

**EXPLORING TRANSFORMATIVE LEARNING EXPERIENCES OF THE VOCATIONALLY  
INTERESTED AND VOCATIONALLY DISINTERESTED PRE-SERVICE TEACHERS IN  
SELECTED TEACHER TRAINING COLLEGES IN ZIMBABWE**

**BY**

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## **DECLARATION**

I, **ESNATI MACHARAGA**, declare that:

The work presented in this thesis, except where otherwise indicated, is my own and has not been presented for any degree work in another university.

Where use has been made of the work of others, it is duly acknowledged in the text.

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## **ABSTRACT**

The purpose of this study was to explore the transformative learning experiences of 40 vocationally interested and vocationally disinterested pre-service teachers in four selected teacher training colleges in Zimbabwe. This multi-site case study was guided by Mezirow's ten-phase Transformative Learning Theory to understand and unpack the pre-service teachers' transformative learning experiences, how they understood their transformative learning, and the forms of support offered by the institutional communities that enhanced their transformative learning experiences. Having employed a multi-modal approach which involved focus group discussions, individual face-to-face interviews and continuum drawings and discussions to generate data, a qualitative data analysis strategy using open coding was adopted.

Findings suggested that student teachers experienced transformative learning through two major avenues: disorienting dilemmas and learning experiences. While the majority of the pre-service teachers, both the vocationally interested and the vocationally disinterested, experienced transformative learning in teacher education, this thesis found that some did not experience transformation.

From the findings, the pre-service teachers investigated understood their transformative learning as embracing two domains: transformative learning as change (of perceptions, views, attitudes and beliefs and understanding of the teaching profession); and transformative learning as the acquisition of knowledge and skills. Such change and knowledge acquisition gave rise to personal awareness that created new ways of thinking and seeing the world.

Infrastructural (libraries, theatres, halls of residence), material (computers, books) and human (staff, peers) resources, as well as spiritual support, emerged as critical for enhancing student teachers' transformative learning. However, where infrastructural resources offered inadequate spaces, particularly in private institutions, this tended to limit the pre-service teachers' transformative learning experiences. This study thus recommends the provision of adequate and spacious learning spaces to foster student teacher transformative learning.

Drawing on Mezirow's ten-stage Transformative Learning Theory, it is argued that vocationally interested and vocationally disinterested pre-service teachers experienced transformative learning

differently. Although the transformative learning phases were sequential and undeviating in Mezirow's Transformative Learning Theory, for the pre-service teachers investigated, the transformative learning experiences were neither linear nor experienced by having passed through all ten stages. This thesis discovered that vocationally interested pre-teachers achieved transformative learning having passed through fewer stages of Mezirow's Transformative Learning Theory, while their vocationally disinterested counterparts had to move through more stages to realise shifts in their paradigms.

The thesis suggests a need for comprehensive longitudinal studies, drawing on this framework to trace the transformative learning journeys of pre-service teachers from first year to third year, to understand their transformative learning experiences as well as establish whether or not all of them experience perspective changes at the end of their teacher training.

## **DEDICATION**

To you my dearest mother Plasda, and my beloved father Peter Pedzisai Muchena Chadzimura, I know how you would have felt. I feel a sense of accountability to your wisdom. Symbolically, you my father gave me the gift of a pencil on my wedding day, and today I show you the results of that pencil.

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*My Spirit magnifies the Lord,*

*And in my Saviour, I rejoice,*

*My lowliness has been assured,*

*Of Blessings all the world shall voice. (Singing and Ululating)*

## LIST OF ABBREVIATIONS AND ACRONYMS

‘A’ Level	Advanced Level
CD	Continuum Drawings
DTE	Department of Teacher Education
FGD	Focus Group Discussion
HOD	Head of Department
Ind. Int.	Individual interviews
MHTESTD	Ministry of Higher and Tertiary Education Science and Technology Development
MPSE	Ministry of Primary and Secondary Education
PTH	Primary Teachers Higher
PTL	Primary Teachers Lower
PSA	Professional Studies Syllabus A
RCZ	Reformed Church of Zimbabwe
S1to S10	Categories to represent participants in the study
TP	Teaching Practice
‘O’ Level	Ordinary Level
UK	United Kingdom
USA	United States of America
UZ	University of Zimbabwe
ZINTEC	Zimbabwe Integrated Teacher Education Course
Zim –Asset	Zimbabwe Agenda for Sustainable Socio-Economic Transformation



