying at the school where I was, but it was very humiliating. All the staff had heard about what happened and everyone was talking about it.

To make things worse, the principal also threatened to sue the other school for poaching his teachers. I heard about the post from my friend who worked there and who knew that I was unhappy at my current school. My principal regarded this as poaching. I knew that he would not actually do that but being a beginner teacher, I was afraid, and I did not know him as well as I did later on. I had only spoken to my friend at Hoërskool Gerrit Maritz about how I had heard about the post, and this now created another problem for me. She had told my HoD that I heard about the post from my friend there, after I had asked her to not talk about it. Through all of this I also had to deal with betrayal from someone I thought was my friend.

#### **4.16 The lack of successful communication**

While being a full-time student at University (from 2010 to 2013) I remember doing a module about communication. I also remember that we had to buy a very expensive textbook for this module, and I thought to myself, “what a waste of money!”. I remember this module focussed solely on how to communicate with your learners and different styles of communication. Working as a beginner teacher I constantly thought about communicating with my learners in such a way that they could understand me.

Working at Hoërskool Gerrit Maritz as a beginner teacher mostly frustrated me. This frustration was due to communication problems between the management team and the teachers. The management team would decide on something and just instruct the rest of us to do it, even though it did not make any sense at all! Sometimes they would take a decision and not inform us, and a week later we would be criticised for not implementing their decision. The lack of successful communication was a major problem for me at this school. Almost daily I thought to myself that these people really need to learn how to communicate. Sometimes, in the staff room in the mornings, the principal would have an argument with another teacher in front of everyone, or he would be furious with a teacher for being absent and badmouth the teacher in front of all the staff – I remember this distinctly as I sat in the front of the staffroom where he stood to talk to us. Sometimes there would be miscommunications between the three principals and we could see it in the mornings at staff briefings. They would also not inform us or the learners about important arrangements, and then only inform us on the actual day or the day before.

Usually, on Fridays in the first term we would have athletics meetings. The whole week we would wonder at what time the buses would leave and whether the learners will be allowed to wear Gerrie wear (Friday sport wear). The teachers and the learners would only find out on the day before the meeting. I remember the learners being furious as they still had to make transport arrangements. I thought that one of the reasons why the school had poor discipline was because the learners did not respect the principals. I remember teaching a class on a Thursday

afternoon for the last period and listening to an announcement from the deputy principal giving information about the athletics the next day. After his announcement, the whole class mumbled, so I asked them what was going on. They said that they were sick of only hearing about the arrangements the day before as they have already arranged with their transport to pick them up a certain time and now they had to change it or get another taxi to get home or they would have to wait a few hours. They also said that their parents were tired of this.

It was also the inability to communicate with the management team that made me feel inferior. If we, as beginner teachers, had recommendations about how things were done at the school, there was no one we could talk to and if we did mention it to one of the principals, they would just laugh at us and tell us why it would not work. Sometimes they would get angry with us. I did understand that they had a lot of stress and that I was only a beginner teacher with no idea of what they had to deal with on a daily basis, but I did also feel that they should handle things in a better way. I often felt “voiceless” when it came to the principals. Even though this was a bad experience for me and brings negative memories with it, it made me promise myself not to become like that and to learn from what they did wrong. I remember when, with other beginner teachers, we made a suggestion about collecting money for the school by allowing the learners to wear casual clothes once a month, and having them paying for it. The deputy principal laughed at us and said that if we really wanted to have a school out of control we should do that. We then said that we were prepared to work with them, as getting in some money was worth more than handling one day of poor discipline. He just refused and we felt so annoyed. We knew this would work as the students had come to us with the idea. They said they would love to wear casual clothes more often and would not mind paying for it. We also had the idea once to bring back Spring Day, and once again we were laughed at. It felt as if change was not welcome and that beginner teachers were only there to shut up and listen, no input from us was welcome.

#### **4.17 Maintaining discipline**

As a high school learner at Hoërskool Gerrit Maritz, I never thought that the school had poor discipline. The classes that I was in never disrupted a class or disrespected a teacher. Yes, we were naughty at times and did not do homework

sometimes, but we never disrespected our teachers. After I left the school for university they had appointed a new principal. Maybe that made a difference. The school had a disciplinary system where learners are given negative points or positive points. The learners received a merit slip with the rule written on it and they needed to sign on the slip. This was the source of a lot of confrontation between me and the learners, as some of them just refused to sign. Luckily, I could just call my HoD and she would sign for me. Just the mere fact that learners would refuse to sign the slip illustrated that they had no respect for the discipline system and that it inevitably does not work.

After learners had acquired 275 negative points, they would go to detention for three days. Unfortunately, some of these learners would not pitch up for detention and nothing would happen to them. Children are smart and they know that if nothing happens to them they do not have to fear any form of punishment. This made my first three years of teaching very hard, as I could not use anything as punishment because the system that I was supposed to use, did not work on those learners and my options were limited.

I knew that I taught in a community where there were a lot of broken homes and that the majority of the learners lived below the bread line which directly impacted the discipline of the school. I also felt that discipline should flow from the principals downwards. On various occasions at assembly the school's learners would blatantly refuse to listen to the principals. The principals would ask the school to keep quiet, but they would be ignored. The principal or deputy principal would completely lose it and storm off. Another teacher would then take over with assembly. I also thought that if they did not respect the principal, how will they respect me? I was only a beginner teacher. This made me question the advice he would give us if we were experiencing problems in the classroom. I thought how can I listen to him if he could not gain the respect of the school. As a high school learner, I had respect for my principal and if I passed him in the corridor, I would greet him. On various occasions I witnessed that learners did not even notice the principal, not to mention greet him.

The longer I taught at Gerrit Maritz the less respect I had for the principals, especially the head principal. It was just the way in which he treated us and talked to us that made me feel this way. For instance, if you wanted to speak with him in his office, he continued with whatever he was busy with and only listened with half an ear. It made me feel disrespected and unimportant. I grew up knowing that when someone spoke to you, you left whatever you were doing and listened attentively. It was a sign of respect taught to me by my parents. For me to be treated like this on more than one occasion, unsettled me. I had high expectations for my principal as I had an excellent principal as an example when I did my practicum at Hoërskool Pretoria-Noord. I thought that all principals were like him. He made you feel important by truly listening to what you had to say and he actually paid attention to your life and knew what was going on.

The lack of respect that the learners and I had for the principal was a major frustration during my beginner years, as I believed that a principal either makes or breaks a school. Working with principal like mine made me feel defeated. I would often compared him to the principal during my practicum and he never measured up. Strangely enough, other teachers also complained about him and how he treated us, but nothing was done to improve the situation. I also thought that if he could hear what we had to say, and take it positively, then things might improve, but it never did. Through this experience I learned that even though the conditions at the school are not favourable, I can still be in charge of my classroom and I found different ways to at least have some form of control in my classroom. I stopped putting my hope in the principals and management and focussed on what I could do with my learners.

#### **4.18 Conversations with my mother and grandfather**

I wanted to give up on various occasions during my beginner years of teaching, as teaching did not turn out as I thought it would . Through all these uncertain times of whether I should continue with the profession or not, I often asked my mother and my grandfather for advice, as they were both teachers and my grandfather had worked at the same school many years ago.

*Elriza: (calling my mother over my cell phone) Hi mum, I think I need to quit.*

*My mother: Hi Reze, oh no, what happened?*

*Elriza: These kids are just too much. They treat me like garbage and do not want to learn, and no one here can help me. It is just too much!*

*My mother: That is not nice at all. Did you do anything to them? Maybe you need some time off?*

*Elriza: I cannot take time off, my principal won't allow it. I just gave them demerits, but I know it won't work.*

*My mother: Have you tried talking to them?*

*Elriza: No, not yet I was just too angry and there was no time.*

*My mother: I think you need to uncover the real problem, and you will only get to it if you talk to them.*

*Elriza: (worked up) Why should I make any effort in talking to them? I am always prepared for my lessons, and I just want to teach, why are they making it difficult?!*

*My mother: That is exactly why. They know that is the thing that pushes you to your limits. You will need to work smarter with them.*

*Elriza: Mmm, that is true. Okay, I will try and work from a different angle. Thanks mum.*

*My mother: You see, you just need some perspective. Always try and put yourself in their shoes. I know it is sometimes difficult because they frustrate you, but for your own sanity, just try it. Remember that they are only children and see them for who and what they are.*

My mother tried to encourage me and help me contextualise a problem in an effort to let me understand all facets of the problem, so that I could make an informed decision. She believed that I should be a teacher and nothing else. She always saw me as a teacher and was glad that I chose it as a career. Sometimes, however, I would be reluctant to talk to my mother about the problems I was facing at school, because she would often tell me what I didn't want to hear. This included that children will be children and that I should try and contextualise the problem to gain a better understanding. She would side with me but would give good advice.

My grandfather on the other hand, started teaching in a different era with different policies and expectations. He was in the education sector from the late 70's and

he kept on teaching until the age of 76. This made him a good source for advice and he just had a different view on things. We would normally catch up when he was at his home in Pretoria.

*My grandfather: How is school going?*

*Elriza: Same old same old. Discipline is not good, and the principal just has no control. It feels like a circus some days.*

*My grandfather: You know, what I have learnt in all my years of teaching is that a principal makes or breaks a school. If the learners do not respect the principal, the school has disciplinary problems. But let's not bad mouth the principal, we do not know what he is going through.*

*Elriza: Yes, I know. It is just so difficult at times because my mother always puts the school on a pedestal. She always refers to it as being such a great school when she attended, and it is not the same now.*

*My grandfather: Yes, the school has changed a lot. In my days you just automatically had respect from the learners and if they gave you trouble, you sorted them out with a hiding on the bum. My learners never failed and when I see them in the shops, they always thank me for being such a good teacher.*

*Elriza: We cannot do that now it is against the law and I also do not want to. I cannot even imagine giving a learner a hiding.*

*My grandfather: Yes, things have changed. I also do not give hidings anymore, but I do sit with more learners failing and some days they make such a noise that I cannot even teach.*

*Elriza: Yes, it is the same with us. So many learners fail, and they like to be noisy. It always feels like it is my fault when they fail.*

*My grandfather: No, if you can honestly say that you did everything you could, and they still fail, then you cannot blame yourself. Remember we are working in a completely different system these days than twenty years ago. The system is failing the learners. The big role players are not thinking about the learners.*

*Elriza: Yes, that is true. If the learners are failing, then they bring the pass percentage down to suit the learners.*

*My grandfather: Yes that is the worst thing they can do because the learners notice that they do not need to work hard to reach the standard set, because the standard will be adjusted to suit them. Children are very clever, and they are*



*creating a culture of demand to get what they want and not a culture of hard work to get you what you want.*

He would remind me of the real reasons for being a teacher and why it is important. His focus has always been on the learners and how to work with them. He gave me some tips – such as finding the leader of a difficult class and working with that learner. I applied it to a difficult class in my third year of teaching and it completely turned the class around. I could not believe it! It made me think of the impact a leader in a class had, and that he/she had a bigger influence on the class than the teacher.

I was intrigued by the stories that my grandfather told me about how the teaching arena had been and how it was now. It fascinated me and had an impact on how I perceived the teaching profession and how I saw myself in it. It also had an impact on my thought processes sometimes. My grandad spoke highly of the teaching profession and still regarded it as the most important profession. He never regretted the fact that teaching was his career and was extremely proud of it. This also embedded a sense of pride in me because of what I was doing. Hence, it was a big shock when I entered the profession and discovered that the sense of importance and pride was not there. This definitely hindered my own pride in my profession, and I had to work hard to build it up again.

#### **4.19 My pride in the profession**

Fresh from University, here I go  
Ready to make a difference,  
But lo,  
This is not what I intended,  
My dream versus my reality,

Classes being out of control,  
Not caring about their education and future.  
What future? They ask me,  
I sit and think how far my uni days are now from me,  
Where is my pride?

It was taken by the learner who threatened my life,  
It was taken by my principal who played me like a harp,  
It was taken by a failing system that no one tells you about,  
Whereto from here?  
I ask sincere...

#### **4. 20 Lack of collaboration**

When I started working in my first full time position, I felt isolated in terms of my subject. Collaboration was not a thing in our department. I shared my grade 9 group with a teacher who had a few years of experience, but she was only at school for the first term and then went on maternity leave. She did not really offer advice or direction and no one else offered help except another teacher who gave me her grade 9 file. This also did not help as it was in no specific order and was not organised at all. It was one of those files where everything was just inserted no matter the order. I felt that I could not use it as it did not make sense. I started using the Curriculum and Assessment Policy Statement (CAPS) document alongside the textbooks I had purchased and the prescribed book that each child received.

During this time, it felt normal to be on my own doing my own thing and I was free to explore different resources and teaching methods. I could do things in my own way. To a certain extent it worked for me as I am the kind of person that prefers working on her own. But what if it was someone else who abused the situation and did not work at the level and standard set by the Education Department? The learners and the school would have been let down. The school did not have clear instructions or guidelines as to what they expected of me as a teacher or from the learners. This might have contributed to the low performance from learners in that school. And it was not only in the Maths department, but throughout the school and across all subjects.

Looking back at it now, collaboration with my department would have been a great tool that could have guided me in the direction which I needed to be. To have had an existing resource bank with guidance from other teachers might have helped

me to be more of a team player, which could then have helped me develop certain skills faster and improve my teaching practice overall. I could have learned how to communicate with others in my department better, and we could have exchanged ideas and made the workload less. Instead of working collaboratively, each person worked on their own, created their own recourses and kept it to themselves. Because of this all classes worked on their own level and some classes performed better than others. When it came to tests, some classes had not covered the work they should have and were therefore either not able to write the test or were disadvantaged by the whole situation. This in turn made the department look bad and the learners to have a negative attitude towards Maths.

#### **4.21 Class sizes**

In my first year of teaching my class sizes were fairly small. They ranged between the high twenties to the low thirties. I did not have a class bigger than 34 learners which made teaching so much easier. I was able to get to know my learners and where they struggled with the work. It also made class management easier which lead to less class disruptions. When I think back to my first year of teaching, I think of it as my easiest year in terms of workload. I only had one grade for which I had to prepare lessons for, even though in Afrikaans and English. I only coached one Netball team with another teacher, I coached one Softball team and organised the Maths Olympiad. I was not overwhelmed by extramural activities or extra tasks. I have to mention that this was something the school did right. They respected that I was still trying to find my feet in the profession, and I am very thankful for that.

As I moved on to the next few years my workload became more, but so did my class sizes. I went from fairly small to moderately sized classes to full classes. Classes with 40 learners in them. This happened in my second year of teaching and it might have contributed to why it was my worst year of teaching so far. I had five grade 8 classes each packed with 40 learners and I had to learn all their names and prepare lessons with the curriculum content of a new grade. It was over whelming, but I enjoyed it. I enjoyed the grade 8 curriculum and the fact that the school bought proper textbooks for this group. My greatest challenge was the class sizes and managing my classroom that was packed with 40 students.

I had to rethink my approach to classroom management. For example, the previous year I managed to check my learners homework and books at least four times a week, but with all the big classes I could not do that, as it would take up too much of my time. I had to change my approach and was only able to check homework once a week where I could only do up to 10 learners a period. I also had to think of new ways to gain my learners' attention and keep it, so that learning actually did take place. It was difficult to give each learner the same amount of attention.

I could not get to all my learners in the way I would have liked. I had to shift my focus completely. Checking books and homework was no longer a priority. Rather getting everyone into class, seated and ready to work was now my priority. It was also difficult to give them work and let them work on their own, as they would rather play around or talk instead of working. During that year I learned a lot of patience, something I had thought I had. I had to calm myself down regularly, take a deep breath and then move on. Because of the big class sizes the learners would all join forces against me and if they decided they were not in the mood to work then they didn't. The big class sizes made teaching extremely difficult, but at the same time taught me valuable lessons.

#### **4.22 Setting up my classroom**

Setting up my classroom before commencing teaching in my first year was something that I looked forward to. I was excited to paint, rearrange and clean my class. However, when I saw my classroom for the first time, I did not expect it to look as it did at the time. The walls were all written on and needed to be painted, the tables were written and scratched on, and needed to be sanded off and varnished, the windows were dirty and full of dust and the cupboards were filled with the previous teacher's notes, files and transparencies. It was a nightmare. The only good thing was the floor as it had been tiled during the December school holidays. Mrs Angel insisted that I should come in before school started to clean up and paint. I had to buy my own paint, cleaning materials and varnish to clean up the class. I also had to ask my family to help me as I would not have been able to do it all on my own.

At the time, I did not mind doing it as I enjoyed it, but when I look back at it now, I get upset about it. It was the school's responsibility to get the class painted and the tables sanded off and not the teacher's, especially if it is a beginner teacher who did not receive a salary yet. I remember one day while I was cleaning out the class the principal walked in and greeted me, then he commended me on the job I had done. As a beginner teacher I was very impressed by this, but when I look back now, I realise what a bad manager he truly was. He also turned to my HoD and said "she does not even have a contract yet, but here she is buying paint".

I could have left the classroom as it was, but I could not imagine teaching in such an environment or for the learners to learn in such an environment. I wanted to be successful in my profession and I regarded this as an important aspect of success. I wanted my learners to want to come to class and enjoy being in my class. Throughout my first year I did get compliments from learners and staff about the good condition my class was in, and it was rewarding hearing everyone's positive feedback. It did help to clean up and get it ready for the year ahead and each year I just had to do minor improvements to make sure that my classroom was in a good condition.

#### **4.23 Being taken advantage of**

University did not teach me to be "street wise" when it came to teaching and how not to be taken advantage of as a beginner teacher. My principal would inform me about certain things and I would believe him as I did not know any better, but when talking to others about it, I would realise how he had taken advantage of me being a beginner teacher and being clueless about certain things. For example, when I started teaching, I did not get my salary from the department after my first month on the job as I should have. It took three months before I received my first salary advice and salary from the department. In the meantime, the school paid me what I needed, and I had to pay it back to the school once I received my backpay from the department. I accepted this as normal as everyone at school went through the same process. It was only when I had spoken to a friend teaching at Hoërskool Pretoria-Noord that I realised how he had lied to me. She was also a beginner teacher in a government position, and she received her salary advice and her salary at the end of her first month working, the way it was supposed to happen. It

came down to my principal not handing in my documentation on time which made the whole process drag on and resulted in me not getting paid when I should have.

This was the first incident that made me realise that my principal did not support me as he should have. It also decreased my trust I had in him and gave birth to a continuous cycle of distrust. During my years at that school I saw how he took advantage of other beginner teachers and that it was something he regarded as normal. At the end of my first year I asked one of the deputy principals if I could have leave. He informed me that teachers do not get any leave and that I can forget about it. Afterwards I asked around, read up on it and found that a teacher does get certain days in a year for sick, study, maternity and urgent private affairs leave. This teacher clearly took advantage of my lack of knowledge and used it for his own agenda. I did feel clueless and incompetent as I did not know and remember wishing that either the school or the University had informed me about this and what I was entitled to.

#### **4.24 Behind with technology**

Going from an ordinary government high school to the University of Pretoria was a big step in terms of technology and keeping up with new developments within technology. Going to University, I was computer literate because I had Information Technology as one of my elective subjects at school and I was relatively clued up on it. It was just the way the University utilised technology when communicating, presenting lectures, and doing assessments that was a bit different to what I was used to. Using technology as part of my studies was normal and I relied on it. Stepping into the classroom for my first job felt like going back in time. My classroom, like all the other classrooms in the school did not have data projectors or whiteboards. They still had the green chalkboards and overhead projectors. In using the overhead projectors, I needed transparencies which were expensive. The school only provided us with twenty transparencies at the beginning of the year and when those were finished we had to buy our own with our own money.

The school did not keep up with modern technology and its development. It really frustrated me, as I thought of the learners and the quality of their education. I felt that not having access to a data projector limited my teaching. It was not

impossible to teach, I was just very limited especially teaching modern learners who had grown up in advanced technological times. Learners often commented on the lack of technology in the classrooms and suggested that I used new technology. They knew what was going on in other schools. Not having modern technology in my classroom made me feel stuck and stagnating as I was limited to what I could do in class. Teachers from other schools shared their experiences with me and it only pushed me into making a plan to have a data projector in my class. I was able to use mine for two years, after which it needed costly repairs and I was not prepared to pay the bill. So I had to go back to the overhead projector. The overhead project was a good tool to use when writing out examples and it was easier than writing on the board. It still did not have the same value as a data projector. I don't think the school realised how far behind they were when it came to modern technology.

One morning at staff briefing the principal was bragging about the department sending us white boards, and interactive white boards, and that we should just come and ask if we wanted one as they were specifically for Science and Maths. I was so excited! I went to him immediately after briefing and asked him if I could have one of the interactive whiteboards for my classroom. He replied that there would only be one and that science would get it as they need it most. So I asked if I could then get a white board for my class. He laughed at me and asked: "Where should we get the money for that?". I replied saying that he just said in briefing that the department was going to send some. He said he would put my name on the list and let me know. He never did.

I had a good relationship with one of the groundsman at school and he told me that there was an old whiteboard in storage somewhere. He brought it for me one day and I was so happy! It was very old and had permanent damage, but I could work with it. I asked the groundsman to put it up for me but he never did. I had the whiteboard balancing on a table in my class for a year, when the Mechanics teacher, by chance, walked in and saw this. He immediately went to his class, grabbed a drill and put the board on the wall for me. I was so thankful but angry at the same time. Something so simple and the groundsman did not want to help me. I realised that I could not ask anyone for help, but should just sort it out myself.

#### **4.25 Lack of leadership roles**

Being a young beginner teacher at my school limited me in certain ways. I was given limited responsibility which was acceptable according to management. They liked to give me things to do, but it was limited. This was not really something that made me grow as a teacher. These tasks were usually responsibilities that others did not want anymore and they were passed on to the new person at school. For example, when I started my first year, Mrs Angel almost immediately gave me the annual Maths Olympiad to organise and run. Of course, I did not refuse, as I wanted to make a positive impression. Likewise with the World Knowledge Olympiad - I just received an information sheet indicating that I needed to enter learners. No one asked me if I would like to do it. I did not mind and am glad that I did do it. I just wished that I would be exposed to a leadership position.

At the school certain teachers were responsible for certain activities, and they remained there until they retired. If I look back, I could have learned something of value to my profession by being in control of Netball or being an assistant to help with the Netball organisation. Also, maybe taking on a role as an Assistant to the Maths HoD would have taught me some much-needed leadership skills. At that time in my career I might have felt overwhelmed and could not imagine adding another thing to my already overloaded plate. If this had been in place, as an initiative from the school's side, to expose beginner teachers to leadership roles, it might have empowered the leadership of the school, as beginner teachers sometimes have good ideas that can benefit the school. It could also have extended my teacher identity in a leadership direction. I would usually only have to do as people told me to and was not part of any collaboration where I could have questioned decisions or made recommendations.

#### **4.26 Blessed with a good HoD**

An aspect that stands out from my beginner years of teaching was my HoD, Mrs Angel. She was a really tough person with high expectations, and I am thankful for having her as my HoD during my beginner years. When I started my career, I thought that she would be very prescriptive in what was expected of me as a teacher, but she was not. It was only when it came to setting up tests that she had certain expectations. In her leadership style, she was laid back and only reacted



when you did something that was not according to school policy. She did not prescribe how I should teach but would give helpful advice when it came to classroom management and discipline. About the content itself or how to teach it, she would leave me alone. She would be open to questions if I needed help and she would very patiently help me.