## TABLE OF CONTENTS

DECLARATION .....	i
ABSTRACT .....	ii
DEDICATION .....	iv
ACKNOWLEDGEMENTS .....	v
LIST OF ABBREVIATIONS AND ACRONYMS .....	vii
LIST OF FIGURES .....	xviii
<b>CHAPTER 1 .....</b>	<b>1</b>
<b>SETTING THE SCENE .....</b>	<b>1</b>
1.1 Introduction .....	1
1.2 The concept of transformative learning .....	5
1.3 Background to the study .....	7
1.4 Teacher training provision in Zimbabwe – Post-independence era .....	8
1.5 Focus and purpose of the study .....	12
1.6 Personal context and motivation for the study .....	13
1.7 Rationale for the study .....	14
1.8 The research questions .....	18
1.9 Overview of the theoretical framework .....	18
1.10 Brief overview of the literature .....	19
1.11 Overview of the methodological approach .....	20
1.12 Conclusion and overview of the thesis .....	21
1.12.1 Organisation of the thesis .....	21
1.13 Definition of key terms .....	23

<b>CHAPTER 2 .....</b>	<b>25</b>
<b>REVIEW OF RELATED LITERATURE .....</b>	<b>25</b>
2.1 Introduction.....	25
2.2 Vocational interest and vocational disinterest .....	26
2.3 The nature of the transformative learning experiences of students .....	29
2.3.1 Global studies.....	29
2.3.1.1 Transformative learning is an emotional experience caused by disorienting dilemmas .....	29
2.3.1.2 Transformative learning experiences through study abroad programmes.....	32
2.3.1.3 Transformative learning experiences through creative learning .....	34
2.3.1.4 Transformative learning experiences through a holistic approach .....	35
2.3.1.5 Transformative learning experiences through catalysts .....	36
2.3.1.6 Transformative learning experiences through transition from informational learning to transformative learning.....	37
2.3.1.7 Transformative learning experiences through precursors .....	39
2.3.1.8 Transformative learning experiences through passion .....	41
2.3.1.9 Transformative learning experiences through self-awareness.....	43
2.3.1.10 Transformative learning experiences through work-integrated learning .....	43
2.3.1.11 Transformative learning experiences through social media .....	44
2.3.1.12 Transformative learning experiences through graduate competencies.....	45
2.3.1.13 Transformative learning experiences through critical reflection.....	46
2.3.2 Regional studies .....	48
2.3.2.1 Transformative learning experiences through integrative learning .....	48
2.3.2.2 Transformative learning experiences through spirituality.....	49
2.3.2.3 Transformative learning experiences through social change .....	50
2.3.2.4 Transformative learning experiences through willingness to learn.....	51

2.3.2.5 Transformative learning experiences through emotional intelligence .....	52
2.4 How students understand their transformative learning .....	55
2.4.1 Global studies .....	55
2.4.1.1 Transformative learning as a change of personal dispositions .....	55
2.4.1.2 Transformative learning as empathy .....	57
2.4.1.3 Transformative learning as leadership.....	58
2.4.2 Regional studies .....	59
2.4.2.1 Transformative learning as a change .....	59
2.4.2.2 Transformative learning through self-awareness .....	60
2.5 Forms of support offered to students to enhance their transformative learning .....	61
2.5.1 Global studies.....	61
2.5.1.1 Teaching strategies as a support mechanism for transformative learning .....	61
2.5.1.2 Emotional support for transformative learning .....	62
2.5.1.3 A model for effective teaching and learning as a support mechanism for transformative learning.....	63
2.5.1.4 Problem-oriented projects as a support mechanism for transformative learning .....	63
2.5.1.5 The physical learning environment as a support mechanism for transformative learning .....	64
2.5.2 Regional studies .....	65
2.5.2.1 The learning environment as a support mechanism for transformative learning .....	65
2.5.2.2 The learning resources as a support mechanism for transformative learning .....	66
2.5.2.3 Creative learning environments as support for transformative learning .....	67
2.5.2.4 Physical environment as a support mechanism for transformative learning .....	67
2.6 Conclusion .....	69

<b>CHAPTER 3.....</b>	<b>72</b>
<b>THEORETICAL FRAMEWORK.....</b>	<b>72</b>
3.1 Introduction.....	72
3.2 Historical development of Mezirow’s transformative learning theory.....	73
3.2.1 Perspective transformation.....	73
3.2.2 Main conceptualisations of transformative learning .....	76
3.2.2.1 Kuhn’s 1962 paradigm .....	76
3.2.2.2 Paulo Freire: transformation as consciousness-raising.....	77
3.2.2.3 Habermas’s domains of learning and communicative action.....	79
3.3 The principles/phases of Mezirow’s transformative learning theory .....	81
3.3.1 Disorienting dilemma.....	82
3.3.2 Self-examination with feelings of fear, anger, guilt or shame .....	84
3.3.3 Critical assessment of assumptions .....	88
3.3.4 Recognition that discontent and the process of transformation is shared .....	89
3.3.5 Exploration of options for new roles, relationships and actions .....	90
3.3.6 Planning a course of action .....	91
3.3.7 Acquisition of knowledge and skills .....	93
3.3.8 Provisional trying of new roles .....	94
3.3.9 Building of competence and self-confidence in new roles and relationships .....	95
3.3.10 A reintegration into one’s life on the basis of conditions dictated by one’s perspective.....	96
3.4 Critique of Mezirow’s transformative learning theory .....	98
3.4.1 Transformative learning as individuation .....	98
3.4.2 De-contextualization of the transformative learning theory .....	99
3.4.3 Spiritual and emotional dimensions of transformative learning theory .....	100
3.5 Conclusion .....	102

<b>CHAPTER 4.....</b>	<b>104</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>104</b>
4.1 Introduction.....	104
4.2 Research paradigms .....	105
4.3 The interpretivist paradigm.....	106
4.4 Research design .....	107
4.5 The multiple-site case study research design.....	107
4.6 The qualitative approach.....	109
4.7 Methodology .....	110
4.7.1 Gaining access.....	110
4.7.2 Population.....	112
4.7.3 Sampling and sampling methods.....	113
4.7.4 Convenience sampling .....	113
4.7.5 Purposive sampling .....	114
4.7.6 Piloting instruments .....	115
4.7.7 Data generation .....	116
4.7.7.1 Data generation tables .....	117
4.7.7.2 Data generation.....	118
4.7.7.3 Data generation using a questionnaire.....	119
4.7.8 Focus group discussions.....	119
4.7.9 Individual face-to-face interviews.....	124
4.7.10 Continuum drawings and discussions .....	127
4.7.11 Challenges encountered in data generation.....	129
4.8 Data analysis .....	131
4.9 Trustworthiness of the study.....	136