Having been taught Maths by her from Grade 10 to 12, I expected her to be as I remembered, but being her colleague surprised me. She was a different person; she was a kind and friendly person. She gave me the advice to not smile at my students for at least the first two terms of the year, and that was exactly what she had done with us as learners as well. She was a professional manager and teacher and was someone to look up to. She dressed professionally with shoes which had some type of heel. Her presentation was flawless, and she demanded respect. She had been a teacher for over 30 years, and more than 20 of those years were at Hoërskool Gerrit Maritz. She had so much knowledge of her subject that it blew my mind and it still does. She had an answer for any question I asked based on Maths content.

The learners were afraid of her as she was very strict and did not allow for any tardiness. Even her classroom was immaculate. It was always clean and tidy with no papers on the floor. The tables and chairs were always kept in their rows and no one would ever dare write on her tables. She had the cleanest tables in all the school. She was a tall woman which helped with her discipline. Not even the men at school would challenge her as they knew she would not back down. It was not what she said, but that she did not need to say anything. It was as if everyone just knew who she was and what she stood for. Even in our department she would not demand rigorous unexpected class visits or lean over your shoulder and question your teaching. She was not that kind of leader. She did not have to verbalise her expectations, as we knew it beforehand.

As a beginner teacher I looked up to her. I did not always agree with her method of doing things as it was outdated with regard to certain aspects, but I did learn a lot from her and she was open to teaching me. She taught me to demand respect from my learners and peers through how I presented myself. This included how I

would dress, talk to others and my manner of doing things. I remember her saying once, that her learners had commented on how well she was dressed for a teacher and that was how she knew she was wearing the right clothes. She said they told her that she looked very professional and they also wanted to look like that one day. She taught me to not procrastinate and to do things immediately as when you leave it for later it would all heap up and you would feel overwhelmed. She taught me to support my fellow teachers and to know that kids will be kids. They will try to bring you down, but if you do what you need to, they will not be successful.

I was in her office once and a parent had phoned in to see the principal to complain about a Maths teacher. She said that she kept on fighting for the teacher in the meeting and that I should remember to take the teacher's side as children are liars sometimes, and that parents get too emotional when it comes to their children. She taught me to be strict in class and demand the highest quality work from my learners. I will forever be grateful to her. She was the best I could ask for. She had the ability to make me feel like a colleague even though I was very young and sometimes ignorant.

#### **4.27 Male domination**

Teaching in a school where the majority of teachers are female, I expected that the management team would also be mostly women. In this school however, the management was mostly made up of male teachers. This brought about a lot of confrontation and disagreements as the female staff would not agree with the decisions of the mainly male management team. Traditional gender roles were definitely still present at this school as the male staff expected a certain behaviour as part of being a woman. I remember the vice principal telling a female staff member that her hormones were to blame for her not coping with her learners' behaviour, when in fact she was a good teacher, always prepared for her lessons and was just the unlucky one to teach a terrible class of teenage boys who refused to do their work.

Being a young female teacher in a school where the majority of decisions were made by male staff, was extremely difficult for me. Even as a beginner teacher I

questioned their decisions as it was not always very logical. It sometimes felt as though they were thinking backwards and they would never give anyone an opportunity to criticise or change their decisions. They would only allow suggestions if it suited them. Once a male member of the management team made a decision, then it was set in stone and no one could question or change his decision. Only he himself could do that. It was as if they had given themselves this power over making decisions for the school and no one else had an input. I remember Mrs Angel would challenge their decisions on multiple occasions and she would do it during morning staff briefings in the hope that the rest of the staff would side with her and that the management team would change their decision. It would normally erupt in heated discussions where, sometimes, she would be successful, but not always.

This “male power” rubbed off on the other male staff who thought that they were untouchable. Male staff would let certain students sit outside their classes or walk around the school grounds without a pass and no one would say anything. When a certain female teacher had students sit outside her class for not doing their homework, one of the vice principals pointedly corrected her behaviour in a morning staff briefing, in front of all the staff. I cannot remember an occasion where they did the same to a male colleague. It was when female teachers did something that they did not approve of that it would be corrected in front of all the staff members. It made me wonder why they would discipline female staff publicly, but not male staff. I realised that it had to be easier for them to discipline a female than a male as a female would react differently than a male would. A male might activate his fight response, whereas a female would rather activate her flight response. I know I would have. Maybe if I had been in the profession longer, I would rather fight, but even female teachers who worked at the school for 20+ years would not. They would mainly ignore the male management team and just do their job as they clearly knew how after 20+ years of experience.

The male domination at this school was something that gave me a feeling of distrust because I did not feel that they cared about the school as a whole, but rather what they and only they thought was best. I remember one of the older female Maths teachers, who was part of the management team, complained about

the decisions made by male members and how frustrating it was that they did not want to listen to reason. They made a decision, on the timetable, that did not work and which led to the timetable being changed five times in one term. This happened because they asked a new male staff member to take over the scheduling of the timetable and he made a mess of it. This female teacher had said from the start that he should not do it but they still asked him to do it. I remember her saying that at least she would retire in a year and then she would be rid of all this. I remember thinking that if they did not listen to an experienced teacher, how would they even try to listen to me?

#### **4.28 Backwards thinking in terms of gender roles**

I grew up with the idea that women can accomplish anything they set their minds to and that we do not have to adhere to traditional gender roles or expectations. Having modern learners in my classes also added to this as they had grown up in an era where women were now entering careers that were once male dominated and they were being successful at it. When I started teaching at Hoërskool Gerrit Maritz I expected the same mindset. As my second year went by, I started to realise that this was not the case at this school, from the school's side. For example, some of the Grade 8 girls wanted to start a girls' soccer team in 2015, but they were refused by management and were told that girls have only two options of winter sport at the school, Netball and Hockey, and that they could choose one. They were also told that the school did not have the funds or means to start a girls' soccer team. The girls asked why boys could have Rugby, Hockey and Soccer as winter sport options, but girls not. Again, they replied that there were not enough resources.

Being resilient, these girls kept at it and eventually in 2018 a girls' soccer team was approved. They created a business plan including possible players, teachers from the school to help out and a coach from outside school. They presented their business plan to the School Governing Body and it was approved. These girls demonstrated absolute resilience and persistence for their cause and continued with it. It made me proud to know that I taught these girls and that they did not back down after being put down. I expected the school to run with the idea and work with the girls and teachers to make this happen. This made me realise one

should not put down learners easily, but help and support them in their endeavours, especially if they can make a difference and enhance their lives. I also realised that being a teacher is not just about teaching my subject, but about touching lives and helping learners to grow and make memories that will last them a lifetime.

Another example of backwards thinking in terms of gender roles was the expectations of girls at the school. The school was both an academic and technical school that offered technical subjects like Electrical, Mechanical and Civil Technology as electives from Grade 10 to 12. At the school there was a set expectation that these subjects are for boys and the classes were mostly comprised of boys. The only teachers teaching the subjects were males. There were however a few girls in these classes. Maybe one or two in each class which was almost nothing compared to the number of boys in these classes. When learners selected their subjects in grade 10, girls who chose these technical subjects were often labelled as “tom boys”, just looking for attention in a class full of boys.

From the school’s side, girls were not encouraged to choose one of these subjects as they were seen as subjects designed for boys, and boys would do a trade after school, not girls. When girls showed an interest in these subjects, they were discouraged from selecting them, but if boys showed an interest they were encouraged. The opposite was also true. If girls chose consumer studies they were encouraged, but when boys displayed an interest, their choice was queried, and they were asked to rather consider the technical subjects. One would expect this twenty years ago when people lived in a different time. This was very strange to me as when I was at the school I remember the Electrical Technology teacher bragging about having me and another girl in his class to the whole group of grade 9’s making their subject choices. I always felt proud taking that subject, but I do remember some hostility from the boys in the class. They said that we were good with theory but not with the practical side of things, even though we usually outperformed them. I remember in Matric when the teacher’s son asked to borrow my final portfolio to see how I did it. He ended up copying me and getting a higher

grade, but he never admitted this to his dad even though other learners had witnessed it.

#### **4.29 Salary**

When I started teaching, I did not have a car or big bond payment to pay each month, so I did not feel that my salary was insufficient. At the end of my first year my husband and I bought our own house, and I needed a new car as my old one was giving problems. When I started my second year, I realised what everyone was talking about. My teacher's salary was not bad compared to other occupations. It covered all my expenses including things like our bond payment, levy, electricity bill, car payment, car insurance, rates and taxes, petrol, food, medical aid and clothing accounts. We by no means lived above what we earned as we had bought a small townhouse in a complex, and we bought groceries wherever the specials were. After I paid all my expenses, there was nothing left for extra things such as going out or saving up for a holiday. This forced me to continue tutoring after school hours so that I had extra money to "live".

I struggled with this decision for years as I felt that I had too much on my plate. Being a teacher full time was enough and adding tutoring on to it stretched me to the limit. I often wanted to stop tutoring as my days were just too full and I was working the whole time. I had to make a mind shift and re-structure my day. This only happened in my second year of teaching. While being a student I used to go to the gym every day and I enjoyed it, but having to work full time and tutor made it impossible, so I decided to go for a run each morning instead. I started enjoying it as my dog, Sisu went with me. It was hard in the beginning to wake up a little bit earlier, but it was worth it, as I had more energy throughout the day. I also tried to do as much schoolwork during the school day as I could so that, after tutoring, I did not have to sit at home working again. I managed to do this most of the time, but some weeks were hectic with so much marking that I had to mark at home and do planning for the week on Sundays. After school hours I had to concentrate on my tutor kids as they also had needs and questions that I had to help them with. I also had to teach them to be productive when I arrived at their home, so that I did not have to sit there until late at night.

In the beginning it was tough but as the time went by they got better at it and we did not work longer than 1.5 to 2 hours each day. When I got home, I tried not to think of work and to spend time with my family and dogs. It was tough, but it taught me how to maximise my time and prioritise what I had to do. I am glad I had to work through this in my beginner years as it taught me a valuable skill. It did of course have an impact on the time and effort I could put into school, but I gave my best, in spite of time constraints. I just had to do it, otherwise I would work at school but have no finances to truly live.

#### **4.30 Gift of being myself**

One gift I was given by the school during my beginner years was to be myself in my classroom. I was given the opportunity to do things in a way that made me feel comfortable. Even though I did have to adjust my thinking and way of doing things, I was still given enough space to reflect on my teaching and be myself in the classroom. I was not regularly checked upon which made me feel more comfortable as I did not have to worry about preparing for an observation. This method may not have worked for everybody, but it did work for me.

I chose to be involved in Netball rather than Hockey and no one questioned that. I did coach Softball in my first year and it did not go very well as I did not agree with the way things were done, - especially in terms of the parents and the level of competitiveness that came with it. I did enjoy playing the sport as a school student, but I did not enjoy coaching it. In my second year I told the Sport coordinator that I did not want to coach Softball and he was okay with it. He understood that I really hated it and that it would not be a good thing for me or the girls I would coach.

Mrs Angel allowed me to teach how I wanted to teach in my classroom. She would not criticise me endlessly, but rather gave me space to be myself and do what I loved most, and that was working with children and teaching them how to do Maths. She would give me advice if I asked for it, and if she saw something that worried her, she would step in and ask if everything is okay. She did not dictate my teaching at all. The same went with the principal. He would allow me to teach in my way and would not dictate what teachers should do. I remember a colleague telling me, in my first year, that according to the principal I was doing great and

that I was “ruling” the learners I taught. I remember her exact words. I was very pleased with myself. I just remember wishing that he had said it to me himself. In my beginner years I was given space to be myself and to get to know myself. This was a good thing as I was given the space to live out my religion even though teaching full time. When I look back at those beginner years I do see a lot of effort, disappointment and distrust but I also see a time of growth and opportunity in which I learned valuable teacher life lessons that I still utilise today. It was a hectic time in my life, but it was also a beautiful time.

#### **4.31 Conclusion**

This chapter includes my personal story in the form of self-reflexive narratives that were derived from memory work, interviews, and critical conversations with family members and a friend. From this I was able to identify the major themes relevant to my study and that answered my research questions. In chapter 5 I identify my major themes by applying my conceptual framework in the analyses and interpretation phase. I have also used thematic analysis in analysing and interpreting my narrative. This is discussed in more detail in chapter 5.



## CHAPTER 5: DATA ANALYSIS AND INTERPRETATION

### 5.1 Introduction

Autoethnography is a highly personal and social process (Chang, 2016). It involved myself, as the researcher, sharing my very personal story while taking into account the socio-cultural context wherein my story occurred (Chang, 2016; Ellis, Adam & Bochner, 2011). In chapter 4 I have told my story as a beginner female Mathematics teacher in South Africa. I painted the socio-cultural landscape of my lived experiences as a white Christian Afrikaner female student in my primary and high schools. I have also included the context of my workplace where I started my first teaching position as a beginner female Mathematics teacher. Although chapter 4 included rich autoethnographic data, this data means nothing unless it is analysed and interpreted to form meaning (Mlangeni, 2019). This chapter will thus cover the interpretation and analysis of my autoethnographic data.

### 5.2 The process of analysing and interpreting of my data

While I was writing my self-reflexive narratives and thinking ‘with’ my story, I was already starting the data analysis process by thinking ‘about’ my story (Jarvis, 2014). This is because as I was implementing memory work and deciding on what was important and relevant to include in my story, I was already analysing it by thinking how it would impact my narrative (Chang, Ngunjiri & Hernandez, 2013). This is why Chang et al. (2013) separate the analysis and interpretation of data. In this study, I did the same. Looking at the process of doing autoethnography there is no clearly prescribed approach (Harwood & Eaves, 2017). This non prescribed process can rather be seen as a “generative journey” (Harwood & Eaves, 2017:146) or a repetitive process wherein the different stages are blended together (Chang, 2013).

In generating and gathering data there are various sources to use such as “memories, memorabilia, documents about themselves, official records, photos, interviews with others, and on-going self-reflexive and self-observational memos” (Chang, 2013:108). This non-prescriptive process in writing my autoethnography caused my data generation and collection to be messy at times. In the process of

writing my story, which included twenty nine shorter narratives, I had to read my narratives multiple times to ensure that certain events were grouped together and that my presentation of it did not come across as disorganised. When my narrative came across as disorganised, it also made it difficult to analyse and interpret and therefore I had to limit the messiness.

The analysis of my narrative included the process of coding the data and grouping and regrouping them into important elements and themes (Chang et al., 2013). I employed the process of thematic analysis to analyse and interpret my autoethnographic data (Wagner et al., 2012). This process allowed me to code my data and afterwards identify the broad themes that emerged from my self-reflexive narratives. The interpretation of my narrative, on the other hand, included a more holistic process whereby I looked for deeper meaning and themes within my narrative, through the socio-cultural aspect and theoretical and conceptual lenses of my study (Chang et al., 2013). The interpretation of my narrative was therefore a discovery of the socio-cultural messages which emerged from my narrative and which led me to understand my beginner teacher identity as well as the context in which it was constructed. During the phase of interpreting my data, I kept referring back to my conceptual framework which included elements of the Social Identity Theory (Tajfel & Turner, 1979) and the Self-efficacy Theory (Bandura, 1994) and how this presented itself within my data. I also referred back to my research done on identity, teacher identity, aspects influencing my teacher identity and being a female in the field of STEM (cf. 2.2-2.5).

The broad themes that emerged from my narrative included my familial heritage as influence on my teacher identity construction, intrinsic factors influencing my teacher identity construction and factors in the professional context influencing my teacher identity construction. These themes will now be discussed in more detail along with all relevant sub-themes.

### **5.3 Emerging themes and sub-themes from my data**

Table 5.1 (below) illustrates the main themes and sub-themes in a tabulated format. A detailed discussion of the themes and sub-themes follow.

**Table 5.1: Themes and sub-themes in a tabulated format**

<b>THEMES</b>	<b>SUB-THEMES</b>
5.3.1 Familial heritage as influence on my teacher identity construction	5.3.1.1 My ancestral line of White Christian Afrikaner teachers
	5.3.1.2 An inheritance of commitment and dedication
	5.3.1.3 Fear in the face of race
5.3.2 Intrinsic factors influencing my teacher identity construction	5.3.2.1 Passion for Mathematics Education
	5.3.2.2 Performing above the red line
5.3.3 Factors in the professional context influencing my teacher identity construction	5.3.3.1 Authority in the classroom
	5.3.3.2 Being a female beginner teacher
	5.3.3.3 Collaboration with my superiors
	5.3.3.4 The transition from being a student to becoming a teacher

### **5.3.1 Familial heritage as influence on my teacher identity construction**

During the analysis and interpretation phase of my narrative it was very clear that my familial heritage played a major part in my teacher identity construction, and I therefore identified it as a major theme. This in turn led to three sub themes: my ancestral line of White Christian Afrikaner teachers, an inheritance of commitment and dedication and fear in the face of race. In the next section I discuss how both sub-themes fitted into this major theme.

#### **5.3.1.1 My ancestral line of White Christian Afrikaner teachers**

In interpreting my narrative, it was evident that becoming a teacher in the new South Africa, came as a reality shock to me. This initial unforeseen shock was driven by my preconceived, and developed, perceptions created by my grandfather and my mother who were also teachers. Being a third-generation teacher in my White Christian Afrikaner family brought with it certain expectations and perceptions of the teaching profession. These expectations and perceptions

were formed by the stories that were told by my mother and grandfather about their experiences of the previous education system, which was fundamentally different from the one in which I found myself as a teacher.

Stories play a significant role in constructing and recalling a family's heritage which ultimately defines who we are (Peters, 2017). My grandfather and my mother had strong opinions on South Africa's past education system and these views were passed on to me. These views included that the previous system (National Christian Education) was a good system and that (White) schools in those days flourished under that system because it was based on Christianity, and my family regarded this as a contributor to academic success and an education based on values and morals. These views and perceptions intentionally and unintentionally informed my personal, professional, social, and teacher identity and how I perceived education in South Africa. This is seen in my narrative which also shows that what I expected and what I came across as a beginner teacher was different.

My grandfather had a conservative view about the post-apartheid South African education system. He believed that the curriculum did not have enough substance and detail, and that the examinations were below the standard that he was used to. When the new Outcomes Based curriculum (Curriculum 2005) was made compulsory for all schools in South Africa in the late 1990's (Mouton, Louw & Strydom, 2013), my grandfather was a teacher at a White Afrikaans school in Middelburg, Mpumalanga. He commented that this school did not feel the immediate impact of the new curriculum, as they retained their school culture and adapted their learning strategies to the new curriculum, but did not allow the new curriculum to change their long standing Afrikaner school culture of high academic performance and Christian nationalist identity. Jansen (2013:89) refers to this kind of reaction by teachers, to the curriculum, as an "exoskeleton impressed on their teaching materials, learners' writing books and assessment records", where their "teaching practice was a mirror image of the new curriculum policy". He further adds that this "exoskeleton" protects the "endoskeleton" of the school which includes the "values, identity, memory and tradition of the school" (Jansen, 2013:89).

This process of adjusting the exoskeleton to protect the endoskeleton is what I did as a beginner teacher. As a beginner teacher I knew that there were procedures that I needed to follow and a curriculum to teach, but I wanted to protect my endoskeleton of strict Christian Afrikaner values. This led to a major confrontation between my endoskeleton and the exoskeleton. As is seen in my narrative the more I wanted to protect my endoskeleton, by adjusting the exoskeleton, the more the exoskeleton of my reality broke down. I came to realise that I had to adjust my endoskeleton (a strong and conservative Afrikaner Christian background) to fit into the exoskeleton (the reality of teaching in a new South African context). In doing this I had to be more accepting of my new environment and find ways in which it fitted my personal identity.

My grandfather has been a devout Christian and one of his favourite verses in the Bible, that he regularly quoted, is Proverbs 13:24: *Whoever spared the rod hates his son, but he who loves him is diligent to discipline him*. This was one of the most important values that he applied as a teacher. He still feels that today's schools lack discipline and that this culture of disorderliness could possibly be a reason for poor academic performance. In my narrative I emphasised my classroom discipline and I measured my success as a teacher by the respect I received from my learners and how disciplined my classroom was. In my mind a disciplined classroom would yield good academic results. However, this did not happen in my classroom. This need for a disciplined classroom was in part created by my upbringing as a White Christian Afrikaner, where discipline was at the centre of my upbringing and was taught at home. The fact that my classroom was now undisciplined created me to question my self-efficacy as a teacher.

My mother was brought up in a Christian household and went to public schools that upheld the Christian National Education curriculum (Kriel, 2013). She has been a devout Christian and instilled those Christian values into my upbringing. She reminded me of a *volksmoeder*<sup>5</sup> that regarded the wellbeing of her family as

---

<sup>5</sup> Refers to the volksmoeder ideology that classified Afrikaner women as obedient to males and wherein they saw the Afrikaner nation as a collective that they had to protect and guide (Van der Westhuizen 2017).

the utmost importance and above her own needs, as seen in my narrative where I wrote about her (Pretorius, 2019). I have never seen myself as a *volksmoeder* as I do not agree with the ideology's view that a woman should be obedient to her husband and stay at home while looking after the children (Lombard, 2020). The *volksmoeder* ideology was part of my mother's upbringing and easier for her to accept as she grew up with National Christian Education and the welfare of the *volk* was top priority in those days (Vincent, 1999). I grew up in post-apartheid South Africa and did not accept the *volksmoeder* ideology, even though my mother was a perfect example of it. My mother's example of portraying a *volksmoeder* did not fit the bill for me and this was highlighted even more when it was difficult for me to just accept the behaviour and rules set by the mostly male management team during my beginner teacher years. As seen in my narrative it was difficult at times starting my career as a teacher this way, but it was a way in which I could put the *volksmoeder* ideology, that was prevalent in my life through my mother, to rest.

Once I started teaching, my preconceived views and perceptions were in conflict with the reality that I was facing. When looking back at this with my theoretical and conceptual lenses, I was constantly negotiating between the in-group and the out-group. The in-group, with which I had identified for the greater part of my life, included my mother and grandfather's views on the education system of South Africa and the perceptions I had of the teaching profession. This included my Christian Afrikaner values handed down from my mother and grandfather. The out-group was the current South African education system that brought with it the perceived undisciplined classrooms, disrespectful learners, and little to no Christian values. It was difficult to identify with my reality as it was so different from my expectations. Even though I struggled to identify with my new reality, I had to find a middle ground otherwise I would not have survived as a beginner teacher. Looking back with my theoretical and conceptual lenses I used the four sources of the Self-efficacy theory (Bandura, 1994) which includes mastery experiences, social persuasion, vicarious experiences and emotional states to improve my self-efficacy as a beginner teacher.

The reality that I was facing was that most of the time what I encountered went against my White Christian Afrikaner values. The above-mentioned aspects of the Self-efficacy theory made it possible for me to navigate in my new reality and, in a sense, accept certain aspects of the out-group and thus adjust my in-group, because it was now my new reality. I could no longer focus on the negative aspects of the out-group to make myself feel like a person that was better than the out-group. By using the four sources of the Self-efficacy theory it was possible for me to accept certain aspects of the out-group and adjust what I originally identified with.