4.10 Ethical considerations .....	138
4.11 Limitations of the study .....	140
4.12 Conclusion .....	142
<b>CHAPTER 5 .....</b>	<b>143</b>
<b>THE RESEARCH SETTINGS.....</b>	<b>143</b>
5.1 Introduction.....	143
5.2 A brief overview of teacher education in Zimbabwe.....	144
5.3 College governance.....	145
5.4 Colleges.....	146
5.4.1 College one.....	146
5.4.2 College two .....	150
5.4.3 College three .....	158
5.4.4 College four.....	160
5.5 Participants' biographical data.....	165
5.5.1 Period awaiting training .....	170
5.5.2 Supplementing failed 'O' Level examinations.....	170
5.5.3 Joined the world of work.....	171
5.5.4 Cross border traders .....	172
5.5.5 Marriage .....	173
5.5.6 Failure to further education .....	174
5.5.7 Reasons for joining the teaching profession .....	174
5.5.7.1 Passion .....	175
5.5.7.2 Family influence .....	176
5.5.7.3 Serving the nation.....	177
5.5.7.4 To obtain a professional qualification .....	178

5.5.7.5 Economic situation .....	178
5.5.7.6 Financial benefits.....	179
5.5.7.7 A stepping stone and a last resort .....	180
5.5.7.8 Job security .....	181
5.6 Conclusion .....	181
<b>CHAPTER 6 .....</b>	<b>184</b>
<b>DATA PRESENTATION AND ANALYSIS.....</b>	<b>184</b>
6.1 Introduction.....	184
6.2 Transformative learning experiences related to affirmative feelings .....	186
6.2.1 Excitement.....	186
6.2.2 Pride .....	189
6.3 Transformative learning experiences related to disorienting dilemmas .....	191
6.3.1 Fear.....	192
6.3.2 Shame .....	196
6.3.3 Being overwhelmed.....	197
6.3.4 Confusion .....	199
6.3.5 Frustration .....	200
6.3.6 Shock.....	203
6.4 Transformative learning through learning experiences .....	207
6.4.1 The nature of transformative learning experiences related to classroom techniques.....	207
6.4.2 Transformative learning experiences related to research .....	208
6.4.3 Transformative learning experiences through demonstration .....	209
6.4.4 Transformative learning experiences through group work .....	210
6.4.5 Transformative learning experiences through the lecture method .....	211
6.4.6 Transformative learning experiences through question and answer technique.....	213

6.4.7 Transformative learning experiences through information and communication technology (ICT) .....	214
6.5 Conclusion .....	217
<b>CHAPTER 7 .....</b>	<b>218</b>
<b>DATA PRESENTATION AND ANALYSIS.....</b>	<b>218</b>
7.1 Introduction.....	218
7.2 Transformative learning as change .....	219
7.2.1 Transformative learning as a change in views/attitudes and perceptions about teaching .....	219
7.2.2 Transformative learning as change in self-concept.....	222
7.2.3 Transformative learning as a change related to personal attributes .....	224
7.3 Transformative learning as the acquisition of knowledge and skills .....	227
7.3.1 Transformative learning as acquisition of knowledge and skills through assignment writing .....	227
7.3.2 Transformative learning as acquisition of knowledge and skills related to communication and interaction .....	229
7.3.3 Transformative learning as the development of confidence .....	230
7.3.4 Transformative learning as acquisition of knowledge and skills related to new content.....	231
7.4 Supportive environment.....	235
7.4.1 Resource support .....	235
7.4.2 Material resource support.....	235
7.4.3 Infrastructural resource support .....	237
7.4.3.1 Library .....	238
7.4.3.2 Lecture venues .....	239
7.4.3.3 Students' halls of residence .....	241
7.4.4 Human resource support.....	243