When interpreting my narrative, it became clear that my ancestral line of White Christian Afrikaner teachers as a sub-theme was evident in my both my narratives and interviews conducted with my family. My preconceived views and expectations, formed in part by my mother and grandfather, played a bigger role in the construction of my beginner teacher identity than I had originally thought. In my literature review of this study I focussed on the fact that various authors (Oleson & Hora, 2013; Bransford, Brown & Cocking, 1999; Schoenfeld, 2000; Beijsaard, 2004; Boylan & Woolsey, 2015; Schepens, Aelterman & Vlerick, 2009) commented on the strong influence that close family relations have on the teacher's identity and that it forms part of the basis of the beginner teacher's teacher identity. I also looked at the complexity of the new environment that the teacher is faced with and how difficult it can be for the beginner teacher to navigate through this period of her career while keeping in mind her past experiences (cf. 2.4.1).

During my beginner teacher years I had a strongly developed White Christian Afrikaner personal identity which made it even more attractive to teach at my old high school, Hoërskool Gerrit Maritz, because it still had a Christian culture, Christian values and Afrikaans as one of the languages of instruction. This all made me feel comfortable in a familiar context. By applying my theoretical and conceptual lenses to my narrative, it highlights the fact that I faced a sense of discord between my ancestral line of White Afrikaner Christian teachers and the reality of teaching at Hoërskool Gerrit Maritz. I constantly moved between the in-group (my very strong White Christian Afrikaner background) and the out-group (my reality of teaching in the new South Africa). Even though I was born in 1991

and was brought up in the post-apartheid South Africa, my strong ancestral line of White Christian Afrikaner teachers formed my perceived reality of the teaching profession, which was in contrast to what I experienced once I started teaching. Even though my new reality was contradicting my perceived reality, something drove me to stay in the profession and not to give up. This included a deep commitment and dedication that I inherited from my ancestors. This is therefore my second sub-theme that emerged from my narrative which I will explore in more detail in the next section.

### **5.3.1.2 An inheritance of commitment and dedication**

My narrative reveals that I displayed a deep commitment and dedication to teaching. A sense of commitment to teaching has an influence on a teacher's work satisfaction (Moses, Berry, Saab & Admiraal, 2017). A commitment to something can be seen as having a "high level of attachment" to it (Moses et al., 2017:445). A teacher with a deep commitment will therefore have an attachment to teaching which can include a specific affinity to the "teaching profession, school organisation, students and teaching subjects" (Moses et al., 2017:445). Zhang, Yu & Liu (2019) comment on the positive relationship between the motivation and commitment to teaching. They have stated that a fully committed teacher will exhibit a strong sense of intrinsic motivation to enter the teaching profession and will therefore stay committed to teaching (Zhang et al., 2019). In my Mathematical and Statistical thought process it relates to a scatter graph with a strong positive linear relationship where, as my motivation for teaching increased, so my commitment to teaching also increased.

In analysing and interpreting my narrative I realised that my grandfather and my mother had a strong influence on my motivation to become a teacher and my deep commitment and dedication to stay in the profession, even though I faced difficulties as a beginner female teacher. Through analysing my narrative, I realised that my motivation was based on the discussions I had previously in my youth with my mother, father and grandfather and were revealed when I was writing my narrative. In our interviews my mother referred to the love that I had for working with children and that I inherited that attribute from her. My mother was an early childhood development educator and she also taught at our church's Sunday



School. She had also been the Sunday School superintendent for a few years. In our interview she also referred to my grandfather and his love for children and how that was passed on to me.

In my grandfather's interview with me he referred to me as an "*uitgeknipte onderwyseres*" which translates to being a person who was cut out to be a teacher from an early age. In my socio-cultural setting it meant that the way in which I did things and how I interacted with others, all indicated to him that I would be a teacher one day. This transcends the fact that he was a White Afrikaner teacher for many years and that his perceptions of me were formed by his background. This ultimately also influenced my view of what a teacher should be. He added that the example that he set as a teacher and coach also influenced my decision to become a teacher.

My grandfather and my mother both referred to teaching as being a "roeping" (a calling) to work with children and they taught me that one does not quit one's calling. Jansen (2013) also reiterated the fact that former White Afrikaner schools had the best interest of the child at their core. During the big change in the South African Education system, former White Afrikaner schools would not strike with the unions or let politics influence their teaching. The teachers and learners remained in their classrooms, committed to their teaching and education (Jansen, 2013). This was passed on to me by my grandfather and my mother who both emphasised the importance of the child in the teaching profession and that everything we do is for the child. In my narrative I came to realise that I did not teach for the content or the institution, but that I wanted to teach my learners and see them grow. This is what drove my commitment and it was instilled in me by my White Christian Afrikaner grandfather and mother.

### **5.3.1.3 Fear in the face of race**

My narrative displays racial tension as I had to navigate through unknown racial relationships in my class to which I was not exposed as a White Afrikaner child. In my racially mixed classes I was for the first time confronted with the issue of race. I came to realise that race was not only a physical concept, as I had believed for

many years, but a social construct. As a social construct race, in my case, gave a new interpretation and even a contestation of my upbringing and how I had to deal with the perceived unequal power relationship between my Black learners and myself. This is substantiated by Lewis (2019) who regards race as an essential social construct in his struggle to a more human society based on justice and equality. The Black Malema<sup>6</sup> in my class disrupted my understanding of race, equality, power and even being a woman. As White Afrikaner I tended to ignore this racial tension and tended to carry on with the job of teaching mathematics.

As seen in my narrative, my parents brought me up with the idea that all people are equal and that not one race should have any advantage over others due to their skin colour, but that we should all be seen as equals with equal opportunities, no matter what happened in the past. Even though my grandfather started teaching during the Apartheid era, he finished his career at a school in Ellisras teaching only black learners. We would talk about how much he enjoyed teaching his learners and how well they performed. I was not made aware of the struggles that non-white South Africans went through during the Apartheid era. My father used to say to me that I was brought up in the post-Apartheid era and that what happened in the past has nothing to do with me. I was brought up to ignore skin colour. This can be defined as colour-blindness (Lewis, 2019; Crenshaw, 2011).

During my beginner teacher years I taught white, black, Indian and coloured learners and I treated them all the same. I was afraid of being called a racist. People in my family, in particular white people, are afraid of talking about race in public as they know that what happened before 1994 will continue to hang over their heads. My fear of admitting race had an influence on the way some of my learners perceived me. Being colour-blind influenced the construction of my beginner teacher identity.

---

<sup>6</sup> Julius Malema is a political figure in South Africa who is head of the party, the EFF (Economic Freedom Fighters). He is well known for his physical appearance of having a bald head and an extended stomach. He is very good at influencing the youth of South Africa and has a negative reputation with the white people in South Africa as he has verbalised his dislike of white people on numerous public occasions.

### **5.3.2 Intrinsic factors influencing my teacher identity construction**

In analysing and interpreting my narrative I discovered a second major theme which I called 'intrinsic factors influencing my teacher identity construction'. This major theme included two sub-themes called 'a passion for Mathematics Education' and 'performing above the red line'. Both these sub-themes examine the intrinsic factors that ultimately influenced my teacher identity construction. These sub-themes will now be discussed in further detail.

#### **5.3.2.1 A passion for Mathematics Education**

"Passion fuels motivation increases wellbeing and gives meaning to individuals' lives" (Gilalm, Channa, Gilal, Gilal & Shah, 2019:889). Passion can be described as the driving force behind a person engaging in an activity that is enjoyable, liked, regarded as important and where the person spends a lot of time doing it (Gilalm et al., 2019). In terms of passion for teaching, Day (2004) defines it as a love that teachers have in the belief that they can have an influence in the lives of their learners and the love for the subject that they teach. In analysing and interpreting my narrative, it became evident that my passion for Mathematics education started when I was still a learner at school. This passion was fuelled by the pure joy that I experienced when returning to school at the beginning of each year. Meeting my teachers on the first day of school and catching up with all my friends was always exciting, but the most exciting thing about going back to school for me was the learning that occurred. I absolutely enjoyed listening in class and learning.

The fact that I performed well in my subjects also stimulated my passion for Mathematics education. In my self-reflexive narratives I wrote that the Mathematics class was my favourite class as I usually had strict Mathematics teachers and that our Mathematics lessons occurred in mostly quiet classrooms which allowed me to learn at my best. The Mathematics class formed part of my in-group and was evident in the process of establishing my beginner female teacher identity

My passion for education continued to develop throughout high school and in my grade 11 year at school I realised, when I had to choose a career path, that it was my passion to pursue a career in it. . My parents and I were discussing options

and teaching seemed like a natural fit. After a lot of self-reflection, I realised that I have always loved going to school and learning and that I unconsciously valued my education as the most important predictor of a person's success. I had high levels of self-efficacy when it came to school and academia as I mostly did well in my subjects. Bhardwaj (2016) refers to education "as the vehicle of knowledge, self-preservation and success" which perfectly encapsulates my view on education and how that view drove me to become a teacher. Even though I was not a Mathematics genius at school, I enjoyed Mathematics and its processes and when I wanted to give up on a complicated Mathematics problem, my passion and love for the subject drove me to find a solution. During my last three months of practicum for teaching, my passion for Mathematics education was awoken, and I knew that I wanted to be a Mathematics teacher. During this process my self-efficacy as a Mathematics teacher grew and I identified strongly with the Mathematics class as part of my in-group.

During my beginner years I was focussed on ensuring that my learners developed a passion for Mathematics and that they would value the importance of education as a strong predictor of their success one day. In reading my self-reflexive narratives I came to realise that my learners did not completely share my passion for Mathematics and education. I had linked my success to their academic performance. During this time of my life I encountered a lot of self-doubt and my self-efficacy as a Mathematics teacher was fluctuating. My passion for Mathematics education however was what kept me going. This passion for Mathematics education "fuelled the motivation" (Marsh, Vallerand, Lafrenière, Parker, Morin, Carbonneau, Jowett, Bureau, Fernet, Guay, Salah Abduljabbar & Paquet, 2013:2) for me to continue and not to give up. My passion for Mathematics education also gave me "meaning in life" (Marsh et al., 2013:2) which caused me to get up and go to work every day.

During my interview with my friend and former colleague, An, she made it clear that looking at my first three years of teaching, she could see that I fitted in with the profession and that it was not just a job to me, but rather a calling. She also commented on the fact that she looked up to me and that I was a good example to her. We spoke about the fact that my learners could talk to me about their

personal lives, and not just about Mathematics and their academic performance, which was an indicator that I was a good teacher. My passion for the profession drove me to further my studies and I completed my Honours degree in 2016. We also spoke about the way in which I handled negative situations in my first three years of teaching and that I tried to handle the negative aspects in a positive way. She gave the example of the red Department of Basic Education books that I was given in my first year of teaching and how I changed that negative situation into a positive one by buying a good textbook and creating worksheets that my learners could use. This too was mentioned in my self-reflexive narratives. The interview with her highlighted the fact that it was my passion for Mathematics education that drove me and motivated me to keep going even though I encountered negative situations, also that my passion for it was seen by others and influenced those around me.

### 5.3.2.2 Performing above the red line

In my self-reflexive narratives, I wrote the following about my high school Mathematics teacher, Mrs Angel and her reaction towards our results of our first test in Grade 10:

*After our first term in Grade 10, she printed out every learner's mark for the term and put the papers up, on the wall outside her classroom. **There was a red line drawn in the results.** Every learner above the red line had a mark higher than 60%. Every learner who received 60% and less was below the red line. This was harsh. I remember a girl who was furious and who started crying – she became head girl of our class in grade 11. Luckily, my name was above the red line, but this did not take away the fact that I resented Mrs Angel a little bit. I felt empathy for this girl. It was a public humiliation for some. We were told that everyone below the red line would not make it up to grade 12 in Maths and were persuaded to rather take Mathematics Literacy. Many learners did this, but some refused.*

This identified itself as a sub-theme in my narrative. Since pre-primary I have been obsessed with my academic performance and abilities. As seen in my narratives, I was moved up from the Grade RR class to the Grade R class at my pre-primary

school as my teacher felt that I was too smart for the class and that I would get bored. As a result, I was enrolled into Grade 1 with my brother, but a year earlier than I should have been, based on my age. As I was analysing and interpreting my data I realised that I have always had this innate feeling of having to perform *above the red line*, where the red line would represent a certain percentage or the smartest learners in my grade. This kept me in school and made me adopt good study habits to ensure that I performed *above the red line*. I also identified with the top performers in my grade and they formed part of my in-group. I could not identify with learners in my grade that were lazy and underperformed and this transferred into my beginner teacher years. I expected my learners to also perform *above the red line*, but most of them did not and I could not identify with them and they therefore formed part of the out-group. If they were to perform *above the red line* I would also perform *above the red line* and they would form part of my in-group. Due to my learners' underperformance in Mathematics, my self-efficacy in my abilities as a Mathematics teacher and Mathematician dwindled.

As seen in my conceptual framework (cf. 2.7.3.1) the first stage in this framework was to establish a complete teacher identity before moving on to establishing my female beginner teacher identity through the lens of the Self-efficacy theory of Albert Bandura (1994). I measured my success by my learners' academic performance and because they were underperforming, I questioned my whole teacher identity. I then had to work through the four sources of influence of the Self-efficacy theory to re-establish my complete teacher identity and ultimately my female beginner teacher identity.

The first source, mastery experiences (Bandura, 1994), required me to rethink my method of teaching so that I could improve my learners' performance as well as improve my level of success. Botha & Rens (2018) argued that beginner teacher programs in South Africa are mainly theory based and not a lot of time is spent preparing the beginner teachers for the practical and emotionally draining side of the profession. Based on my academic program at university, I was also focussed on the content of Mathematics and I measured my success in terms of how well my learners knew the content. According to Morrow (2007) content knowledge is needed to teach a subject, but one cannot teach successfully with only content

knowledge. As seen in my self-reflexive narratives I started to work on the way that I communicated with my learners in class and the relationships that I had with them. I shifted my focus from being purely content based in my pedagogy to learner centred and by doing that my learners were more engaged and their performance improved. As I made more and better connections with my learners it reinforced and improved my self-efficacy in being a Mathematics teacher. The second source of influence was vicarious experiences (Bandura, 1994) where I would observe other successful teachers and their habits and encompass them in my profession. As I became more comfortable with the staff at Hoërskool Gerrit Maritz, I reached out to other teachers teaching the same classes as I did and asked for advice on how they were improving their performances. I would observe how other teachers would treat learners and communicate with them and this inspired me to do a similar thing. As I implemented these strategies, I could see a change in my learners and in myself. I changed the way I viewed success and my new *red line* was making a difference in my learners' lives and no longer only their academic performance. I had the viewpoint that if my classroom was learner-centred, all other things would fall into place, and it did.

The third source was social persuasion (Bandura, 1994). To uplift my self-efficacy as a Mathematics teacher, I would talk to my mother and grandfather and they would reinforce my abilities as a Mathematics teacher and therefore strengthen my self-efficacy. Getting positive feedback from learners' parents, the principal and Mrs Angel also uplifted my self-efficacy. As seen in my self-reflexive narratives I also received negative social persuasion from Mrs Angel which caused me to doubt my abilities as a Mathematics teacher. The fourth source was emotional states (Bandura, 1994), and this includes how a positive mood can help uplift a person's self-efficacy. In the interview with my father, he made it clear that he has always seen me as an emotional person. In analysing my self-reflexive narratives, it was also clear that I was riding an emotional roller coaster at times, but that I tried to see the good and react in a positive way. I would also do things to put me in a positive mood like eating healthy foods and going for my morning run each day. I would give my body and my mind some time to rest and recharge over the weekends so that I was in a positive mood when the new week started. This does

not mean that my mood was always positive as there were instances at school that would put me in a bad or negative mood.

During my beginner teacher years, I therefore realised that defining my *red line* in only one way (subject content) can be changed to be more learner centred. I realised that my learners will not remember the Mathematics done in class, but that they will remember the way that they felt in the Mathematics class. This caused a significant shift in my way of teaching as well as my outlook on the profession and allowed me stay in the profession and ultimately influenced the construction of my beginner teacher identity.

### **5.3.3 Factors in the professional context influencing my teacher identity construction**

My narrative displays several factors in the professional context that influenced my teacher identity construction, and this is why I identified it as my third major theme. These factors included authority in the classroom, collaboration with my superiors and the transition from being a student to becoming a teacher. They were all identified as sub-themes within my third major theme. They will be discussed in the next section.

#### **5.3.3.1 Authority in the classroom**

Kinser-Traut & Turner (2018) defines authority as “to mean the right, or power, an individual has, either given or assumed, to shape learning and events within the classroom”. As a beginner teacher, authority in the classroom to me meant that I was in charge of the classroom and that the responsibility for all teaching and learning as well as discipline, lied with me. It also meant that my learners should respect me as the teacher in the classroom and accept my authority. This perception of authority came from my up bringing which my parents instilled in me. As a child it was normal for me to sit quietly in my classrooms, respect my teachers and do as I was told. It was only during my beginner teacher years that I realised that I had to change my perception of authority in the classroom as I did not receive the “automatic” respect from my learners that I thought I would. This was not unusual as various teachers who taught at Hoërskool Gerrit Maritz had



disciplinary problems in their classrooms. It is also something that has been seen world-wide as adolescents question the authority of their teachers (Graça, Calheiros & Barata, 2012). A possible contributor to the problem is the complex interpersonal relationships between teachers and their learners within the classroom (Pace & Hemmings, 2007). Graça et al., (2012:1066) argue that the importance of authority in “an academic context” cannot be ignored as it plays a significant role in the teaching and learning process.

As seen in my self-reflexive narratives, in my first year of teaching my way of discipline in the classroom worked with my students. Demanding respect from them in the way I spoke to them and in the way I dressed, rewarded me with their respect. My disciplinary problems were at a minimum in my first year of teaching. It was in my second year of teaching that I soon realised that my way of demanding respect had to change. I went through a process of reflecting on my practice and dealing with learners like Mr Goldy, Lucifer, Charlotte and Ginger. This made me realise that I was working with children and that they were all victims of their circumstances and that I should not judge them according to my standards, but that I should treat them with patience and give them some form of authority in the classroom. One way of sharing authority in the classroom is to bring learners’ lives outside of school into the classroom so that they feel a sense of ownership in the classroom (Kinser-Traut & Turner, 2018). I applied this with Mr Goldy, a learner in the grade 8F class, as he had such an influence on the class. Once I had him in my corner the class became my favourite class to teach. I learned to not work against these learners, but that I should find a way of working with them and share the authority with them.

Another way of working with my learners in the Mathematics classroom was through inquiry-based learning where the learner is actively involved in taking responsibility for their learning and where the authority is shared between the teacher and the learners (Depaepe, De Corte & Verschaffel, 2012). This is in contrast to the more traditional Mathematics classrooms where the teacher takes full responsibility for the learners’ learning and where the learners are passive role players in the construction of their own learning (Depaepe et al., 2012). I started experimenting with this method of teaching towards the end of my second year of

teaching. It was difficult to motivate my learners to think for themselves and not to rely on me to give them the answers. Towards the end of my third year of teaching I completed a module for my Honours degree that specifically focussed on this way of teaching, and it helped me tremendously in applying inquiry-based teaching and learning in my classroom. As part of my course I had to film myself where I was teaching a lesson using inquiry-based learning. Afterwards I reflected with my learners, who had participated in this lesson, and their main feedback was that I forced them to think for themselves, and that they were in charge of their own learning, which also demanded their participation. This did not work for every one of my classes or for every lesson, but when I saw an opportunity to employ this method, I did, and that also helped me in sharing authority in my classrooms which caused my discipline in the classroom to be much better during my fourth and fifth teaching years at Hoërskool Gerrit Maritz.

### **5.3.3.2 Being a female beginner teacher**

As noted in my narrative, being a female beginner teacher brought with it certain challenges, that male beginner teachers might not face at all, or might face to a lesser degree. In the classroom learners like Mr Goldy, Lucifer, Charlotte and Ginger, all demonstrated a lack of respect towards me because of my gender. These learners might not have displayed this behaviour towards me if I were a male. As mentioned in my literature review (cf. 2.5) traditional gender roles (Mlangeni, 2019; Stromquist et al., 2013; Bhana & Pillay, 2012) were still prevalent in my community during my beginner teacher years. This contributed to the fact that some of my learners displayed less respect towards me, as they viewed me as a female who was meant to be at home, taking care of a family, and not in the classroom teaching them Mathematics.

The fact that I was a young White Afrikaner teacher also did not help in establishing respect with some of my black learners. During my beginner teacher years I realised that the South Africa that I grew up in was not the same South Africa that most of my black learners grew up in. In the classroom I expected them to respect me as their teacher, without taking into account that, based on my outward appearance and my background, they were not able to identify with me. I learned that everyone is not equal and that everyone does not have same

opportunities, as my parents had taught me. I had to learn how to connect with those learners so that they could identify with my personality, even though my outward appearance and my background were significantly different to theirs. It was again a situation where my new reality was different to my expectations, and I had to adjust my in-group so that I could achieve a complete social identity and eventually construct my female beginner teacher identity.

In constructing my female beginner teacher identity at Hoërskool Gerrit Maritz my conceptual lens provided some insight. The second section of my conceptual framework, which included the four sources of the Self-efficacy theory (Bandura, 1994), provided insight into how I constructed my female beginner teacher identity at a time when some of my learners did not display respect towards me due to my gender. I utilised the first source of mastery experiences, where I would try different methods of connecting with those students, and when those methods worked it strengthened my self-efficacy as a female beginner teacher. I also looked at other female beginner teachers, who had good relationships and interacted well with those learners, and asked for their advice and then implemented it. When I implemented their advice and it worked, my self-efficacy as a beginner teacher became stronger. The third source, social persuasion, also improved my self-efficacy as other teachers would notice that I was able to maintain good relationships with those learners, and their positive feedback made a difference. Also, social persuasion from learners that appreciated my interest in their lives helped to improve my self-efficacy as a beginner teacher. Receiving positive feedback from other teachers and my learners put me in a positive mood, which brings me to the final source which was emotional states. Being in a positive mood at school, because I was successful in building relationships with my learners, boosted my self-efficacy as a beginner teacher.

As a student and a teacher of Mathematics I found the stereotype of how a female Mathematician should look and act quite different to how I perceived myself. I had to align my personal identity with my STEM identity and not adhere to the stereotype that females in the STEM fields do not care about their outer appearance, , are not emotional but isolate themselves and only adhere to reason and logic (cf. 2.5.2). Mrs Angel was a perfect example of a STEM teacher with a

strong STEM identity. She did care about her outer appearance but did not seek personal relationships with her learners and saw doing Mathematics in only one way. In her classroom reason and logic were deemed to be above everything else. I, however, saw that the majority of my learners could not identify with Mathematics as a subject, if reason and logic were placed above everything else. I therefore merged my personal identity with my STEM identity by accepting that I was a female with emotions who cared about her outer appearance, and that I could still be a STEM professional and enjoy teaching Mathematics without adhering to the stereotype. Being a female beginner teacher in a professional and STEM setting came with several difficulties, which male teachers might not face or face less, and the experiences that came with those difficulties had an influence on the construction of my female beginner teacher identity.