7.4.4.1 Lecturers .....	243
7.4.4.2 Peers.....	245
7.4.4.3 The college management .....	247
7.4.4.4 Spiritual support .....	249
7.4.5 Extra-curricular activities.....	250
7.5 Conclusion .....	251
<b>CHAPTER 8.....</b>	<b>253</b>
<b>DISCUSSION, CONCLUSIONS AND SYNTHESIS.....</b>	<b>253</b>
8.1 Introduction.....	253
8.2 Methodological reflections on the study .....	255
8.3 Review of the study .....	257
8.4 Discussion of findings.....	262
8.4.1 The nature of the transformative learning experiences .....	265
8.4.1.1 Transformative learning experiences related to affirmative feelings .....	265
8.4.1.2 Transformative learning experiences related to disorienting dilemmas .....	266
8.4.1.3 The nature of transformative learning experiences related to classroom learning techniques .....	271
8.4.2 Vocationally interested and vocationally disinterested pre-service teachers' understandings of their transformative learning.....	275
8.4.2.1 Transformative learning as a change .....	276
8.4.2.2 Transformative learning as a change in views and/or attitudes about teaching .....	276
8.4.2.3 Transformative learning as a change in self-concept .....	279
8.4.2.4 Transformative learning as a change in personal attributes .....	280
8.4.2.5 Transformative learning as a change in views about dress code .....	280
8.4.3 Transformative learning as the acquisition of knowledge and skills .....	281

8.4.4 Forms of support offered by the college communities to enhance the pre-service teachers' transformative learning.....	285
8.5 Lessons and contributions of the study.....	290
8.6 Implications based on the study.....	294
8.6.1 Methodology .....	295
8.6.2 National .....	296
8.6.3 Institutional.....	296
8.6.4 Implications for research.....	297
<b>REFERENCES.....</b>	<b>299</b>
<b>APPENDICES .....</b>	<b>359</b>
Appendix A: Request for permission to conduct research.....	359
Appendix B: Permission letter for data collection from Ministry of Primary and Tertiary Education .....	360
Appendix C: University ethical clearance certificate .....	361
Appendix D: Research request letter for Bondolfi teachers' college .....	362
Appendix E: Request letter for data collection for principals.....	363
Appendix F: Letter of information to participants and consent form .....	364
Appendix G: Data generation schedule: Questionnaire.....	368
Appendix H: Data generation schedule: Focus group discussion.....	370
Appendix I: Data generation schedule: Face to face interview .....	371
Appendix J: Data generation schedule: Continuum drawings and discussions.....	373
Appendix K: Language Editor Certificate .....	374

## LIST OF TABLES

Table 1.1: Zimbabwean primary and secondary teachers' training colleges .....	11
Table 4.1: The colleges used in the study .....	112
Table 4.2: Recruitment of participants: questionnaire .....	117
Table 4.3: Data generation methods .....	118
Table 4.4: Crystallization of data. Source: Researcher (2019) .....	134
Table 5.1: College one .....	165
Table 5.2: College two .....	166
Table 5.3: College three .....	167
Table 5.4: College four .....	168

## LIST OF FIGURES

Figure 1.1: Pre and post-independence colleges .....	11
Figure 3.1: Mezirow's principles of the transformative learning theory .....	81
Figure 4.1: Data generation itinerary .....	117
Figure 4.2: Stages of post data generation analysis Adapted from Braun and Clarke (2006) ....	132
Figure 8.1: Mezirow's stages of transformative 1991 learning (Mezirow 2012) .....	262
Figure 8.2: The transformative learning experiences related to context shock .....	267
Figure 8.3: The nature of transformative learning related to classroom learning techniques .....	271
Figure 8.4: Transformative learning as change .....	276
Figure 8.5: Transformative learning as the acquisition of knowledge and skills .....	282
Figure 8.6: Forms of support offered by the college communities .....	285

## **CHAPTER 1**

### **SETTING THE SCENE**

#### **1.1 Introduction**

Transformative learning as an expansion of consciousness through the transformation of individual worldviews and specific capacities of the self has become an attractive area of research into the learning of adults (Rahman and Hoque 2017).

This study explores the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers in selected teacher training colleges in Zimbabwe.