### **5.3.3.3 Collaboration with my superiors**

Schuck, Aubusson, Buchanan, Varadharajan & Burke (2018) wrote about the influence that the micro political atmosphere of the school has on the teacher identity of beginner teachers. They are of the opinion that if beginner teachers are not guided or shown how to navigate within the micro political atmosphere of the school, it could lead to them feeling unsafe in this environment and being bullied by other senior staff (Schuck et al., 2018). Another factor that was highlighted by beginner teachers was their inability to collaborate with senior staff and how this influenced their teacher identity development negatively (Schuck et al., 2018).

Collaboration with one's superiors as a beginner teacher can be daunting and cause anxiety (Clandelin, Schaefer, Long, Steeves, McKenzie-Robblee, Pinnegar, Wnuk & Downey, 2012), but teaching at one's old high school with one's own teachers can be even more stressful as they are now one's colleagues and not one's teachers. The dynamic changes completely. I was faced with this situation, and, coming from a traditional Christian Afrikaner household, it was difficult to view my old high school teachers as colleagues and I struggled to call them by their first names, hence I kept using *juffrou/meneer* (miss/mister).

In analysing and interpreting my self-reflexive narratives, the collaboration with my superiors identified itself as a sub-theme, especially the collaboration or rather the lack of collaboration with the principal and the senior management team (henceforth, SMT). In my narratives I wrote about how the SMT would disregard any suggestions that beginner teachers would have, and how the principal would take advantage of the fact that I did not know of all the procedures, either relating to my salary or being appointed in a government position. As the SMT was made up of mainly males, the opinions that the mostly female staff would have, were also disregarded. This created a feeling of resentment and distrust as I felt powerless when it came to making suggestions or having a voice. Even though the school had a traditional Afrikaner background where women were seen as mere subordinates, and not as leaders, I was shocked that this was still enforced on a daily basis. As there was bias towards beginner male teachers at the school, I attributed this lack of collaboration with my male superiors to my gender. The fact that the SMT was mainly made up of males, was not something that was only happening at this school. This occurrence has shown itself worldwide and in other African countries like Ghana and Kenya (Mukolwe, Okwara & Ajowi, 2016). It is a worldwide phenomenon that women are underrepresented in leadership roles in the education sector (Mukholwe et al., 2016).

The lack of collaboration with my female superiors was attributed to the fact that I was a beginner teacher. When it came to working with Mrs Angel I would find it difficult to exchange ideas with her about teaching Mathematics as she was used to doing things in her way. When it came to mentoring me about my classroom discipline, she had one way of dealing with it. As stated in my self-reflexive narratives, her advice was not to smile at my learners and be very strict with them. She advised me not to be friendly and to record everything they did wrong, such as coming late to class and not doing their homework, so that I could show this to their parents at parents' evening. I trusted her and used her method in my first year of teaching, and it seemed to work well, even though it felt unnatural to me. She did not believe in building relationships with one's learners as she felt that she did not want to be their friend and she wanted to keep some boundaries. In my second year of teaching this method of discipline did not work with my classes and she could not provide me with another way of dealing with my learners.

Collaborating with Mrs German was a difficult activity as she had traditional standards that would cloud her judgement when it came to beginner teachers. She was in charge of the mentoring program at the school and I was grateful to have had a mentoring program during my first year of teaching. Towards the end of my first year of teaching I had to complete a reflection questionnaire wherein I made some suggestions to improve the mentoring program, but those suggestions never came to light. Mrs German was also in charge of the learners' wellbeing at the school and she would favour the learners before her teachers, even if the learners were in the wrong. This came out in my self-reflexive narratives in the way she dealt with what happened with Malema and Charlotte in my classroom. Mrs German was not open for criticism or suggestions which made collaboration almost impossible. She was also a Mathematics teacher, and other teachers informed me that I should be thankful that Mrs Angel was my HoD, and not Mrs German as she would enforce weekly inspections of Mathematics classrooms and would be very critical of one's pedagogy. Knowing that she was also a Mathematics teacher, I thought that it would count in my favour and that we could bond. That was not the case. During my beginner teaching years I cannot remember that she gave me any form of recognition or respect which made collaboration with her even more difficult.

In a perfect world, successful collaboration with my superiors would have been possible and I would have been able to learn from it and grow from it. However, my experience was the complete opposite and also had an influence on the construction of my beginner teacher identity.

#### **5.3.3.4 The transition from being a student to becoming a teacher**

It is important to note that identity development is regarded as a "highly complex, discontinuous, multi-faceted and a non-linear process of interaction between individuals and their various social and professional environments" (Akkerman & Meijer, 2011). This was the same for me as I transitioned from a student of Mathematics to a teacher of Mathematics. The process of transitioning from a student to a teacher is both a professional and a personal process where the "stakes are high" and it is crucial that the beginner teacher is present throughout

this emotional process (Day & Gu, 2010). In this process the personal identity and the professional identity interlink and it is crucial for beginner teachers to experience this immersion of the personal and professional (Morrison, 2013). Teacher identity can also be seen as the explanation of one's self within a variety of contexts and experiences of teaching (Morrison, 2013). Also, beginner teachers' existing perceptions and understanding of the teaching profession, combined with their work environment, is what ultimately forms their teacher identity (Morrison, 2013). Morrison (2013) makes a valuable statement when saying that the beginner teachers who "talk positively about themselves" as teachers, can be seen as having a natural calling for teaching. When beginner teachers look at their teacher identity and reflect on it, they help to establish who they are in the teaching profession, and this also helps them in developing their teaching profession, after the initial stages.

Transitioning from a student of Mathematics to a teacher of Mathematics was not an easy process for me. I had to work through a range of emotions and pre-existing perceptions and this required a lot of change and adjustment to my personal and social identity. In changing and adjusting my personal and social identities, it gave birth to my beginner teacher identity. My beginner teacher identity was then influenced by numerous situations, people and contexts.

The transition from being a student to becoming a teacher is a complex process subject to a range of influences. As seen in chapter 2 (cf. 2.4, 2.5) of this dissertation the beginner teacher goes through a process of developing her teacher identity and in this process she needs to intertwine her personal identity and her professional identity. Another aspect mentioned in 2.4.2 is that the new environment in which the beginner teacher finds herself has an influence on her developing teacher identity (Morrison, 2013). The conceptual framework designed for this study illustrates this transition from being a student to becoming a teacher, based on my own experiences. As mentioned in chapter 2 (cf. 2.7.3), the beginner teacher enters the profession with a developed personal identity and is then confronted with a new environment that influences her personal and social identity. The beginner teacher makes comparisons between her in-group and her out-group. In an effort to identify with her in-group she will focus on the negative

aspects of the out-group. After identifying with the in-group, the beginner teacher will now have a satisfied social identity. The next phase of my conceptual framework includes the construction of the female beginner teacher's identity by implementing the four sources of the Self-efficacy theory (Bandura, 1994). In implementing these four sources (mastery experiences, social persuasion, vicarious experiences and emotional states) the beginner female teacher improves her own self-efficacy as a teacher in this new environment and therefore constructs her beginner teacher identity.

In analysing and interpreting the interviews done with my family and a friend I realised that they all viewed me in a similar way. They saw me as a hard-working student who goes all out for what I want in life. They also saw me as a student who respected the institution of education and had a passion for working with children. In my self-reflexive narratives, it was clear that this transition was a difficult one at times, and that I had a good dose of reality in my beginner years. I learned a few things about the teaching profession, including that being a teacher is hard work and not a straightforward process, one is always learning about one's subject and one's learners, also do not underestimate the support of family and friends and be kind to yourself.

#### **5.4 Conclusion**

The three main themes identified during the data analysis and interpretation phase perfectly encapsulate my experiences as a female beginner teacher teaching Mathematics. The sub-themes that emerged from my narrative also contributed to answering my two research questions. My first research question was: How did I construct my beginner teacher identity as a female Mathematics teacher? My second main theme of intrinsic factors influencing my teacher identity construction, contributed to answering my first research question. This included a passion for Mathematics education and my need to perform above the red line. My third main theme included the factors in the professional context which influenced my teacher identity construction and also contributed in answering my first research question.



My second research question stipulated: Why did I construct my beginner teacher identity as a female Mathematics teacher in the way I did? In answering this question my first main theme, familial heritage as influence on my teacher identity construction, gave a good overview as my ancestral line of White Christian Afrikaner teachers, my inheritance of commitment and dedication from my mother and grandfather and fear in the face of race contributed to how I constructed my beginner teacher identity. My conceptual framework also guided me in answering my first research question and was included in my discussion of these two sub-themes. The next chapter includes the conclusion of my study.

## CHAPTER 6: CONCLUSION OF THE STUDY

### 6.1 Introduction

In this final chapter I provide an overview of my study and reflect on my research methodology. I also elaborate on the findings of my study and attempt to answer my research questions. The recommendations I make for future research are based on my findings and the challenges that I encountered throughout this study. I end this chapter off with a final reflection and conclusion.

### 6.2 Review of my study

I now review the chapters of my study by discussing how each chapter unfolded. In chapter 1 I elaborated on my innate attraction to autobiographical texts and thus also autoethnographies in the academic setting. I set the context and background of my autoethnography and positioned myself within my autoethnography. I provided a rich description of my rationale for completing this study by including my personal and professional justification as well as conceptual and scholarly motivation. I then provided a brief overview of my purpose for doing this study and the focus of the study. I included clarification on key concepts used which included construction, beginner teacher, beginner teacher identity, female beginner teacher identity and Mathematics education in South Africa. I also gave an overview of my research paradigm, research methodology of using thematic analysis to analyse and interpret my autoethnography and the quality measures used. Finally, I presented a brief overview of current research assumptions as was applicable to my study.

Chapter 2 included an in-depth review of all possible relevant literature relevant to my study. I identified three broad sections that I wanted to investigate. This included identity as pertaining to the personal, professional, social, teacher and gender. The second included aspects of becoming a beginner teacher. The third was challenging identities which included becoming a female professional and female stereotype-threat. Within these broad terms I delved into greater depth of each and elaborated on the current literature after which I also provided a synthesis of my review. This was followed by an extensive look into my conceptual framework that was designed from two theoretical frameworks which included the

Social Identity theory (Tajfel & Turner, 1979) and the Self-Efficacy theory (Bandura, 1994).

In chapter 3 I explored my research methodology and design. I started off with a look at my chosen research approach which was qualitative in nature and followed this by elaborating on the purpose of a research design and how it related to my study. I then delved into my research paradigm which included the epistemological and ontological assumptions of the interpretivist paradigm. The next section included an in-depth look into my research methodology of an autoethnography and what that meant for my autoethnography. I then investigated the research instruments used to inspire my autoethnography. This included memory work, artifacts, my researcher's journal and interviews and critical conversations with co-constructors of my autoethnography. I then explored the process of analysing my data and how I utilised the process of thematic analysis. The assurance of reliability and credibility of my study was then explained by using verisimilitude. I concluded this chapter by looking at the ethical considerations of my study.

Chapter 4 contained my autoethnography in the form of twenty-nine self-reflexive narratives. These narratives were not documented in chronological order, rather they were written as I remembered important moments in my early teaching career. My reason for writing my story in this manner was because I wanted to place emphasis on certain events that occurred during my beginner teacher years. This method of writing also allowed me to think back to critical moments in my beginner teacher years. I started this chapter with my first narrative that included a brief overview of my background and my close family members.

In chapter 5 I analyse and interpret my autoethnography. I discuss my main themes and sub-themes and focus on how my conceptual framework came into play while analysing and interpreting my story. The main themes that emerged from my story were familial heritage as influence on my teacher identity construction, intrinsic factors influencing my teacher identity construction and factors in the professional context influencing my teacher identity construction. These all included various sub-themes.

### 6.3 Reflecting on my research methodology

When I started this journey, I was not set on doing an autoethnography, I did not even know that it existed in the academic world. During my research proposal defence one of the lecturers on the panel highlighted the fact that I wanted to be an advocate for beginner female Mathematics teachers who found themselves in a similar situation as myself. She made the recommendation of doing an autoethnography to share my experiences and in this way be an advocate. I originally thought that this way of doing research was not true research, but after extensive reading on this methodology I found that it would give me the opportunity to share my own experiences through my own eyes and not the experiences of others. I did however come to realise that I was not doing an autobiography, but that I had to write about my experiences as part of a wider socio-cultural context (Qutoshi, 2015).

I therefore had to think deeply about my experiences and recall memories of the past. This was not a major hurdle as I was the primary data source which meant that I could access my data anytime (Bochner & Ellis, 2016; Allen-Collinsen, 2013; Chang, 2008). Even though I was the main data source, I had to have interviews and critical conversations with my co-constructors to reinforce the relatability and credibility of my research. At first, it was uncomfortable to talk with my co-constructors about my experiences and it felt unfamiliar. As I grew into this methodology and had more critical conversations with my mother and my grandfather, I started to realise that this research project gave me the opportunity to see myself and my experiences through their eyes and position myself within my socio-cultural context.

Doing an evocative autoethnography required me to think deeply and emotionally about my experiences as well as what influenced the construction of my teacher identity as a beginner female teacher. I was in a constant battle between my strict traditional views on research and the pressing need to share my true and whole story. I had to work my way through the cultural understanding of myself and of others in my story through self-reflection and self-examination (Adams, Holman Jones & Ellis, 2015; Chang, 2008) while ensuring a high academic standard.

In analysing and interpreting my story, I found out what it was all about, and I realised that what I thought would be my major themes, turned out to be completely different. I realised that my past and my ancestors played a bigger role in the construction of my beginner female teacher identity, than I could have imagined. This realisation was also due to the unending support I received from my supervisors.

#### **6.4 Proposing answers to my research questions and research findings**

The purpose of my study was to investigate the ways in which I had constructed my beginner teacher identity while teaching Mathematics and the reasons for me doing it in the manner I did. This gave rise to my research questions:

- *How did I construct my beginner teacher identity as a female Mathematics teacher?*
- *Why did I construct my beginner teacher identity as a female Mathematics teacher in the way I did?*

In analysing and interpreting my autoethnography I identified three main themes, which I have divided into correlating sub-themes, that guided me in answering my research question. In answering my first research question, I found that my two main themes of intrinsic factors influencing my teacher identity construction and factors in the professional context influencing my teacher identity construction, guided me in finding answers. My first main theme of familial heritage as influence on my teacher identity construction, was what answered my second research question.

My key research findings and what ultimately influenced the construction of my teacher identity, as a whole, were my past, present and future. This is therefore about understanding my past and where I came from, embracing my present and adjusting to it and not losing focus of my future. It is important for me to mention that these findings can only be applicable to female beginner teachers who find themselves in a similar situation to myself. In approaching the beginner teacher

years in this manner, the beginner teacher will acknowledge and accept her past as part of her identity. Once that stage has been reached, the beginner teacher can focus on embracing her present situation and adjusting her beliefs accordingly. Finally, by focusing on the future the beginner teacher's commitment to the profession will be strengthened and will lead to a blossoming teacher identity.

When I started writing my autoethnography, I did not realise the importance that my past would have in answering my research questions. While analysing and interpreting my autoethnography I realised that the contradiction that I encountered between my new found reality and my preconceived values was due to my very strong roots as a White Female Christian Afrikaner. These roots were instilled by my ancestral teachers, my mother, and my grandfather. It is from them that I inherited a specific outlook on life and on the education profession. In my beginner teacher years, I would question the management of the school, my learners' behaviour, my learners parents' reactions and the demands of the DBE. Most of the events that I encountered went against my White Christian Afrikaner values and my established personal identity. My established in-group was questioned, and I had to learn how to adjust it and allow certain aspects of the out-group form part of my new in-group. This included all aspects of my current reality as a Mathematics teacher in South Africa, which was at variance with my already developed in-group. In being able to construct my beginner teacher identity, I had to study my present situation, accept it, and adjust to it.

For my beginner teacher identity to survive, I had firstly to understand where I came from and to realise that I had to alter my belief systems in order to embrace my present. During my beginner teacher years, I was exposed to things that I had never been exposed to before. My first reaction was shock and a sense of not being able to identify with my current situation. I then had to make peace with it and alter my outlook on life, it was a case of *if you cannot beat them, join them*. I had to strengthen my self-efficacy again by altering my perception of the profession, in the sense that I focused on building relationships with my learners and making an effort to knowing them. I learnt to accept the demands from the DBE and at the same time speak up so that my voice would be heard. With

regards to the management style of my principal, I tried to put myself in his shoes so that I could understand where he came from. All these experiences had a direct influence on my teacher identity, and they instilled a resilience and confidence in me, as a beginner teacher. I learnt to measure my success against the well-being of my students in my class and this boosted my self-efficacy as a teacher.

By focusing on the future and learning that what I sow now I will reap in the future, made me approach my teaching in a more robust manner. My eye was no longer on the content and my learners' results, but rather on building relationships with my learners so that they could feel comfortable and have a positive attitude towards learning in my classroom. My *roeping* (calling) kept me focused on the future when I struggled to identify with my present and is what motivated me to improve my self-efficacy.

## **6.5 Recommendations stemming from my study**

Following the process of identifying my major themes and sub-themes to answer my research questions, there are also possible recommendations that I want to make as a passionate Mathematics teacher. My recommendations are divided into three levels, including recommendations for policy, practice, and future research. My recommendations follow:

### **6.5.1 Recommendations for policy**

- Beginner teachers need to be given better support from higher levels in Education such as the Department of Basic education. This support can be in the form of better professional development opportunities. It can also include a lighter workload for the beginner teacher so that she can find her feet and come to terms with her new reality (Botha & Rens, 2018).
- Beginner teachers should be better prepared for the profession during their teacher training programs. This can be done by having pre-service teachers complete their practical at schools that truly display the educational arena of South Africa. This can include schools in the townships or schools with limited resources and social issues. This also includes learning about all aspects of the profession and not just what happens in the classroom.

### **6.5.2 Recommendations for practice**

- Beginner teachers should be given the opportunity to complete a proper mentoring program, for a maximum of two years, with a mentor at the school where they would meet on a regular basis to discuss classroom management, discipline and subject content (Clandinin, Long, Schaefer, Downey, Steeves, Pinnegar, Robblee & Wnuk, 2015).
- Beginner teachers should enter the teaching profession with an open mind that will make space for change and adjustment as their new reality might be different to their existing perceptions and expectations.
- Beginner teachers should be given more opportunities for making recommendations to the management teams of schools and management teams should provide and welcome these opportunities (Schuck et al., 2018).
- It would be beneficial for beginner teachers to keep a journal or some form of documentation during their beginner years wherein they document their experiences whether good or bad. The beginner teacher can use this to reflect on and improve their practice.

### **6.5.3 Recommendations for future research**

- Future research can elaborate on the social injustices that are prevalent in South Africa's high schools and how these influences the learners and the teachers, in an attempt to guide further instruction and support for teachers.
- Future research can also investigate the challenges that female teachers face in South African schools and advise how that can be changed or improved on.

The themes and sub-themes identified within my autoethnography could all not only contribute to the body of existing knowledge but could also inspire future research. I believe that the construction of the beginner female Mathematics teacher identity is extremely important and that there should be more support given to these teachers. I know that I am not the only teacher who faced difficulties during my beginner teacher years. I also believe that South Africa's education



system is in trouble and that giving greater support to these teachers could combat some of the predominant and widespread issues. I hope that my findings will someday gain the attention of decision makers in schools and the DBE. In an effort to challenge and change current practices to provide better quality education for all learners in South Africa and provide better opportunities and workplace environments for beginner teachers, I can only hope that someone will look at the recommendations and do something constructive.

## **6.6 Challenges experienced during my study**

I started my journey in January 2018 and moved to New Zealand in January 2019. This made the process of finishing my research project more challenging as I did not have the leisure of driving to the university to see my supervisor or meet up with my peers. I could also not have critical conversations with my mother and grandfather in person, and I had to do those via video call. I also felt isolated at times as I could not attend meet ups and workshops at the university where I would engage in academic conversations with other autoethnographers. The main limitation of moving to a new county half-way through the process, was that due to the distance and communication problems I took longer to complete this project than I anticipated. I would not recommend this to anyone wanting to attempt a research project and do it using a research methodology that is completely new to the individual. If I had not moved away I do believe that I would have been able to complete this study earlier, as I would have lived in the same city as my supervisor and communication would have been easier. I also had to deal with the personal difficulties of adjusting to a new teaching position and country with only my husband as support.

One challenge of writing an autoethnography is not to depict oneself as a victim (Spry, 2001) and I tried to steer clear of this. It was challenging at times because as a beginner teacher one feels insecure and incompetent at times and when teachers from my management team did not help me in a constructive way or I did not have their support, I did sometimes feel like a victim of my circumstances and this was portrayed in some of my narratives. I do not wish to be portrayed as a victim in the whole of my story by my reader as I honestly depicted my experiences from my point of view with the consideration of my co-constructors as

conversations with them quickly made me realise if I was portraying myself as a victim and I was able to steer clear of depicting myself as the victim. When writing my narratives I did take my socio-cultural context into consideration while trying to convey my feelings and experiences as best possible in an effort for the content to be relatable.

## **6.7 Final reflection and conclusion**

My autoethnography journey started with not having any knowledge about this methodology, but I was interested in finding out how I would call this real research as my very analytical left brain kept on creating doubt in my mind. Nevertheless, I kept on doing research, writing my story and communicated with my supervisor and peers who were also in the same boat, even though I moved to Wellington, New Zealand half way through this journey. I originally thought that moving away would be the most difficult aspect in completing this study and even though it made it more difficult it was not the most difficult contributor.

The most challenging and liberating aspect of this study was reflecting on my past experiences. It was challenging because it forced me to recall unpleasant memories which made me gasp as I remembered them. It was liberating because I could compare myself as a teacher now to the teacher that I had been and realise how much I had grown since stepping into my first teaching position at my old high school in 2014. I had a front row view of how my female beginner teacher identity was constructed and how it has grown.

This study gave me the gift to make peace with my past and embrace my heritage. This study gave me the opportunity to have critical conversations with my grandfather and in doing that I realised that we had a lot in common. It also made me look at my mother with different eyes and respect her even more. Ultimately this study made me realise that my love for education was instilled by my mother and grandfather which made it seem natural to become a third generation teacher in my family. The process of constructing my female beginner teacher identity involved a range of influences and even though it was not all pleasant, I am thankful for my experiences and all role players. I am excited about my future as a female Mathematics teacher.



The photo to the left is my most recent staff photo. It was taken in March 2019 at my new school, Wellington Girls' College in Wellington, New Zealand. As seen on this picture, I am completely content as a female Mathematics teacher and thankful that I was able to become a teacher. In my grade 11 year my English teacher gave me a bookmark with a quote on it by Aristotle. It read: *The roots of education are bitter, but the fruit is sweet.* This perfectly encapsulates my journey and are words that I instil in my learners. It only takes one teacher to make that everlasting impression on a learner and I strive to be that teacher.

## 7. REFERENCES

- Adams, T. E., Jones, S. L. H., & Ellis, C., 2015. *Autoethnography. Understanding qualitative research*. New York: Oxford University Press
- Ahlqvist, S., London, B. & Rosenthal, L., 2013. Unstable Identity Compatibility: How Gender Rejection Sensitivity Undermines the Success of Women in Science, Technology, Engineering and Mathematics Fields. *Psychological Science*, vol. 24, no. 9, pp. 1644-1652. [Online] Available from: doi: 10.1177/0956797613476048 [Accessed: 4 October 2018].
- Akkerman, S.F. & Meijer, P.C., 2011. A dialogical approach to conceptualizing teacher identity. *Teaching and Teacher Education*, vol. 27, no. 2, pp. 308-319.
- Allen-Collinsen, J. 2013. Autoethnography as the engagement of self/other, self/culture, self/politics, selves/futures in S. Holman Jones, T.E. Adams and C. Ellis (eds), *Handbook of Autoethnography*. Walnut Creek, CA: Left Coast Press pp. 281-299.
- Alphonso, C., 2013. Canada's fall in math-education ranking sets off alarm bells. *The Globe and Mail*. 3 December. [Online] Available at: <https://www.theglobeandmail.com/news/national/education/canadas-fall-in-math-education-ranking-sets-off-red-flags/article15730663/> [Accessed 27 April 2018].
- Alsop, C.K. 2002. Home and Away: Self-reflexive Auto-/Ethnography. *Forum: Qualitative Social Research*, vol. 3, no. 3. [Online] Available at: <http://nbnresolving.de/urn:nbn:de:0114-fqs0203105> [Accessed: 6 December 2019].
- Anderson, L. 2006. Analytic autoethnography. *Journal of Contemporary Ethnography*, vol. 35, no. 4, pp. 373-395.
- Anderson, L., & Glass-Coffin, B. 2016. 'I learn by going: Autoethnographic Modes of Inquiry' in Holman Jones, S., Adams, T.E., & Ellis, C. (eds.) *Handbook of Autoethnography*. New York: Routledge, pp. 57-83.
- Anney, V.N. 2015. Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, vol. 5, no. 2, pp. 272-281. [Online] Available at: <http://jeteraps.scholarlinkresearch.com/articles/Ensuring%20The%20Quality%20Of%20The%20Findings%20new.pdf> [Accessed: 2 January 2020].
- Anspal, T., Eisenschmidt, E. & Löffström, E. 2012. Finding myself as a teacher: Exploring the shaping of teacher identities through student teachers' narratives. *Teachers and Teaching*, vol. 18, no. 2, pp. 197-216.
- Ashforth, B.E. & Mael, F.A., 1989. Social Identity Theory and the Organization. *Academy of Management Review*, vol. 14, no. 1, pp.20-39. [Online] Available at: doi: 10.2307/258189 [Accessed: 1 May 2018].
- Astalin, P.K., 2013. Qualitative research designs: A conceptual framework. *International Journal of Social Science & Interdisciplinary Research*, vol. 2, no. 1, pp. 118-124. [Online] Available at: <http://indianresearchjournals.com/pdf/IJSSIR/2013/January/13.pdf> [Accessed: 11 October 2020].

- Atkinson, P. 2006. Rescuing autoethnography. *Journal of Contemporary Ethnography*, vol. 35, no. 4, pp. 400-404.
- Avraamidou, L., 2014. Studying science teacher identity: current insights and future research directions. *Studies in Science Education*, vol. 50, no. 2, pp. 145-179. [Online] Available at: doi:10.1080/03057267.2014.937171 [Accessed: 9 November 2020].
- Ballantyne, J. & Grootenboer, P., 2012. Exploring relationships between teacher identities and disciplinarity. *International Journal of Music Education*, vol. 30, no. 4, pp. 368-381. [Online] Available from: doi: 10.1177/0255761412459165 [Accessed: 23 September 2018].
- Bandura, A., 1994. Self-Efficacy. In V.S. Ramachaudran (Ed.), *Encyclopedia of human behaviour*, vol. 4, pp. 71-81. New York: Academic Press.
- Banks, J., 2001. Citizenship education and diversity: Implications for teacher education. *Journal of Teacher Education*, vol. 52, no. 5, pp. 5-16.
- Beauchamp, C., & Thomas, L., 2009. Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, vol. 39, no. 2, pp. 175-189. [Online] Available at: doi: 10.1080/03057640902902252 [Accessed: 8 November 2020].
- Beauchamp, C., & Thomas, L., 2011. New teachers' identity shifts at the boundary of teacher education and initial practice. *International Journal of Educational Research*, vol. 50, pp. 6-13.
- Beede, D., Julian, T., Langdon, D., McKittrick, G., Khan, B. & Doms, M., 2011. Women in STEM: A gender gap to innovation. *US Department of Commerce, Economics and Statistics Administration*. (Online) Available at: <https://files.eric.ed.gov/fulltext/ED523766.pdf>
- Berger, R. 2013. Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, vol. 15, no. 2, pp. 219-234.
- Bergin, J. & Westwood, R. 2003. The Necessities of Violence. *Culture and Organisation*, vol. 9, no. 4, pp. 211-223.
- Best, J. 2006. What, we worry?: The pleasures and costs of defective memory for qualitative sociologists. *Journal of Contemporary Ethnography*, vol. 35, no. 4, pp. 466-478.
- Bhana, D., & Pillay, V., 2012. How Women in Higher Education Negotiate Work and Home: A Study of Selected Women at a University in South Africa. *Journal of Higher Education in Africa*, vol. 10, no. 2, pp. 81-94.
- Bhardwaj, A., 2016. Importance of Education in Human Life: a Holistic Approach. *International Journal of Science and Consciousness*, vol. 2, no. 2, pp. 23-28. [Online] Available at: <http://www.ijsc.net/docs/issue4/importance-of-education-in-human-life.pdf> [Accessed 30 August 2020].
- Bilim, I., 2014. Pre-service elementary teachers motivations to become a teacher and its relationship with teaching self-efficacy. *Procedia - Social and Behavioral Sciences*, vol. 152, pp. 653 - 661. [Online] Available at: doi:10.1016/j.sbspro.2014.09.258 [Accessed 9 February 2020].
- Billups, F.D., 2014. Trustworthiness and the Quest for Rigor in Qualitative Research. *The NERA Researcher*, vol. 52, pp. 10-12. [Online] Available at: [https://www.nera-education.org/docs/TNR\\_Fall\\_2014\\_Color\\_Final.pdf](https://www.nera-education.org/docs/TNR_Fall_2014_Color_Final.pdf) [Accessed: 6 May 2018].
- Blanchard, A. 2013. Review of *Contemporary British Autoethnography*, by Nigel P. Short, Lydia Turner and Alec Grant.

- Bochner, A. and Ellis, C., 2016. *Evocative autoethnography: Writing lives and telling stories*. Routledge.
- Bochner, A. P., 2000. Criteria against ourselves. *Qualitative Inquiry* 6(2), 266-272.
- Bochner, A.P., & Ellis, C. 2016. The ICQI and the Rise of Autoethnography. *International Review of Qualitative Research*, vol. 9, no. 2, pp. 208-217. [Online] Available at: doi: 10.1525/irqr.2016.9.2.208. [Accessed: 9 December 2019].
- Botha, C.S., & Rens, J., 2018. Are they really 'ready, willing and able'? Exploring reality shock in beginner teachers in South Africa. *South African Journal of Education*, vol. 38, no. 3, pp. 1-8. [Online] Available at: doi: 10.15700/saje.v38n3a1546 [Accessed 26 August 2020].
- Boylan, M. & Woolsey, I., 2015. Teacher education for social justice: mapping identity spaces. *Teaching and Teacher Education*, vol. 46, pp. 62-71. [Online] Available from: doi: 10.1016/j.tate.2014.10.007 [Accessed: 7 October 2018].
- Braun, V., & Clarke, V. 2006. Using Thematic analysis in psychology. *Qualitative Research in Psychology*, vol. 3, no. 2, pp. 77-101. [Online] Available at: doi: 10.1191/1478088706qp063oa [Accessed: 29 December 2019].
- Brinkman, B.G., Rabenstein, K.L., Rosén, L.A. & Zimmerman, T.S., 2014. Children's Gender Identity Development: The Dynamic Negotiation Process Between Conformity and Authenticity. *Youth & Society*, vol. 46, no. 6, pp. 835-852. [Online] Available from: doi: 10.1177/0044118X12455025 [Accessed: 1 September 2019].
- Bullough, R.V., 2015. Differences? Similarities? Male teacher, female teacher: An instrumental case study of teaching a Head Start classroom. *Teaching and Teacher Education*, vol. 47, pp. 13-21.
- Burke, P.J., & Stets, J. E., 2009. *Identity theory*. New York: Oxford University Press.
- Burnier, D. 2006. Encounters with the self in social science research. *Journal of Contemporary Ethnography*, vol. 35, no. 4, pp. 410-418.
- Burton, D.M., 2011. *The history of Mathematics*. New York: McGraw-Hill.
- Cai, J., Mok, I.A.C., Reddy, V. & Stacey, K., 2016. *International comparative studies in mathematics: Lessons for improving students' learning*. Cham, Switzerland: Springer International.
- Campbell, E., 2016. Exploring Autoethnography as a Method and Methodology in Legal Education Research. *Asian Journal of Legal Education*, vol. 3, no. 1, pp. 95-105. [Online ] Available at: doi: 10.1177/2322005815607141 [Accessed: 6 January 2020].
- Campbell, E., 2017. Apparently Being a Self-Obsessed C\*\*t Is Now Academically Lauded": Experiencing Twitter Trolling of Autoethnographers. *Forum: Qualitative Social Research*, vol. 18, no. 3, pp. art. 16. [Online] Available at: doi: 10.17169/fqs-18.3.2819 [Accessed: 10 December 2019].
- Capuno, R., Necesario, R., Etcuban, J.O., Espina, R., Padillo., Manguilimotan, R., 2019. Attitudes, Study Habits, and Academic Performance of Junior High School students in Mathematics. *International Electronic Journal of Mathematics Education*, vol. 14, no. 3, pp. 547-561. [Online] Available at: doi.org/10.29333/iejme/5768 [Accessed: 26 august 2020].
- Carvalho-Malekane, W.M., 2015. *Young adults' narration of their biracial identity construction in a South African context*. PhD Thesis. Pretoria: University of Pretoria.

- Casad, B.J., Hale, P. & Wachs, F.L., 2017. Stereotype Threat Among Girls: Differences by Gender Identity and Math Education Context. *Psychology of Women Quarterly*, vol. 41, no. 4, pp. 513-529. [Online] Available at: doi: 10.1177/0361684317711412 [Accessed: 30 March 2018].
- Challa, S., 2017. *An exploratory study of the five-factor personality traits model as predictors among women in science, technology, engineering and mathematics fields at Indiana State University*. Doctor of Philosophy. Dissertation. Indiana State University. Available at: [http://gateway.proquest.com/uplib.idm.oclc.org/openurl?url\\_ver=Z39.88-2004&rft\\_val\\_fmt=info:ofi/fmt:kev:mtx:dissertation&res\\_dat=xri:pqm&rft\\_dat=xri:pqdiss:10641813](http://gateway.proquest.com/uplib.idm.oclc.org/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&res_dat=xri:pqm&rft_dat=xri:pqdiss:10641813)
- Chang, H., 2008. *Autoethnography as method*. Walnut Creek, CA: Left Coast Press.
- Chang, H., 2013. Individual and Collaborative Autoethnography as method. In S. Holman Jones, T.E. Adams & C. Ellis. (Eds) *Handbook of Autoethnography*. Left Coast Press: Walnut Creek, CA.
- Chang, H., 2016. Individual and Collaborative Autoethnography as Method: A social Scientist's perspective. In S. Holman Jones, T. Adams & C. Ellis (Eds), *Handbook of Autoethnography* (p. 107). 2<sup>nd</sup> edition. New York: Routledge.
- Clandinin, D. J. & Connelly, F.M., 2000. *Narrative inquiry: Experience and story in qualitative research*. San Francisco: Jossey-Bass.
- Clandinin, D. J., Long, J., Schaefer, L., Downey, C. A., Steeves, P., Pinnegar, E., Robblee, S. M., & Wnuk, S., 2015. Early career teacher attrition: intentions of teachers beginning. *Teaching Education*, vol. 26, no. 1, pp. 1-16. [Online] Available at: doi: 10.1080/10476210.2014.996746 [Accessed: 28 November 2020].
- Clandinin, J., Caine, V., Estefan, A., Huber, J., Murphy, M.S., & Steeves, P., 2015. Places of Practice: Learning to think Narratively. *Narrative Works*, vol. 5, no. 1, pp. 22-39.
- Clandinin, J., Schaefer, L., Long, J., Steeves, P., McKenzie-Robblee, S., Pinnegar, E., Wnuk, S., & Downey, C., 2012. Early career teacher attrition: Problems, possibilities, 28 potentials. Edmonton: Centre for Research for Teacher Education and Development, University of Alberta.
- Clarke, V. & Braun, V., 2014. Thematic analysis. In A. C. Michalos (Ed.), *Encyclopaedia of Quality of Life and Well-Being Research* (pp. 6626-6628). Springer, Dordrecht, Netherlands: Springer.
- Clough, P., 2000. Comments on setting criteria for experimental writing. *Qualitative Inquiry* vol. 6, no. 2, pp. 278-291.
- Crenshaw, K.W., 2011. Twenty years of Critical race theory: Looking back to move forward. *Connecticut Law Review*, vol. 43, no. 5, pp. 1253-1352.
- Creswell, J.W. and Poth, C.N., 2016. *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Custer, D., 2014. Autoethnography as a Transformative Research Method. *The Qualitative Report*, vol. 19, no. 37, pp. 1-13. [Online] Available from: <https://nsuworks.nova.edu/tqr/vol19/iss37/3> [Accessed: 6 January 2020].
- Danielewicz, J., 2001. *Teaching selves: Identity, pedagogy and teacher education*. New York: State University of New York Press.

- David, B. & Resnik, J. D., 2015., *What is ethics is research & Why it is important?* [Online]. Available: <http://www.niehs.nih.gov/research/resources/bioethics/whatis/> [Cited 6 May 2018].
- Day, C. & Gu, Q., 2010. *The New Lives of Teachers*. London: Routledge.
- Day, C., 2004. The passion for successful leadership. *School Leadership & Management*, vol. 24, no. 4, pp. 425-437. [Online] Available at: doi:10.1080/13632430410001316525 [Accessed: 22 August 2020].
- Day, C., Kington A., Stobart, G. & Sammons, P., 2006. The personal and professional selves of teachers: Stable and unstable identities. *British Educational Research Journal*, vol. 32, no. 4, pp. 601-616.
- Delamont, S. 2007. Arguments against Auto-Ethnography. *Qualitative Researcher*. [Online] Available from: <http://www.leeds.ac.uk/educol/documents/168227.htm> [Accessed: 11 December 2019].
- Delamont, S. 2009. The only honest thing: autoethnography, reflexivity and small crises in fieldwork. *Ethnography and Education*, vol. 4, no. 1, pp. 51-63. [Online] Available at: doi: 10.1080/17457820802703507 [Accessed: 11 December 2019].
- Denzin, N.K. & Lincoln, Y.S. 2000. *Handbook of qualitative research* (2<sup>nd</sup> ed.) Thousand Oaks, CA: Sage.
- Denzin, N. 2006. Analytic autoethnography, or déjà vu all over again. *Journal of Contemporary Ethnography*, vol. 35, no. 4, pp. 419-428.
- Denzin, N.K. and Giardina, M.D. eds., 2016. *Ethical futures in qualitative research: Decolonizing the politics of knowledge*. Routledge.
- Depaepe, F., De Corte, E., & Verschaffel, L., 2012. Who is granted authority in the Mathematics classroom? An analysis of the observed and perceived distribution of authority. *Educational Studies*, vol. 38, no. 2, pp. 223-234. [Online] Available at: doi: 10.1080/03055698.2011.598676 [Accessed 29 August 2020].
- Diagram of Social Identity Theory*, viewed 1 May 2018, <[http://www.age-of-the-sage.org/psychology/social/social\\_identity\\_theory.html](http://www.age-of-the-sage.org/psychology/social/social_identity_theory.html)>
- Diekman, A.B., Brown, E.R., Johnston, A.M. & Clark, E.K., 2010. Seeking congruity between goals and roles: A new look at why women opt out of science, technology, engineering and mathematics careers. *Psychological Science*, vol. 21, pp. 1051-1057.
- Drake, C., Spillane, J. & Hufferd-Ackles, K., 2001. Storied identities: Teacher learning and subject-matter context. *Journal of Curriculum studies*, vol. 33, pp. 1-24.
- Dyson, M., 2007. My Story in a Profession of Stories: Auto Ethnography - an Empowering Methodology for Educators. *Australian Journal of Teacher Education*, vol. 32, no. 1, pp. 36-48. [Online] Available at: doi: 10.14221/ajte.2007v32n1.3 [Accessed: 17 October 2020].
- Ellis, C.S. & Bochner, A.P. 2000. Autoethnography, personal narrative and personal reflexivity. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2<sup>nd</sup> ed.) (pp. 733-768). Thousand Oaks, CA: Sage.
- Ellis, C. 2007. Telling secrets, revealing lives: Relational ethics in research with intimate others. *Qualitative Inquiry*, vol. 13, no. 1, pp. 273-277. [Online] Available at: DOI: 10.1177/1077800406294947 [Accessed 21 April 2019].



- Ellis, C., Adams, T., & Bochner, E., 2011. Autoethnography: An Overview. *Historical Social Research*, vol. 36, no. 4, pp. 273-290.
- Ellis, C., 2004. *The Ethnographic I: A methodological novel about autoethnography*. Walnut Creek: AltaMira Press.
- Else-Quest, N.M., Mineo, C.C. & Higgins, A., 2013. Math and Science attitudes and achievement at the intersection of gender and ethnicity. *Psychology of Women Quarterly*, vol. 37, no. 3, pp. 293-309.
- Fantilli, R.D. & McDougall, D.E. 2009. A study of novice teachers: Challenges and support in the first years. *Teaching and Teacher Education*, vol. 25, no. 6, pp. 814-825.
- Flick, U., 2004., Design and process in qualitative research. *A companion to qualitative research*, pp.146-152.
- Florio-Ruane, S. 2001. *Teacher education and cultural imagination*. Mahwah, NJ: Lawrence Erlbaum.
- Forgasz, H., Leder, G. & Tan, H., 2014. Public views on the gendering of mathematics and related careers: international comparisons. *Educational Studies in Mathematics*, vol. 87, no. 3, pp. 369-388. [Online] Available at: doi: 10.1007/s10649-014-9550-6 [Accessed: 29 April 2018].
- Foster, K., McAllister, M. & O'Brien, L. 2006. Extending the boundaries: Autoethnography as an emergent method in mental health nursing research. *International Journal of Mental Health Nursing*, vol. 15, no. 1, pp. 44-53. [Online]. Available at: DOI: 10.1111/j.1447-0349.2006.00402.x [Accessed 21 April 2019].
- Freeman, D. & Richards, J.C., 1993. Conceptions of teaching and the education of second language teachers. *TESOL Quarterly*, vol. 27, no. 2, pp. 189-216.
- Gergen, M. & Gergen, K., 2002. Ethnographic representation as relationship. In A. Bochner & C. Ellis (Eds.), *Ethnographically speaking: Autoethnography, literature and aesthetics* (pp. 11-33). Walnut Creek, CA: AltaMira Press.
- Gilal, F.G., Channa, N.A., Gilal, N.G., Gilal, R.G., & Shah, S.M.M., 2019. Association between a teacher's work passion and a student's work passion: a moderated mediation model. *Psychology Research and Behaviour Management*, vol. 12, pp. 889-900.
- Gorard, S., 2013. *Research design: creating robust approaches for the social sciences*. London: SAGE.
- Gouwe, M.A., Mathipa, E.R. & Netshitangani, T., 2017. The influence of gender on performance in mathematics in the foundation phase: the perceptions of selected teachers in a specific school. *Gender and Behaviour*, vol. 15, no. 2, pp. 9122-9132.
- Graça, J., Calheiros, M.M., & Barata, M.C., 2012. Authority in the classroom: adolescent autonomy, autonomy support, and teachers' legitimacy. *European Journal of Psychology of Education*, vol. 28, no. 3, pp. 1065-1076. [Online] Available at: doi: [10.1007/s10212-012-0154-1](https://doi.org/10.1007/s10212-012-0154-1) [Accessed 28 August 2020].
- Gray, T., & Stuart, K., 2015. The power of storytelling in adventure therapy. *Adventure therapy around the globe: International perspectives and diverse approaches*, pp. 393 – 407.
- Hahl, K. & Mikulec, E., 2018. Student Reflections on Teacher Identity Development in a year-long Secondary Teacher Preparation Program. *Australian Journal of Teacher Education*, vol. 43, no. 12, pp.42-58. [Online]

- Available at: <https://ro.ecu.edu.au/ajte/vol43/iss12/4> [Accessed: 18 July 2019].
- Harwood, S. and Eaves, S., 2017. In Search of an Autoethnographic Method. In *European Conference on Research Methodology for Business and Management Studies* (pp. 145-153). Academic Conferences International Limited. [Online] Available at: [https://www.research.ed.ac.uk/portal/files/33004807/ECRM\\_FINAL\\_REVdo\\_cx.pdf](https://www.research.ed.ac.uk/portal/files/33004807/ECRM_FINAL_REVdo_cx.pdf) [Accessed: 28 September 2020].
- Hofer, B. K. 2004. Epistemological understanding as a metacognitive process: *Thinking aloud during online searching*. *Educational Psychologist*, vol. 39, no. 1, pp. 43-55.
- Hokkanen, S., 2017. Analysing personal embodied experiences: Autoethnography, feelings, and fieldwork. *Translation & Interpreting*, vol. 9. No. 1, pp.24-35. [Online] Available at: doi: 10.12807/ti.109201.2017.a03 [Accessed: 11 October 2020].
- Holman Jones, S., Adams, T.E., & Ellis, C., 2013. *Handbook of Autoethnography*. New York: Routledge.
- Hughes, S., & Noblit, G., 2017. Meta-ethnography of autoethnographies: a worked example of the method using educational studies, *Ethnography and Education*, vol. 12, no. 2, pp. 211-227 [Online]. Available at: DOI: 10.1080/17457823.2016.1216322 [Accessed 23 November 2019].
- Hughes, S.A., & Pennington, H.L., 2017. *Autoethnography: Process, Product and Possibility for Critical Social Research*. California: SAGE Publications.
- Iwu, R.U. & Azoro, A.V., 2017. A study on the barriers to participation of females in science, mathematics and technology Education in Imo State the way forward. *Educational Research and Reviews*, vol. 12, no. 17, pp. 832-838. [Online] Available from: doi: 10.5897/ERR2017.3277 [Accessed: 30 March 2018].
- Jansen, N. & Joukes, G., 2012. Long term, interrelated interventions to increase women's participation in STEM in the Netherlands. *International Journal of Gender, Science and Technology*, vol. 5, no. 3, pp. 305-316. [Online] Available at: [https://www.vhto.nl/fileadmin/user\\_upload/documents/publicaties/SEFI2015\\_VHTO\\_jansen\\_rev1.pdf](https://www.vhto.nl/fileadmin/user_upload/documents/publicaties/SEFI2015_VHTO_jansen_rev1.pdf) [Accessed: 4 August 2019].
- Jarvis, B. J., 2014. *Whiteness and Education in Southern African Spaces: An Autoethnography*. Doctor of Philosophy. University of KwaZulu-Natal. [Online]. Available at: <https://pdfs.semanticscholar.org/6ce4/8a07a3e42d2d81acee5f122044b2d7a3e428.pdf> [Accessed: 4 October 2019].
- Javadi, M., & Zarea, K., 2016. Understanding thematic analysis and its pitfall. *Journal of Client Care*, vol. 1, no. 1, pp. 34-40. [Online] Available at: doi:10.15412/J.JCC.02010107 [Accessed: 30 December 2019].
- Mackay, J.R.D., Hughes, K., Marzetti, H., Lent, N., & Rhind, S.M., 2019. Using National Student Survey (NSS) qualitative data and social identity theory to explore students' experiences of assessment and feedback, *Higher Education Pedagogies*, vol. 4, no. 1, pp. 315-330. [Online] Available at: doi: 10.1080/23752696.2019.1601500 [Accessed 30 January 2021].
- Joiner, S. & Edwards, J., 2008. Novice teachers: Where are they going and why don't they stay? *Journal of Cross-Disciplinary Perspectives in Education*, vol. 1, no. 1, pp. 36-43.

- Jones, I., Brown, L., & Holloway, I., 2013. *Qualitative Research in Sport and Physical Activity*. London: SAGE Publications.
- Jones, V., 2006. How do teachers learn to be effective classroom managers? *Handbook of classroom management: Research, practice and contemporary issues*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Kaynak, N. E., 2019. "Teaching is like taking a trip": two cases of pre-service teachers' early construction of professional identity with disparate outcomes. *International Journal of Progressive Education*, vol. 15, no. 6, 122-131. [Online] Available at: doi: 10.29329/ijpe.2019.215.8 [Accessed: 9 November 2020].
- Kerr, J.C. 2016. Internationally, US students are failing. *U.S. News and World Report*. 6 December. [Online] Available from: <https://www.usnews.com/news/politics/articles/2016-12-06/math-a-concern-for-us-teens-science-reading-flat-on-test> [Accessed 27 April 2018].
- Kim, M. 2013. Constructing Occupational Identities: How Female Preschool Teacher Develop Professionalism. *Universal Journal of Educational Research*, vol. 1, no. 4, pp. 309-317. [Online] Available from: doi: 10.13189/ujer.2013.010406 [Accessed: 28 October 2018].
- Kinser-Traut, J., & Turner, E.E., 2018. Shared authority in the mathematics classroom: successes and challenges throughout one teacher's trajectory implementing ambitious practices. *Journal of Mathematics Teacher Education*, vol. 23, no. 1, pp. 5-34. [Online] Available at: doi: [10.1007/s10857-018-9410-x](https://doi.org/10.1007/s10857-018-9410-x) [Accessed: 28 August 2020].
- Klopper, H., 2008. The qualitative research proposal. *Curationis*, vol. 31, no.4, pp.62-72.
- Kornienko, O., Santos, C.E., Martin, C.L. & Granger, K.L. 2016. Peer Influence on Gender Identity Development in Adolescence. *Developmental Psychology*, vol. 52, no. 10, pp. 1578-1592. [Online] Available at: doi: 10.1037/dev0000200 [Accessed: 1 September 2019].
- Kriel, M., 2013. *Loose continuity: The post-apartheid Afrikaans Language Movement in historical perspective* (Doctoral dissertation, The London School of Economics and Political Science (LSE)).
- Kronenberg, C. 2016. 20% maths decree sets a dangerous precedent for schooling in South Africa. *Mail & Guardian*. 29 December. [Online] Available from: <https://mg.co.za/article/2016-12-29-20-maths-decree-sets-a-dangerous-precedent-for-schooling-in-south-africa>. [Accessed 22 April 2018].
- Kuhn, A., 2010. Memory texts and memory work: Performances of memory in and with visual media. *Memory studies*, vol. 3, no. 4, pp.298-313. [Online] Available at: doi: [10.1177/1750698010370034](https://doi.org/10.1177/1750698010370034) [Accessed: 12 October 2020].
- Kusmaryono, I., 2014. The importance of mathematical power in mathematics learning. *International Conference on Mathematics, Science and Education 2014*, pp. 35-40
- Lake, V.E. & Kelly, L., 2014. Female Preservice Teachers and Mathematics: Anxiety, Beliefs and Stereotypes. *Journal of Early Childhood Teacher Education*, vol. 35, pp. 262-275.

- Lapadat, J.C., 2017. Ethics in Autoethnography and Collaborative Autoethnography. *Qualitative Inquiry*, vol. 23, no. 8, pp. 589-603. [Online] Available: doi: 10.1177/1077800417704462 [Accessed: 2 January 2020].
- Lauriala, A., & Kukkonen, M. 2005. Teacher and student identities as situated cognitions. In P. Denicolo & M. Kompf (Eds.), *Connecting Policy and Practice: Challenges for teaching and learning in schools and universities* (pp. 199-208). Oxford: Routledge.
- Lavy, V. & Sand, E., 2015. On the origins of Gender Human Capital Gaps: short and long term consequences of Teachers' stereotypical biases. National bureau of economic research. (No. w20909). [Online] Available from: doi: 10.3386/w20909 [Accessed: 29 April 2018].
- Lee, J, Zhang, Z, & Yin, H., 2011. A multilevel analysis of the impact of a professional learning community, faculty trust in colleagues and collective efficacy on teacher commitment to students. *Teaching and Teacher Education*, vol. 27, no. 5, pp. 820-830. [Online] Available at: doi:10.1016/j.tate.2011.01.006 [Accessed 16 August 2020].
- Leslie, L.L., McClure, G.T. & Oaxaca, R.L. 1998. Women and minorities in science and engineering: A life sequence analysis. *The Journal of Higher Education*, vol. 69, pp. 239-276.
- Lincoln, J., & Guba, E.G., 1985. *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Lombard, M., 2020. The cultivation of the racial identity of an Afrikaner juffrou: An autoethnography, Master dissertation, University of Pretoria, Pretoria.
- Maguire, M., & Delahunt, B., 2017. Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars. *AISHE-J: The All Ireland Journal of Teaching and Learning in Higher Education*, vol. 8, no. 3, pp. 3351-33514.
- Mapaire, L., 2016. Learners' performance in Mathematics: A case study of public high schools, South Africa. *European Journal of STEM Education*, vol. 1, no. 3, pp. 1-10. [Online] Available from: doi: <http://dx.doi.org/10.20897/lectito.201645> [Accessed: 30 March 2018].
- Maréchal, G., 2010. Autoethnography. In A. J. Mills, G. Durepos & E. Wiebe (Eds.), *Encyclopedia of case study research*, vol. 2, pp. 43–45. Thousand Oaks, CA: Sage Publications
- Marsh, H. W., Vallerand, R. J., Lafrenière, M.-A. K., Parker, P., Morin, A. J. S., Carbonneau, N., Jowett, S., Bureau, J. S., Fernet, C., Guay, F., Salah Abduljabbar, A., & Paquet, Y., 2013. Passion: Does One Scale Fit All? Construct Validity of Two-Factor Passion Scale and Psychometric Invariance Over Different Activities and Languages. *Psychological Assessment*, vol. 25, no. 3, pp. 796-811. [Online] Available at: doi: 10.1037/a0032573 [Accessed: 26 August 2020].
- McAdams, D., 1993. *The Stories we Live By*. London: Guilford Press.
- McAdams, D.P., Josselson, R. & Lieblich, A. 2006. Introduction. In: D.P. McAdams, R. Josselson & A. Lieblich (Eds.), *Identity and Story* (pp1-11). Washington, DC: American Psychological Association.
- McIntyre, J. & Hobson, A.J., 2016. Supporting beginner teacher identity development: external mentors and the third space. *Research Papers in Education*, vol. 31, no. 2, pp. 133-158. [Online] Available from: doi: 10.1080/02671522.2015.1015438 [Accessed: 29 April 2018].
- Meadows, M., 2016. Where are all the talented girls? How can we help them achieve in science, technology, engineering and mathematics? *Journal for*

- the Education of Gifted Young Scientists*, vol. 4, no. 2, pp. 29-42. [Online] Available at: doi: <http://dx.doi.org/10.17478/JEGYS.2016222219> [Accessed: 3 August 2019].
- Medford, K., 2006. Caught with a fake ID: Ethical questions about slippage in Autoethnography. *Qualitative Inquiry*, vol. 12, no. 5, pp. 853-864. [Online]. Available at: doi: 10.1177/1077800406288618 [Accessed 21 April 2019].
- Mendez, M., 2013. Autoethnography as a research method: Advantages, limitations and criticisms. *Colombian Applied Linguistics Journal*, vol. 15, no. 2, pp. 279-287. [Online]. Available at: DOI: 10.14483/udistrital.jour.calj.2013.2.a09 [Accessed 21 April 2019].
- Mirza, H., 2013. A second skin: Embodied intersectionality, transnationalism and narratives of identity and belonging among Muslim women in Britain. *Women Studies International Forum*, vol. 36, pp. 5-15.
- Mlangeni, D.S., 2019. Experiencing mathematics as a Black female – An autoethnography, Master dissertation, University of Pretoria, Pretoria.
- Mohd Rustam, M. R., 2016. Challenges in mathematics learning: A study from school students' perspective. *Research on Educational studies*, Universiti Teknologi Malaysia, vol 1.
- Moklele, M.L., 2017. Lesson study as a Professional Development Model for improving Teachers Mathematics Instruction. *Journal of Social Sciences and Humanities*, no. 2, pp. 49-56
- Monaco, J., 2010. Memory work, autoethnography and the construction of a fan-ethnography. *Participations*, vol. 7, no. 1, pp.102-142. [Online] Available at: <https://participations.org/Volume%207/Issue%201/monaco.pdf> [Accessed: 12 October 2020].
- Morrison, C., 2013. Teacher Identity in the Early Career Phase: Trajectories that Explain and Influence Development. *Australian Journal of Teacher Education*, vol. 38, no. 4, pp. 91-107. [Online] Available from: doi: 10.14221/ajte.2013v38n4.5 [Accessed: 7 October 2018].
- Morrow, W., 2007. What is teachers' work? *Journal of Education*, no. 41, pp. 3-20. [Online] Available at: <https://journals.co.za/docserver/fulltext/joe/41/1/21.pdf?expires=1598412319&id=id&accname=guest&checksum=21D3854D9491B7B2C1093704C720D666> [Accessed 26 August 2020].
- Morse, J., 2002. Writing my own experience. *Qualitative Health Research*, vol. 12, no. 9, pp. 1159-1160. [Online] Available from: doi:10.1177/1049732302238241 [Accessed 20 April 2019].
- Moses, I., Berry, A., Saab, N., & Admiraal, W., 2017. Who wants to become a teacher? Typology of student-teachers' commitment to teaching. *Journal of Education for teaching*, vol. 43, no. 4, pp. 444-457. [Online] Available at: doi: 10.1080/02607476.2017.1296562 [Accessed: 15 August 2020]
- Mouton, J., 1996. *Understanding Social Research*. Pretoria: JL Van Schaik.
- Mouton, N., Louw, G.P. and Strydom, G., 2013. Critical challenges of the South African school system. *International Business & Economics Research Journal (IBER)*, vol. 12, no. 1, pp.31-44. [Online] Available at:
- Mukolwe, J.O., Okwara, M., & Ajowi, O.J., 2016. Factors hindering the deployment of female teachers to headship positions in public primary schools in Nambale Sub-County Kenya. *Educational Research and Reviews*, vol. 11, no. 8, pp. 1749-1756. [Online] Available at: <https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ1115637>

- Muncey, T., 2005. Doing Autoethnography. *International Journal of Qualitative Methods*, vol. 4, no. 1, pp. 69-86.
- Mutodi, P. & Ngirande, H., 2014. Exploring Mathematics Anxiety: Mathematics students' experiences. *Mediterranean Journal of Social Sciences*, vol. 5, no. 1, pp. 283-294. [Online] Available at: doi:10.5901/mjss.2014.v5n1p283 [Accessed: 6 May 2018].
- Nash, R. J., 2004. *Liberating scholarly writing: The power of personal narrative*. New York: Teachers College.
- Newcomer, K.E., Hatry, H.P. and Wholey, J.S., 2015. Conducting semi-structured interviews. *Handbook of practical program evaluation*, 492.
- Ngunjiri, F.W., Hernandez, K.C., & Chang, H. 2010. Living Autoethnography: Connecting Life and Research. *Journal of Research Practice*, vol. 6, no. 1, pp. 1-17.
- Nicks, S. Korn, J. Mainieri, T., 1997. The Rise and Fall of Deception in Social Psychology and Personality Research, 1921 to 1994. *Ethics and Behaviour*, vol. 7, no.1, pp. 69-77.
- Nieuwenhuis, J., 2016. Qualitative research designs and data gathering techniques. In K. Maree, *First Steps in Research* (pp. 71-80). Pretoria: Van Schaik.
- Nishishiba, M., Jones, M. and Kraner, M., 2013. *Research methods and statistics for public and nonprofit administrators: A practical guide*. SAGE Publications.
- Nowell, L.S., Morris, J.M., White, D.E., & Moules, N.J., 2017. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, vol. 16, pp. 1-13.
- Nowell, L.S., Norris, J.M., White, D.E., & Moules, N.J., 2017. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, vol. 16, no. 1, pp. 1-13. [Online] Available at: doi: 10.1177/1609406917733847 [Accessed: 29 December 2019].
- O'Keeffe, S. & Skerritt, C., 2020. Exploring teacher identity using poststructural tools. *International Journal of Research and Method in Education*, pp. 1-14.
- Ojo, M.H., 2018. *Will I ever use this Math? Yes!* Doctors for Global Education.
- Okafor, C.F. & Anaduaka, U.S., 2013. Nigerian school children and Mathematics phobia: How the Mathematics teacher can help. *American Journal of Educational Research*, vol. 1, no. 7, pp. 247-251. [Online] Available at: doi: 10.12691/education-1-7-5 [Accessed: 6 May 2018].
- Oleson, A., & Hora, M.T. 2013. Teaching the way they were taught? Revisiting the sources of teaching knowledge and the role prior experience in shaping faculty teaching practises. *Higher Education*, vol. 68, no. 1, pp. 29-45. [Online] Available from: doi: 10.1007/s10734-013-9678-9 [Accessed: 7 October 2018].
- Olney, J., 2014. *Autobiography: Essays theoretical and critical*. Princeton University Press.
- Olsen, B., 2008. *Teaching what they learn, earning what they live*. Boulder, CO: Paradigm Publishers.
- Oojorah, V. A., 2016. A Study of the design principles used to digitize the primary school curriculum at the Mauritius Institute of Education: An Autoethnography. *Philosophy of Education*. University of KwaZulu-Natal.
- Pace, J., & Hemmings, A., 2007. Understanding authority in classrooms: a review of theory, ideology, and research. *Review of Educational Research*, vol. 77,

- no. 1, pp. 4–27. [Online] Available at: doi: 10.3102/003465430298489 [Accessed: 29 August 2020].
- Paltridge, B., & Phakiti, A. eds., 2015. *Research Methods in Applied Linguistics: A Practical Resource*. Bloomsbury Publishing.
- Pearce, J. & Morrison, C., 2011. Teacher identity and early career resilience: Exploring the links. *Australian Journal of Teacher Education*, vol. 36, no. 1, pp. 48-59.
- Peker, H. Torlak, M., Toprak-Çelen, E., Eren, G., & Günsan, M., 2020. Language teacher identity construction of foreign language teaching assistants. *International Online Journal of Education and Teaching (IOJET)*, vol. 7, no. 1, pp. 229-246. [Online] Available at: <http://iojet.org/index.php/IOJET/article/view/733> [Accessed:8 November 2020].
- Pennington, M.C. & Richards, J.C., 2016. Teacher Identity in Language Teaching: Integrating Personal, Contextual and Professional Factors. *RELC Journal*, vol. 47, no. 1, pp. 5-23. [Online] Available from: doi: 10.1177/0033688216631219 [Accessed: 8 October 2018].
- Pennington, M.C., 1989. Faculty development for language programs. In: Johnson, R.K. (ed.) *The Second Language Curriculum*. New York: Cambridge University Press, 91-110.
- Pennington, M.C. ,1999. Rules to break and rules to play by: implications of different conceptions of teaching for language teacher development. In: Trappes-Lomax, H. & McGrath, I. (eds.) *Theory in Language Teacher Education*. London: Longman, 99-108.
- Peters, C., 2017. The Genealogy of Roberts Settlement Explored Through Black Feminist Autoethnography. *Genealogy*, vol. 1, no. 3, p.14.
- Pillen, M., Beijaard, D. & den Brok, P., 2013. Tensions in beginning teachers' professional identity development, accompanying feelings and coping strategies. *European Journal of Teacher Education*, vol. 36, no. 3, pp. 240-260. [Online] Available from: doi: 10.1080/02619768.2012.696192 [Accessed: 30 March 2018].
- Pillen, M., Beijaard, D., & den Brok, P., 2013. Professional identity tensions of beginning teachers. *Teachers and Teaching: Theory and Practice*, vol. 19, no. 6, pp. 660–678. [Online] Available at: doi: [10.1080/13540602.2013.827455](https://doi.org/10.1080/13540602.2013.827455) [Accessed: 9 November 2020].
- Pitard, J., 2017. A Journey to the Centre of Self: Positioning the Researcher in Autoethnography. *Forum: Qualitative Social Research*, vol. 18, no. 3, art. 10.
- Pitsoe, V. J., 2013. Teacher Attrition in South Africa: Trends, Challenges and prospects. *Journal of Social Sciences*, vol. 36, no. 3, pp. 309-318.
- Polonski, M., 2014. Designing and managing a research project. Chapter 5. [Online]. Available: [http://www.sagepub.com/sites/default/files/upm-binaries/4999\\_Polonski\\_Chapter\\_5.pdf](http://www.sagepub.com/sites/default/files/upm-binaries/4999_Polonski_Chapter_5.pdf) [Accessed: 6 May 2018].
- Poulos, C. N., 2013. 'Autoethnography' in Trainor, A.A., and Graue, E. (eds) *Reviewing Qualitative Research in the Social Sciences : A Guide for Researchers and Reviewers*. UK: Routledge, pp. 38-53.
- Qutoshi, S.B., 2015. Auto/ethnography: A Transformative Research Paradigm. *Dhulagiri Journal of Sociology and Anthropology*, vol. 9, pp. 161-190. [Online] Available at:

- <https://pdfs.semanticscholar.org/6ce4/8a07a3e42d2d81acee5f122044b2d7a3e428.pdf> [Accessed: 20 October 2019].
- Ramezanzadeh, A., Mohammadreza, S., Ahmad, A. & Eghtesadi, R., 2016. Femininities in Teaching: dialectic of self and others. *Qualitative Research Journal*, vol. 16, no. 2, pp. 181-196. Available at: doi: <https://doi.org/10.1108/QRJ-03-2015-0018> [Accessed: 6 May 2018]
- Rasool, F.M & Botha, C.J., 2011. The nature, extent and effect of skills shortage on skills migration in South Africa. *SA Journal of Human Resource Management*, vol. 9, no. 1, pp. 1-12.
- Redwood, S., 2008. Research Less Violent on the Ethics of Performative Social Science. *Forum: Qualitative Social Research* vol. 9, no. 2, article 60. [Online] Available from: <http://www.qualitative-research.net/index.php/fqs/article/view/407/882> [Accessed 18 April 2018].
- Rehman, A.A., & Alharthi, K., 2016. An introduction to research paradigms. *International Journal of Education Investigations*, vol. 3, no. 8, pp. 51-59. [Online] Available at: <http://www.ijeionline.com/attachments/article/57/IJEI.Vol.3.No.8.05.pdf> [Accessed: 8 October 2020].
- Richards, J.C. 2015. *Key Issues in Language Teaching*. New York: Cambridge University Press.
- Roberts, N., 2017. School Maths: What is our story? *Daily Maverick*. 8 January. [Online] Available from: <https://www.dailymaverick.co.za/article/2017-01-08-school-maths-what-is-our-story/#.WtwSWciFO00> [Accessed: 22 April 2018].
- Rodriguez, S., Cunningham, K. & Jordan, A. 2017. STEM Identity Development for Latinas: The Role of Self- and Outside Recognition. *Journal of Hispanic Higher Education*, pp. 1-19. [Online] Available at: doi: 10.1177/1538192717739958 [Accessed: 23 September 2018].
- Rogers, C. & Scott, K. 2008. The development of the personal self and the professional identity in learning to teach. In: M. Cochran-Smith, S. Feiman-Nemser, D.J. McIntyre & K.E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions and changing contexts* (pp. 732-755).
- Rosenberg, T., 2016. Conversations and the cultivation of self-understanding. In *Academic Autoethnographies* (pp. 33-47). Brill Sense.
- Rubin, A., & Babbie, E., 2010. *Essential research methods for social work*. New York: Brooks/Cole Cengage Learning.
- Sachs, J. 2005. Teacher education and the development of professional identity: learning to be a teacher. In: Denicolo P, Kompf M (Eds) *Connecting Policy and Practice: Challenges for Teaching and Learning in Schools and Universities*. Oxford: Routledge.
- Schaefer, L. & Clandinin, D.J., 2019. Sustaining teachers' stories to live by: implications for teacher education. *Teachers and Teaching*, vol. 25, no. 1, pp. 54-68. [Online] Available at: doi: 10.1080/13540602.2018.1532407 [Accessed 9 November 2020].
- Schepens, A., Aelterman, A., & Vlerick, P. 2009. Student teachers' professional identity formation: between being born as a teacher and becoming one. *Educational Studies*, vol. 35, no. 4, pp. 361-378. [Online] Available at: doi: 10.1080/03055690802648317 [Accessed: 8 February 2020].



- Schoenfeld, A.H. 2000. Models of the teaching process. *Journal of Mathematical Behaviour*, vol. 18, no. 3, pp. 243-261.
- Schuck, S., Aubusson, P., Buchanan, J., Varadharajan, M. and Burke, P.F., 2018. The experiences of early career teachers: new initiatives and old problems. *Professional Development in Education*, vol. 44, no. 2, pp.209-221.
- Schutz, P.A. & Lee, M. 2014. Teacher emotion, emotional labour and teacher identity. *Utrecht Studies in Language and Communication*, vol. 27, pp. 169-186.
- Schwartz, S.J., Montgomery, M.J. & Briones, E. 2006. The role of identity in acculturation among immigrant people: Theoretical propositions, empirical questions and applied recommendations. *Human Development*, vol. 49, no. 1, pp. 1-30.
- Setati, M., 2002. *Language Practices in intermediate multilingual mathematics classrooms in South Africa*. Unpublished Doctoral Thesis. Johannesburg: University of Witwatersrand.
- Sfard, A., & Prusak, A. 2005. Telling identities: In search of an analytic tool for investigating learning as a culturally shaped activity. *Educational Researcher*, vol. 34, no. 4, pp. 14-22.
- Short, N.P., Turner, L., & Grant, A. 2013. *Contemporary British Autoethnography*. Rotterdam: Sense Publishers.
- Sikes, P. 2015. Ethical considerations in autoethnographic research. *Specialist Research Ethics Guidance Paper*.
- Smith, J. K., (1984). The problem of criteria for judging interpretive inquiry. *Educational Evaluation and Policy Practice* 6, vol. 4, pp. 379-391.
- Sokol, J.T. 2009. Identity Development throughout the Lifetime: An Examination of Eriksonian Theory. *Graduate Journal of Counseling Psychology*, vol. 1, no. 2, p. 14.
- Spangenberg, E. D. & Myburgh, C., 2017. Comparing South African Female and Male Pre-Service Teachers' Beliefs about the Nature of Mathematics. *Africa Education Review*, vol. 14, no. 2, pp. 140-155. [Online] Available from: doi: 10.1080/18146627.2017.1292828 [Accessed: 30 March 2018].
- Sparkes, A.C. ,2002. Autoethnography: Self-indulgence or something more? In A.P. Bochner & Ellis (Eds.) *Ethnographically speaking: Autoethnography, literature and aesthetics* (pp. 209-232). Walnut Creek, C.A: Altamira Press.
- Spillane, J. 2000. Constructing ambitious pedagogy in the fifth-grade: The mathematics and literacy divide. *Elementary School Journal*, vol. 100, pp. 307-330.
- Split, J., Koomen, H. & Thijs, J. 2011. Teacher wellbeing: The importance of teacher-student relationships. *Educational Psychology Review*, vol. 23, no. 4, pp. 457-477.
- Starr, L.J., 2010. The use of Autoethnography in Educational Research: locating who we are in what we do. *Canadian Journal for New Scholars in Education*, vol. 3, no. 1, pp. 1-9.
- Stets, J.E., & Serpe, R.T., 2013. Identity theory. In *Handbook of social psychology* (pp. 31-60). Springer, Dordrecht.
- Stevens, T., Olivarez, A., Lan, W.Y. & Tallent-Runnels, M.K. 2004. Role of mathematics, self-efficacy and motivation in mathematics performance across ethnicity. *Journal of Educational Research*, vol. 97, pp. 208-221.

- Stoehr, K.J., 2017. Building the wall brick by brick: one prospective teacher's experiences with Mathematics anxiety. *J Math Teacher Education*, vol. 20, pp. 119-139. [Online] Available from: doi: 10.1007/s10857-015-9322-y [Accessed 30 March 2018].
- Stromquist, N.P., Lin, j., Corneilse., C., Klees, S.J., Choti, T., & Haugen, C.S., 2013. Women teachers in Liberia: Social and institutional forces accounting for their underrepresentation. *International Journal of Educational Development*, vol. 33, no. 5, pp. 521-530. [Online] Available at: doi: doi.org/10.1016/j.ijedudev.2012.08.002 [Accessed 9 February 2020].
- Stryker, S., 2002. *Symbolic interactionism: A social structural version*. Galdwell, NJ: Blackburn Press.
- Tajfel, H. & Turner, J.C., 1979. An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole
- Talavera-Franco, R., 2018. Exploring the learning experiences of adult Hispanics in MOOCs through self-efficacy theory, PhD thesis, Northeastern University, Boston, Massachusetts.
- Tedlock, B. 2000. Ethnography and ethnographic representation. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2<sup>nd</sup> ed.) (pp. 455-486). Thousand Oaks, CA: Sage.
- Teherani, A., Martimianakis, T., Stenfors-Hayes, T., Wadhwa, A., & Varpio, L. 2015. Choosing a Qualitative Research Approach. *Journal of Graduate Medical Education*, vol. 7, no. 4, pp. 669-670. [Online] Available at: doi: 10.4300/JGME-D-15-00414.1 [Accessed: 6 January 2020].
- Torey, A.F., 2014. Alternate Trajectories: Women Moving into Mathematics Education. *The Research Council on Mathematics Learning*, vol. 6, no. 3, pp. 29-50.
- Tsanwani, A., Harding, A., Engelbrecht, J. & Maree, K., 2014. Perceptions of Teachers and Learners about Factors that Facilitate Learners' Performance in Mathematics in South Africa. *African Journal of Research in Mathematics, Science and Technology Education*, vol. 18, no. 1, pp. 40-51. [Online] Available from: doi: 10.1080/10288457.2014.884262 [Accessed: 30 March 2018].
- Ungadi, B.A., 2015. "I was just done with calculations...I realized that I like working with people" Understanding why women abandon careers in mathematics. *Journal of Education and Practice*, vol. 6, no. 19, pp. 234-250.
- Van der Westhuizen, C., 2017. *Sitting Pretty: white Afrikaans women in postapartheid South Africa*: University of KwaZulu-Natal Press.
- Vandeyar, S., 2008. *Shifting selves: The emergence of new identities in South African*
- Van Maanen, J., 1988. *Tales of the field: On writing ethnography*. Chicago: University of Chicago.
- Viholainen, A., Asikainen, M. & Hirvonen, P.E. 2014. Mathematics Student Teachers' Epistemological Beliefs about the Nature of Mathematics and the Goals of Mathematics Teaching and Learning in the Beginning of their Studies. *Eurasia Journal of Mathematics, Science and Technology Education*, vol. 10, no.2, pp. 159-171.
- Vikaraman, S.S., Mansor, A.N., & Hamzah, M.I.M., 2017. Mentoring and Coaching Practices for Beginner Teachers – A Need for Mentor Coaching Skills, Training and Prinicpal's support. *Creative Education*, no. 8, pp. 156-169.

- Visser, M., Juan, A. & Feza, N., 2015. Home and school resources as predictors of mathematics performance in South Africa. *South African Journal of Education*, vol. 35, no. 1, pp. 1-10.
- Vithal, R., 2012. Mathematics education, democracy and development: Exploring connections. *Pythagoras*, vol. 33, no. 2, pp. 20-33.
- Wagner, C., Kawulich, B. & Garner, M., 2012. *Doing Social Research: A global context*. Berkshire: McGraw-Hill Higher Education.
- Wall, S., 2006. An Autoethnography on learning about autoethnography. *International Journal of Qualitative Methods*, vol. 52, no. 2, pp. 146-160.
- Wall, S.S., 2016. Toward a Moderate Autoethnography. *International Journal of Qualitative Methods*, vol. 15, no. 1, pp. 1-9. [Online] Available: doi: 10.1177/1609406916674966 [Accessed: 20 December 2019].
- Whitaker, M.C., 2020. Us and them: using social identity theory to explain and re- envision teacher-student relationships in urban schools. *The Urban Review*, vol. 52, pp. 691-707. [Online] Available at: doi: 10.1007/s11256-019-00539-w [Accessed: 30 January 2021].
- White, J.I. & Massiha G.H. 2016. The retention of women in Science, Technology, Engineering and Mathematics: A Framework for persistence. *International Journal of Evaluation and Research in Education*, vol. 5, no. 1, pp. 1-8. [Online] Available at: <https://files.eric.ed.gov/fulltext/EJ1094603.pdf> [Accessed: 23 August 2019].
- Winchester, C.L. & Salji, M. 2016. Writing a literature review. *Journal of Clinical Urology*, vol. 9, no. 5, pp. 308-312. [Online] Available at: <https://doi-org.uplib.idm.oclc.org/10.1177%2F2051415816650133> [Accessed: 8 July 2019].
- Winkler, I., 2018. Doing autoethnography: Facing challenges, taking choices, accepting responsibilities. *Qualitative Inquiry*, vol. 24, no. 4, pp.236-247. [Online] Availbale at: doi: [10.1177/1077800417728956](https://doi.org/10.1177/1077800417728956) [Accessed: 12 October 2012].
- Woest, Y. 2016. *The influence of own teachers on the professional identity of beginner teachers*. PhD Thesis. Pretoria: University of Pretoria.
- Woods, P., 1983. *Sociology and the school: an interactionist viewpoint*. London: Routledge and Kegan Paul.
- Zahorik, J.A. 1986. Acquiring teaching skills. *Journal of Teacher Education*, vol. 37, no. 2, pp. 21-25.
- Zembylas, M., 2003. Emotions and Teacher Identity: a post structural perspective. *Teachers and Teaching: theory and practice*, vol. 9, no.3, pp. 213-238.

## 8. ANNEXURES

### Annexure A: Interview with my mother

**How would you describe me before becoming a full time mathematics teacher?**

Jy was altyd onafhanklik, jy het hard gewerk, jy het geniet dit jy gedoen het. Jy het altyd als voluit gedoen. Grootste was jy het altyd die Here eerste gestel.

*You have always been independent. You worked hard and enjoyed what you did. You always tried to do things to the best of your abilities. The greatest was that you always put the Lord first.*

**What were the things that stood out about me?**

Jy het altyd vir ander omgee, in ag geneem en was lief wat jy gedoen het. En jy het gedoen wat jy kan met liefde en oorgawe.

*You cared about others and enjoyed what you did. You did the things you did out of love and compassion.*

**Do you think I chose the best career path?**

Ja, ek dink so

*Yes, I think so.*

**Why?**

Omdat jy baie skills het om met kinders te kan werk, goed oor te dra en hulle verstaan jou. Belangrikste is jou liefde wat jy oorgee beteken baie vir ander en kinders.

*You have the necessary skills to work with children and you have a talent to teach so that they understand you. The most important is the love you show your students – it means a lot to them.*

**What do you think lead me in choosing this career?**

Ek dink jy het 'n goeie een gekies: omdat jy besef het dat jy baie liefde het vir kinders en om met ander te werk en jy het baie om te gee vir die kinders.

Your love for children and the fact that you have a lot to offer them.

**Do you think you might have had an influence on me choosing this career path?**

Ja, ek dink so. Ek is baie lief vir kinders.

*Yes I think so, I also have a great love for children.*

**How did you perceive me during my first years of teaching?**

Ek dink in die begin het jy bietjie gesukkel om jou voete te vind, dit was vir jou moeilik. Maar ons het jou bly aangemoedig om aan te hou en jy het deur gekom, deur getrap en dit geniet op die ou einde. En jy wou net meer bereik het, en het meer ingesit.

*I think in the beginning you struggled to find your feet and it was difficult for you. But we kept on encouraging you to just keep going and you did, and you enjoyed it. You wanted to achieve more, so you worked even harder.*

**What do you recall were the most I talked about?**

Sjoe. Die kinders hoe hulle aanpas, hoe hulle verskil van toe jy 'n kind was, hoe hulle nou is. Hoe jy nou met hulle moet werk, wat jy nou vir hulle moet doen. Meeste oor dit gepraat.

*You mainly spoke about the learners and how different they are to when you were a school learner. You also spoke about ways to work with them.*

### **Anything else I spoke about?**

Jy was in die begin baie beïndruk met jou hoof. Jy het baie na hom opgesien, en jy het hom gewaardeer, en nogal baie sy woord gevat. Sal ek sê.

*In the beginning you were impressed with your principal and you looked up to him. You appreciated him and believed in what he told you.*

### **Did my impression of him remain this way?**

Ek dink in 'n mate. Hy het jou teleurgestel, in 'n mate nog steeds 'n hoë dink van hom gehad en hy 'n hoë dink van jou gehad. En hy het jou mooi hanteer al het jy gevoel hy was nie regverdig, tog was daar 'n mooiheid gewees.

*In a sense he did disappoint you, but you still looked up to him. I think he did handle you with some respect even though you felt that he was unfair.*

### **What about the time that he did not want me to go to Hoërskool Pretoria Noord?**

Dis hoekom ek sê dit was negatief, jy was nie baie met hom beïndruk nie. Tog later uitgesorteer en julle kon weer herbou.

*That's why I said that it was a negative experience, and you were not very impressed with him. Later on I think you were able to sort it out and mend your relationship.*

### **Do you think it was fair for him to treat me that way?**

Nee, Elriza obvious was ons nie, maar ons het nie God se plan geweet nie, dit was 'n beter plan. Op daai stadium het ek self as mamma nie so gedink nie, maar alles werk ten goede mee. Dis hoe ek dit sien.

*No, it was not fair, but we did not know God's plan and it was a better plan at that stage. At the time I also thought that it was not fair, but everything worked out as it should have. That's how I see it.*

**In taking about my experiences at the school, do you think I was telling the truth and not just sharing a one sided vision?**

Jy het geldige redes gehad, dit was vir jou 'n nuwe uitdaging, 'n nuwe toekoms, heeltemal iets anders as wat jy gedink het dit sou wees. Ek voel dit was geldig, maar op daardie stadium het als nie so mooi uitgewerk nie, maar mens aanvaar dit so. En weet jy wat is die mooiste, jy het dit aanvaar en aangegaan.

*You had valid reasons and it was a new challenge, a new future, something completely different to what you expected. I feel that it was valid, but at that stage everything did not work out quite as well, but you accepted it. You accepted it and persevered.*

**In your opinion did I have positive or negative experiences in my first three years of teaching?**

Oor die algemeen dink ek dit was positief. Daar was goed wat jou gepla het, maar jy het gewerk en dit oorkom en oorwin.

*Overall I would say positive. There were things that did not sit right with you, but you worked on them and your overcame them.*

**Did I ever mention that I would leave the teaching profession?**

Jy het al, kan net nie onthou wat jy wou gaan doen.

Yes you did. I can't remember what you said you wanted to do instead.

**Why do you think I wanted to leave?**

Ek dink op daai tyd stadium met jy wat wou Pretoria-Noord toe, gaan was dit vir jou 'n groot skok, en dit het vir jou 'n groot terugslag gegee en jy het gevoel hy was onregverdig. "Hoe kan hy dit keer", maar jy het dit uitgewerk.

*I think at that stage when you wanted to go to Hoërskool Pretoria-Noord, it came as a big shock when the principal stopped you and you felt that he was being unfair. “How can he stop me”, but you worked it out.*

**Why do you think I wanted to leave the profession completely, not just change schools?**

Ek dink jy het baie keer, op 'n stadium nie vervulling gekry nie en die kinders was baie moeilik en het jou baie opdrane gegee en dit was nie lekker vir jou nie.

*I think that you did not feel satisfied with your calling and the children were very difficult at a certain stage and you did not enjoy that.*

**Why do you think I did not leave the profession?**

Ek dink, dit is na aan jou hart, dit is iets wat vir jou kosbaar is, en jy het dit nie gelos nie want kinders is vir jou meer werd as die skool.

*I think the profession was close to your heart and it was important to you and you did not leave it because the children were worth more to you than the school itself.*

**If you can describe my teacher identity as a beginner teacher, how would you describe it?**

Weet jy hoe ek dit gesien het: jy het hard gewerk, jy wou die beste vir jou kinders gee, jy het ekstra ingesit en al was dit moeilik, het jy nog steeds vasgebyt en deur gedruk. Dink jou deursettingsvermoë en jou uithou en aanhou, dit is wat jou gehelp het.

*I saw it as: you worked hard and you wanted the best for your learners by putting in the extra effort. Even if it was difficult sometimes, you kept at it. I think that your perseverance is what helped you.*

**What factors influenced my beginner teachers identity?**

Ek dink jou wil om goeie onderwyseres te wees.



I think your innate will to be a teacher.

**Do you think the school management team and other teachers also had an influence on my teacher's identity?**

Ja, ek dink in n mate, al was dit nie altyd positief nie, het dit jou laat besef, dit is nie hulle wat daar is wat tel en nodig is nie. Ek is daar vir die kinders.

*Yes, in a sense, even though it was not always positive, it made you realise that you were not there for them, but you were there for the learners.*

**Do you think being a female teacher in today's schools are challenging?**

Ja, ek dink so.

*Yes I think so.*

**Why do you think so?**

Want jy kry kinders wat nie baie respek het nie, en jy moet mooi dink wat jy sê. Jy moet ook oplet na jou kleredrag anders lok dit baie dinge uit, en hulle kan baie lelik met jou wees. Omdat hulle nie respek het nie, sal hulle jou aanvat.

*Because there are children who does not have respect for their teachers, and you have to be careful what you say. You have to be mindful of what you what you are wearing, and they can be very nasty towards you. Because they do not have respect for you, they will take confront you Infront of others.*

**Do you think that mathematics in today's schools are challenging?**

Ek glo so, want die kinders sukkel baie daarmee en hulle kry nie goeie punte nie.

*Yes they do. They struggle a lot with it and they do not get good marks.*

**Why do you think so?**

Ek dink die grondslag is nie altyd reg gelê nie en baie kinders vind dit moeilik om

dit te verstaan, en daarom het one onderwysers en onderwyseresse nodig om die grondslag beter te kan lê en mooi stadig te kan begin en opbou na kind toe.

*I think that the foundation is not always there and many children find it difficult to understand. That is why we need teachers that can lay the foundation better so that learners can build on it.*

**Do Mathematics teachers face more or different challenges than other subject teachers?**

Ja, ek dink so.

*Yes, I think so.*

**Why?**

Want jy moet die kinders vat sonder 'n goeie grondslag en daarop probeer bou.

Because by the time the learners reaches high school, you have to teach them without them having a good foundation of Mathematics.

**What about language teachers?**

Tale is makliker, ek as 'n persoon het nie van wiskunde gehou nie. In die laerskool het ek reggekome, maar in die hoërskool het ek glad nie reg kom nie. Partykeer breek dit 'n kind af omdat hy weet hy moet Wiskunde vat, en dan in sy kop maak hy 'n negatiewe konnotasie. So jy as onderwyser moet daai negatief prober uitkry.

*Languages are easier. I struggled with Mathematics in high school, even though I did well in primary school. Sometimes it does more damage to a child knowing that he has to take Mathematics at school and then makes a negative connection with the subject. As a teacher you have to try and get rid of the negative connection.*

**Do you think that Mathematics teachers face more pressure than other subjects?**

Ek dink so want as jy nie wiskunde het nie kan jy nie sekere goed doen nie. So as jy nie wiskunde vat nie kan jy nie enige of sekere werke doen nie. So ja dit, ek dink so.

I think so because you need Mathematics to follow certain career paths.

**Anything final that you wanted to say or add?**

Ek is net trots op jou want jy het hard gewerk en ver gekom en deur Liewe Here se genade is jy besig om te bereik wat jy wil en ons as ouers is trots op daarop.

*I am proud of you because you have worked hard and have come so far. By the Lord's grace you are able to achieve what you wanted to and us as parents are proud of that.*

## **Annexure B: Interview with my grandfather**

**How would you describe me before becoming a full time mathematics teacher?**

Dat jy altyd in my hart ingekruip het. Jy was altyd vriendelik en gehoorsaam. Jy was altyd akademies sterk omdat jy bereid was om te luister en te werk.

*You have always found a way into my heart. You have always been friendly and obedient. You have always been strong academically because you were prepared to listen and do the work.*

**Do you think I chose the best career path?**

Ja ek dink so.

*Yes I think so.*

**Why?**

Omdat jy 'n uitgeknipte onderwyser is en omdat jy nog altyd 'n goeie verhouding met kinders gehad het.

*Because I have always seen you as a teacher. You have always had good relationships with children.*

**What do you think lead me in choosing this career?**

Jou oupa se voorbeeld en jy was net nog altyd bestem om 'n onderwyser te wees.

*Your grandfather's example and you were destined to be a teacher.*

**Do you think you might have had an influence on me choosing this career path?**

Definitief.

**Describe your influence.**

Dit wat ek gedoen het, het jy aangehang. En dinge wat ek gesê het oor die onderwys en afrigting.

*You were intrigued by the things I did and how I talked about education and coaching.*

**How did you perceive me during my first years of teaching?**

Ek dink dat wanneer 'n mens begin skool gee moet mens ondervinding opdoen end dit vat tyd. Ek dink dat jy het 'n goeie ervaring gehad toe jy begin skool gee het.

*I think that when you start teaching you need to build up experience and it takes time. I think that you had a good experience when you started teaching.*

**What do you recall were the most I talked about?**

Jy het nie baie oor die onderwysers gepraat nie. Jy het meestal gepraat oor die kinders. In sommige gevalle het jy gepraat oor moeilike situasies met die kinders, maar jy het Volhard en dit oorbrug. Jy het nie altyd goed gepraat van die kinders nie. Jy het gesê dat die hoof 'n bietjie snaaks was. Die nuwe ervaring het jou 'n bietjie laat dink. In terme van Wiskunde het jy gesê dat jy baie voorbereiding moes doen om seker te maak dat die kinders geleer het wat hulle moes geleer het.

*You did not talk about the teachers. You mostly talked about the learners and about difficult situations with the learners, but you persevered. You did not always have good things to say about the learners. You did mention that the principal was a bit funny sometimes. This new experience made you think a bit. With regards to Mathematics, you said that you did a lot of planning to ensure that your learners learned what they needed to.*

**In your opinion did I have positive or negative experiences in my first three years of teaching?**

Positief omdat 'n mens in jou gesig kon sien dat jy gelukkig was. Jy was nie ongelukkig nie, jy het nie rondgeloop met dinge in jou hart nie, dit wat jy gedoen het, het jy van gehou. Daar was negatiewe dinge ook, maar jy het dit goed hanteer.

*Positive because I could see in your face that you were happy. You weren't unhappy and you did not carry things in your heart. You enjoyed what you were doing. There were negative things, but you handled them very well.*

**Did I ever mention that I would leave the teaching profession?**

Nee ek het jou nooit dit hoor sê nie. Mens voel partykeer in jou hart so, maar more voel jy weer beter.

*No, I never heard you say that. Sometimes you feel like leaving, but tomorrow is a new day and then you feel better.*

**If you can describe my teacher identity as a beginner teacher, how would you describe it?**

Jy was positief ingestel, en jou lojaliteit teenoor die kinders het sterker geraak. Omdat jy positief ingestel was kon jy groei en die negatiewe dinge verwerk.

*From the start you were inherently positive and your loyalty towards the learners grew stronger. Your positivity allowed you to process the negative things.*

**What factors influenced my beginners teachers identity?**

Die kinders se gesindheid teenoor jou definitief. Dit het beter geraak soos wat jou ervaring vermeerder het.

*The learners' attitude towards you definitely had an impact. It improved as your experience increased.*

**Do you think being a female teacher in today's schools are challenging?**

**Why do you think so?**

Ja definitief omdat die kinders en veral die seuns baie arrogant kan wees. Maar as die juffrou hom vas vat van die begin af dan sal hy luister.

*Yes definitely, because the learners and especially the boys can be very arrogant, but if the teacher acts firm from the start, then they will listen.*

**Do you think that female teachers face more challenges than male teachers?**

Ek sal dit nie altyd so stel nie, maar in sommige gevalle kan dit so wees. Kom ek vertel jou van 'n meneer daar in Middelburg. Hy het die kinders gelooi, en hy het resultate uit hulle uitgekry. 'n Juffrou werk nou weer op 'n ander manier, sy werk op 'n sielkundige manier wat net so goed werk. Elke onderwyser het maar sy manier om met die kinders te werk.

*Not always, but in certain cases yes. Let me tell you about a teacher at Middelburg. He used to apply corporal punishment and he got results from his learners. A female teacher on the other hand has a different way of working with her learners and that works too. Every teacher has their own way of working with their learners.*

**Do you think that teaching mathematics in today's schools are challenging?**

**Why do you think so?**

Ja definitief, want die kinders is baie lui. Kinders besef nie dat Wiskunde is soos om lang afstand te hardloop. Jy moet hom elke dag oefen. Hulle doen nie hulle huiswerk nie en skryf by hulle vriende af.

*Yes definitely, because the learners are very lazy. Children do not realise that Mathematics is like training to run long distances, you have to practice every day. They don't do their homework and copy from their friends.*

**Do Mathematics teachers face more or different challenges than other subject teachers? What about language teachers?**

Ek dink dit is basies dieselfde, maar nou moet jy onthou dat wanneer jy 'n taal praat het jy iets wat jy kan skryf. Wanneer jy Wiskunde doen, doen jy toepassing.

*I think it is more or less the same, but you have to remember that when you speak a language you have something that you can write. When you do Mathematics, you need to do application.*

**Do you think that Mathematics teachers face more pressure than other subjects?**

Ja in terme van slaag syfers.

*Yes, in terms of pass rates.*

**Can you describe in words the current school climate in South Africa? Is it overall positive or negative?**

Dit is eintlik 'n baie moeilike situasie. Daar is geen dissipline meer nie en kinders doen nie huiswerk nie, hulle skryf net van mekaar af. Dit is 'n groot probleem verneam in Wiskunde want Wiskunde moet jy elke dag doen. Dissipline moet by die huis geleer word, maar deesdae kry 'n mens gehoorsame ouers. Dinge lyk nie goed nie, maar ons kan nie negatief wees nie, as ons gaan negatief wees gaan alles tot niet gaan

*It is a difficult situation because discipline is non-existent. Learners do not do their homework anymore. They copy from each other and this is a big problem especially in Mathematics where you have to practice every day. Discipline should be taught at home, but nowadays we have obedient parents. It is not looking good, but we can't be negative, because then everything will collapse.*

**Anything final that you wanted to say or add?**

Ja die groot probleem het gekom toe hulle lyfstraf afgestel het. Die Bybel sê tog, tugtig die wat jy lief het.



*Yes the big problem started when they removed corporal punishment. Even the Bible says that you need to discipline your children.*

### **Annexure C: Interview with my father**

#### **How would you describe me before becoming a full time mathematics teacher?**

Jy was energiek vol en altyd lus om dinge te doen. Jy was gemotiveerd.

*You were energetic and wanted to do things. You were motivated.*

#### **What were the things that stood out about me?**

Jy was self gemotiveerd. 'n Mens hoef nie vir jou te gesê het om iets te doen nie, jy het dit sommer net self gedoen.

*You were intrinsically motivated. We did not need to tell you to do something, you just went ahead and did things.*

#### **Can you list my strengths and weaknesses?**

Vir swakpunte: jy sukkel bietjie met aanpassing en jy kan emosioneel raak.

Vir sterkpunte: jy is baie verstandig en kan self besluite neem. Jy is 'n self-starter.

*Weaknesses: you do struggle with adjustment and you can be emotional.*

*Strengths: you are sensible and can make your own decisions. You are a self-starter.*

#### **Do you think I chose the best career path?**

Ek dink so ja, jy floreer daarin en jy geniet dit om met kinders te werk.

*I think so yes, you are thriving and you enjoy working with children.*

#### **What do you think lead me in choosing this career?**

Ons het een aand gesit en gesels oor wat jy gaan doen, nog saam met jou ma. En ons het vir jou gesê dat ons sien jou as 'n onderwyser. Jou oupa en jou ma is

beide onderwysers en ons het gesien hoe jy met die kinders by die Sondagskool gewerk het. Dit was net 'n natuurlike fit.

*We talked about it one night with you mother and we said that we can see you as a teacher. Your grandfather and mother are both teachers and we noticed how you worked with the children at the Sunday school. It seemed like a natural fit.*

**Do you think you might have had an influence on me choosing this career path?**

In 'n mate ja omdat ons daaroor met jou gesels het.

In a way yes, because we had that discussion with you.

**How did you perceive me during my first years of teaching?**

Jy was baie senuweeagtig in die begin en dit was vir jou stresvol in die begin. Maar jy het aangepas en gegroei in die skool. Daar was insidente waarmee jy ongelukkig was, maar jy het sterk gestaan en deur gedruk.

*You were nervous in the beginning and it was stressful for you, but you adapted, and you grew at the school. You were unhappy with certain incidents, but you stood strong and persisted.*

**What do you recall were the most I talked about?**

In die begin was dit die aanpassing in die klas. Wanneer ons by jou kom kuier het was dit nogal 'n ding wat uitgestaan het. En toe jy begin studeer het aan jou Honneurs, het jy weer daaroor gepraat. Jy het ook gepraat oor die hoof wat jou nie ondersteun het nie.

*In the beginning it was your adaption in the classroom. When we visited you those years it stood out from everything you spoke about. When you started your studies towards you Honours degree, you spoke more about that. You also spoke about the lack of support from the principal.*

**In taking about my experiences at the school, do you think I was telling the truth and not just sharing a one sided vision?**

Nee ek dink nie dit was eensydig nie, dit was goed waaroor ek ook ontsteld sou gewees het.

*No, I do not think it was one sided as it included things that I would have been upset about as well.*

**In your opinion did I have positive or negative experiences in my first three years of teaching?**

Ek sal sê meer positief. Jy het gegroei en sterker geword en 'n mens kan nie sterker word as jy net heeltyd negatiewe ervarings het nie.

I would say more positive. You grew and became stronger and you cannot be become stronger if you only had negative experiences.

**Did I ever mention that I would leave the teaching profession?**

Nee, maar jy het wel gesê dat jy sal van 'n werk hou wat meer betaal, maar dit is normaal.

*No, you did say once that you would like a job that would pay more, but that is normal.*

**Why do you think I did not leave the profession?**

Omdat dit in jou bloed is. Jy is 'n onderwyseres en dit is hoe jy is. Jy geniet jou werk.

*Because it is in your blood. You are a teacher and that is who you are. You enjoy your work.*

**If you can describe my teacher identity as a beginner teacher, how would you describe it?**

Jy is positief, jou hele houding straal positiwiteit uit. Jy is ook 'n opbouwende mens wat ander ook opbou.

*You are a positive person and your whole being resembles positivity. You are also a constructive person that will help others.*

**What factors influenced my beginners teachers identity?**

Die hoof, jou HoD en die departement. Jy het baie oor hulle gepraat in die begin. Jy het baie gepraat oor jou HoD en wat sy gedoen het. Sy het definitief 'n invloed gehad. Jy het baie by haar geleer.

*The principal, your HoD and the department. You spoke a lot about them and especially your HoD and what she did. She did have an influence and you learnt a lot from her.*

**Do you think being a female teacher in today's schools are challenging?**

Ja, dit is, veral in die nuwe Suid-Afrika. Die skool en gemeenskap het heeltemal verander. Daar is nie meer dissipline in die skole nie. In my dae was jy versigtig vir jou onderwysers omdat daar lyfstraf was. Deesdae is dit moeiliker vir onderwyseresse want die kinders is nie meer bang nie.

*Yes, it is, especially in the new South Africa. The school and community has changed completely and there is no discipline in schools anymore. In my days you were careful because we had corporal punishment. Nowadays it is more difficult for female teacher because the learners are not afraid anymore.*

**Why do you think so?**

Want selfs by die huis is 'n kind banger vir sy pa as vir sy ma en so sal dit by die skool ook wees. Hy sal banger vir die mans onderwysers wees as die juffrouens.

*Even at home a child would be more careful of his father than his mother and that will be the same at school.*

**Do you think that mathematics in today's schools are challenging?**

Wiskunde is nog al die jare 'n probleem. Ek myself was goed met dit, maar ek weet baie kinders het gesukkel met dit.

*Yes, Mathematics has always been a problem in schools. I was good in it but I know that many other children struggled with it.*

**Why do you think so?**

Daar is nog al die jare 'n stigma rondom wiskunde wat sê dat dit 'n moeilike vak is. Ek voel dat sonder wiskunde kan jy niks doen nie want die hele wêreld vereis wiskunde. Dit is ook deels ouers se skuld want die ouers sê dat hulle kon nie wiskunde doen nie en nou dink die kind hy kan ook nie.

*There has always been a stigma surrounding Mathematics about its difficulty. In my opinion, I feel that you cannot do anything without Mathematics as the whole world requires the use of Mathematics. It is also part the parents' fault as they will share how they could never do Mathematics with their child and so the child grows up believing he can also not do Mathematics.*

**Do Mathematics teachers face more or different challenges than other subject teachers?**

Ja ek dink so.

*Yes I think so.*

**Why?**

Weereens as gevolg van die stigma dat dit moeilik is. Onderwysers moet dit ook op 'n ander manier aanbied want dis nie 'n vak wat jy leer nie, jy moet insig hê. As die onderwyser nie goed kan oordra nie, dan gaan die kinders sukkel om dit te verstaan. Ek het self gesukkel met wiskunde op 'n stadium, tot een jaar wat ek 'n baie goeie onderwyser gekry het en toe maak als vir my sin. Die onderwyser moet na die kind se vlak toe beweeg sodat die kind kan verstaan. Ek glo dat elke kind wiskunde kan doen, maar jy moet 'n goeie onderwyser hê wat dit kan oordra.

*Because of the stigma surrounding mathematics that it is a difficult subject. Mathematics teachers should also teach in a different way, because it is not a subject that you learn, but you should rather have insight. If the teacher cannot teach it properly then the learners will struggle with it. I struggled with Mathematics for a while until I got a good teacher one year where it all made sense to me. Mathematics teachers should also go down to the learner's level so that he can understand. I believe that every child can do Mathematics, but they should have a good teacher that can teach it properly.*

**What about language teachers?**

Dit is makliker met tale want jy kan dit leer soos 'n papegaaie.

*It is easier to teach languages because you can read a book and learn it.*

### **Can you describe the present school climate in South Africa?**

Die onderwysstelsel is besig om die kinders te vaal. Die onderwysers doen hulle beste maar hulle hande is afgeknap. Toe ek op skool was, dink ek het die onderwysers meer vrye teuels gehad in terme van dissipline. Jou oupa byvoorbeeld was bekend in die skool om 'n lat te kon swaai en sy kinders het altyd goed gedoen in vergelyking met die ander onderwysers in die skool. Dit wat hulle nou in die skole doen, werk nie. Ook die slaagsyfer wat maar net 30% is, is glad nie goed nie. Die kinders is dan nie gereed vir universiteit nie. Hulle druij ook nie meer kinders nie, hulle word net deur gesit. Ek self was 'n jaar teruggehou in standerd 6 en dit het my net goed gedoen. Hulle doen die kind meer skade as hulle net deur gesit word. Daar moet ook meer skole gebou word en meer fondse reg aangewend word vir skole. Ons kinders loop uit graad 12 uit op 'n laer standaard as ander lande se kinders en dit beïnvloed hulle in die werksplek ook.

*Our education system is failing our children. The teachers are doing their best, but they are limited in terms of discipline. In my days teachers had more freedom in terms of discipline. For example, your grandfather was known in the school for his discipline and his learners always did very well compared to the other teachers in the school. What they are doing in the schools now are not working. Even the pass percentage of 30% is very low which means that the learners are not ready for university when they leave school. Learners are also not held back anymore; they are just passed onto the next grade. The poor learner did not cope with the current year's work and now he is just passed onto a more difficult grade. They are also not building enough schools anymore and the funds are not being distributed correctly. Currently our children are leaving grade 12 on a lower standard compared to other countries and this also has an influence in their workplace.*

## **Annexure D: Interview with my friend**

### **What was your first impression of me as a student during practical at your school?**

Ek was beïndruk met jou kennis en hoe jy jou klasse hanteer het. Juffrou Erasmus was natuurlik mal oor jou

*I was impressed with your knowledge and how you handled your classes. Miss Erasmus was also crazy about you.*

### **How would you describe my work ethics?**

Jy is hardwerkend en georganiseerd. Jy was 'n voorbeeld en jy was altyd voorbereid vir jou lesse gewees.

*You are hardworking and organised. You were an example and you were always prepared for your lessons.*

### **Can you name the qualities that shaped your image of me during my first three years of teaching?**

Nog steeds hardwerkend, organiseerd, voorbereid en vriendelik. Jy het ingepas by die onderwys end it was 'n roeping vir jou. Jy was vir my 'n voorbeeld.

*Hardworking, organised, prepared and friendly. You were a good fit for teaching, and it was a calling for you. You were an example for me.*

### **Was there anything that stood out about me?**

Jy het goed gedoen waar jy was by Hoërskool Gerrit Maritz en jy het nie moed opgegee nie, al het jy kans gehad om te skuif. Jy was nie bang om jou opinie te lig tydens vergaderings nie.

*You did well at Gerrit Maritz high school, and you did not give up even though you had the opportunity to move schools. You were not afraid to speak your mind during meetings.*

**Do you think I am a suitable Mathematics teacher?**

Ja, verseker. Jy ken jou werk en jou vakkennis is goed.

*Yes, definitely. Your subject knowledge is very good and you are knowledgeable of your work.*

**In your opinion did I struggle to maintain discipline in my classroom?**

Nee, jy het nie regtig gesukkel met dissipline nie.

*No, you did not really struggle with discipline.*

**How would you describe my beginner teacher identity?**

Die onderwys pas by jou en jy kon goed met kinders werk en hulle het respek vir jou gehad. Daar was dae wat jy gesukkel het, maar almal kry daai dae. Jou verhouding met die kinders was goed. Jy kon op verskillende vlakke met hulle praat en nie net skolasties nie.

*Teaching suits you and you did well in working with the learners and they had respect for you. You did have days wherein you struggled, but everyone has those days. You had good relationships with your learners. You were able to communicate with them on different level and not just about school.*

**Do you think that my teacher identity changed during my first three years of teaching?**



Ja, ek sou sê dit het verbeter want jy het geleer hoe om die kinders te hanteer. Jy het ook verder studeer.

*Yes, I would say that it improved because you learned how to work with the learners. You also enrolled for your Honours degree.*

**In your opinion, during my beginner teacher years, did I have positive or negative feelings towards the teaching profession?**

Oor die algemeen positief. Daar is aspekte wat ons almal negatief maak. Jy het die negatiewe op 'n positiewe manier benader. In jou eerste jaar moes julle uit daai rooi boekies werk en jy het probeer beter maak.

*In general, positive. There are aspects that can make us all negative. You always approached the negative in a positive way. In you first year you had to work from those red books, and you tried to make it better.*

**When we saw each other at meetings, what were the things we talked about?**

Ons het gepraat oor die gemiddelde van ons skole. Julle wat departementele vraestelle geskryf het en ons ons eie. Ons het gepraat oor die handboeke wat ons gebruik het en die tipe werk wat ons gedoen het. Ons het ook gepraat oor ons hoofde en dat ons nie altyd saam met hulle gestem het nie.

*We spoke about our averages of our schools and how you wrote department tests and we wrote our own. We spoke about the textbooks we used and the type of work we covered. We also spoke about our principals and how we did not always agree with them.*

**Would you say that I was happy at my school?**

Ek dink jy was omdat al het jy 'n kans gehad om te skuif, jy het nie. Jy het ook gesê dat by die skool gee dit jou kans om op jou studies te fokus omdat jy nie so baie buitemuurs gehad het nie.

*I think you were happy because even though you had a chance to leave, you did not. You also said that at the school it gave you time to focus on your studies as you did not have to do a lot of extra curriculums.*

**Do you think it is challenging to be a female teacher in today's schools?**

Vir my gaan dit oor hoe jy as onderwyser jou klasse hanteer, maak nie saak van jou geslag nie.

*For me it is about how you as a teacher handle your classes, no matter your gender.*

**Do you think that female teachers face more challenges than male teachers?**

Ek dink in die hoërskool veral met die seuns in die ouer grade, definitief. Party mans onderwysers het meer daai gesag wat hulle kan afdwing. Maar weereens, jy as vroulike onderwyser moet net streng wees.

*I think that in high school especially with the boys in the higher grades. Some male teachers do have the automatic respect thing, but again it is up to you as the female teacher to be strict.*

**Do you think it is a challenge to teach Mathematics in today's schools?**

Verseker, die tipe kind waarmee ons werk en dan ook daar is te min tyd vir alles in die CAPS. Kinders vandag het nie die self-dissipline om die bietjie te gaan leer wat mens vandag met hulle gedoen het nie.

*Definitely, the type of child that we work with and we do not have enough time to cover everything stipulated in CAPS. Children today do not have the self-discipline to reinforce what they have been taught.*

**In your opinion, what are some of the challenges South Africa face towards Mathematics as a school subject today?**

Baie onderwysers is nie bekwaam genoeg nie. Kinders se grondslag is nie reg gelê nie. Dis asof daar nie baie aangaan by die laerskole nie.

*A lot of teachers are not competent to teach Maths. Also, the learners do not have a proper foundation, it is as if there is not much done at primary schools.*

**Do you think that enough support is given to beginner teachers from the school and department?**

Die departement het daai werksinkels gehad, maar baie keer het die mense wat dit moes aanbied self nie geweet wat daar aangaan nie. By my skool moes ek een periode 'n week 'n les insit by Juffrou Erasmus en dit het my baie gehelp. Ongelukkig kry nie almal daai ervaring nie. As dit jou eerste keer is wat jy die jaar aanbied dan moes jy die voorbereiding by 'n ander onderwyser gekry het wat dit al gegee het.

*The department did have those workshops, but the people who had to run it, did not know what to do themselves. At my school I had to sit in on one lesson a week in my HoD's class and that helped me a lot. Unfortunately, not everyone gets that experience. At my school, if it was your first time to teach that grade, then you would get your planning from a teacher who has already taught that grade.*

## **Annexure E: Interview with my brother in law**

### **How would you describe me before I became a full time teacher?**

Hardwerkend en georganiseerd

*Hardworking and organised.*

### **What were the things that stood out about me?**

Jy is baie netjies, mens kan sien dat jy goed presteer het op skool.

*You are a neat person, and I could see that you did well at school.*

### **Can you list my strengths and weaknesses?**

Ek dink jy is baie passievol oor die onderwys en jy sit baie moeite in. Ons het so baie banke afgeskuur.

*I think that you are passionate about education and you put in a lot of effort. We sanded so many desks.*

### **Do you think that I chose the best career path for myself?**

Ja ek kan jou nie sien iets anders doen nie. Toe ek op skool was het jy vir my goeie advies gegee en het jy tutor al vir lank.

*Yes, I cannot see you doing anything else. When I was still at school you gave me such good advice and you have been tutoring for so long.*

### **How did you perceive me during my first three years of teaching?**

Passievol, hardwerkend. Jy het baie moeite ingesit om die kinders reg te leer.

*Passionate and hardworking. You put in so much effort to ensure that you taught your learners in the right way.*

### **What do you recall I spoke about most?**

Jy het baie oor die kinders gepraat en hulle gedrag.

*You spoke a lot about your learners and their behaviour.*

**Do think I had a positive or negative experience in my first three years of teaching?**

Ek dink positief want ten spyte van als wat gebeur het, was jy nog steeds passievol.

*I think positive, because in spite of all that happened, you remained passionate.*

**Did I ever mention that I wanted to leave the profession?**

Nee, nie wat ek kan onthou nie.

*No, not from what I can remember.*

**How would you describe my teacher identity?**

Ek dink jy was hands on. Jy was baie betrokke met die leerlinge.

*I think you were a hands on teacher who was involved in your learners' lives.*

**Do you think that my teacher identity changed during my beginner teacher years?**

Jy het verbeter want jy het gewoond geraak aan jou werk en wat jy moet doen.

*You improved because you got used to your work and what you had to do.*

**Do you think it is challenging to be a female teacher in today's schools?**

Ja ek dink so want die jeug van vandag het nie baie respek vir vrouens nie. Hulle het meer respek vir mans. Maar jy kan gesag afdwing maak nie saak van jou geslag nie. As die kinders weet dat daar iemand is wat die ekstra myl vir hulle sal loop, dan sal hulle jou respekteer.

*Yes I think so because today's youth does not have a lot of respect for women. They have more respect for males. But you can instil respect in your classroom no matter your gender. If the students know that you will walk the extra mile for them, then they will respect you more.*

**Can you describe the current state of education in South Africa?**

Daar is nie genoeg skole vir al die kinders nie en die standaard is te laag. Daar is 'n groot sprong van laerskool na hoërskool en dan weer van hoërskool na universiteit.

*We do not have enough schools for all of the learners and the standard is low. There is a big gap between primary school and high school and high school and university.*

## Annexure F: Letter of Verisimilitude from my mother

31A Vos Street  
Mineralia  
Middelburg  
Mpumalanga  
1050  
15 November 2020

### LETTER OF VERISIMILITUDE

I hereby acknowledged that I have read the autoethnography of my daughter Elriza Claassen and I am satisfied that it fulfils the requirements of verisimilitude.

I have always been proud of my daughter, but after reading her story I develop a greater level of respect and admiration for her. She always confides in me about her obstacles but I was never aware of all the sacrifices she made and the stumbling blocks she had to overcome through her journey and where she is today.

AS a mother I always deeply cared for her and is proud she made it as a caring and hardworking teacher. After reading her autoethnography it gave me much more perspective of her passion to help the young learners in the field of maths.

It is an inspiring and motivating story that one can fulfil your dreams through love and caring.



Elizabeth H Moolman

## Annexure G: Letter of Verisimilitude from my father

31A Vos Street  
Mineralia  
Middelburg  
Mpumalanga  
1050  
15 November 2020


### LETTER OF VERISIMILITUDE

I hereby acknowledged that I have read the autoethnography of my daughter Elriza Claassen and I am satisfied that it fulfils the requirements of verisimilitude.

I have always been proud of my daughter, but after reading her story I develop a greater level of respect and admiration for her. I was never aware of all the sacrifices she made and the stumbling blocks she had to overcome through her journey and where she is today.

I always know she would be a dedicated, passionate and hardworking teacher. After reading her autoethnography it gave me much more perspective of her passion to help the young learners of today.

It is an inspiring and motivating story that one can be a success in life



Marthinus Moolman



## Annexure H: Letter of Verisimilitude from my friend

381 Umgeni Street

Erasmuskloof

Pretoria

0048

19 October 2020

### LETTER OF VERISMILITUDE

I hereby acknowledge that I have read the autoethnography of Elriza Claassen and that I am satisfied that it fulfils the requirements of verisimilitude.

I met with Elriza for coffee, about two years ago, where she had an interview with me about her autoethnography. She asked me various questions and my opinion on certain aspects. We have known each other for a while now, but after reading this I have developed a greater level of respect and admiration for what she had to go through to be where she is today.

After reading her autoethnography it gave me more perspective on her way of approaching certain aspects in teaching, as well as her ways of doing so. She is a motivation to many teachers out there, especially first year teachers. I think her love for mathematics and the way she influences students in her class, will have a big impact on their way of understanding Mathematics and to develop a love for it.

It is an inspiring and motivating story.

ANNERI STOOP

## **Annexure I: Letter of Verisimilitude from my brother in law**

52 Hippo Street

Theresapark

Pretoria

0155

16 November 2020

## LETTER OF VERISMILITUDE

I hereby acknowledge that I have read the autoethnography of my sister in law, Elriza Claassen and that I am satisfied that it fulfils the requirements of verisimilitude.

I have known Eliza for what feels like half my life now and I have always been impressed by her positive attitude and outlook on life. Reading about her youth, school life and her first experiences as a teacher has given me new insight and only now do I truly understand the challenges she faced at her first job. I have always perceived Elriza as a kind, intelligent and strong person, the fact that she went through so many setbacks and challenges and overcame them while still retaining her friendly nature and zest for life only reaffirms to me that my admiration for her is not misplaced.

It is clear that she is immensely passionate about teaching and that she has an interest in the improvement of the lives of the people around her, be it student, family member or stranger. Elriza's growth as a teacher is tangible, not only in her autoethnography but it is also clearly evident to those who have known her while her teaching career was still in its infancy. I have no doubt that Elriza will only go from strength to strength and that she will be an invaluable addition wherever she may find herself.

Juan Claassen