Employing high quality teachers is crucial for all educational systems, but getting talented and committed brains into the teaching profession depends on who are trained to be teachers Balyer and Özcan (2014). In this regard, Sayed and McDonald (2017) indicate that motivation to enter initial teacher education is a key concern globally. Research (Roness and Smith 2010; Kim and Cho 2014; Reeves and Lowenhaupt 2016) further reveals that while some students choose teaching for intrinsic-altruistic reasons, a significant number enter teacher training with extrinsic motives. Bastick (2000) and Kim and Cho (2014) concur that approximately 55-60 per cent of pre-service teachers join the teaching profession for extrinsic reasons. Some altruistic - intrinsic reasons often cited relate to serving the country or society, love of teaching or working with children, and the extrinsic motivations relate to having nothing else to do, and teaching as the only available choice (Kim and Cho 2014; Shah et al. 2018). However, Topkaya and Uztosun (2012); and Balyer and Özcan (2014) agree that all teacher education programmes the world over will always be composed of trainees with a vocational calling and those without a calling.

In this study vocationally interested pre-service teachers represent those who have altruistic-intrinsic motivations for teaching, are passionate about teaching, prefer it to other professions and have entered teacher education out of their own volition (Roness and Smith 2010; Kim and Cho 2014). Given the correlation between interest or passion, and performance and persistence in work and academic contexts, Serin (2017) indicates that such teachers can make a difference in pupils' lives and achievements. Vocationally disinterested pre-service teachers represent those who preferred other professions to teaching, or those who joined teaching as a last resort

out of extrinsic motivations. Ikupa *et al.* (2017) indicate that such student teachers are viewed as ‘committed compromisers’ who expect to easily get into professions other than teaching, and their extrinsic motives for joining teaching may undermine their effectiveness and long-term commitment to teaching unless they transform in teacher training. Literature surveyed (Taylor and Cranton 2013; Altun 2017; Serin 2017) indicates that intrinsic motivation or passion is one of the key pillars of transformative learning. In the absence of transformative learning during teacher training, this may negatively impact the quality of their classroom practice. However, Christie *et al.* (2015) and Pilonieta *et al.* (2017) concur that through critical self-examination and critical assessment of assumptions and beliefs, transformative learning may occur. In other words, student teachers who enter teacher training with extrinsic motivations may transform, should they challenge their previously held beliefs in light of new thinking and insights through engagement in critical reflection to realise a paradigm shift - transformative learning. Subsequent to critical reflection will be a change in how they view the world and thus in how they view teaching.

On the contrary, however, Bastick (2000) and Sakinofsky, Amigo and Janks (2018) point out that interest or passion in a profession does not automatically translate into transformation. Also, Gudiel and Muller (2019) and Nazia and Muhd (2019) suggest that interest alone is not enough to experience transformative learning; it should be coupled with intensive self-questioning and assessment. Thus, teacher training should be expected to transform not only the extrinsically motivated trainees, but all teacher trainees need exposure to opportunities that promote their transformative learning and prepare them for effective work in the classroom (Balyer and Özcan 2014; Reeves and Lowenhaupt 2016). However, exactly how these trainees experienced transformative learning in teacher training colleges was not clearly known.

Given these global observations and debates, an attempt to develop a little more understanding of how pre-service teachers experience transformative learning is worthwhile. This is what this study aims to contribute to in a limited way. Again, given the interest in social equity and social justice in the world at large, an understanding of how student teachers transformatively learn, understand their transformative learning and the support that they receive in that process ultimately assists in developing better policies and aids the provision of better teacher training programmes. This thesis does not address these high-level questions of social equity and social

justice directly; rather it addresses a specific research question which aligns with wider discourses about what can be done to promote quality in teacher training, and education broadly in Southern Africa, specifically in Zimbabwe.

Since 2008 the Zimbabwean economy took a nose dive Munangagwa (2009); Thebe (2018). Consequently, industries collapsed, and big companies relocated to nearby countries like South Africa, Botswana and Zambia, and some even moved as far as the U.K, USA, Australia and New Zealand (Mushawatu 2017). Unemployment rates shot up across all age groups. Teacher Education was not spared the effects. The high unemployment forced the jobless to grab anything that came their way for survival. Consequently, teaching became the only window of hope to secure employment after graduation. Thus, many trainees joined teacher education, not because they had a calling into teaching, but because that was the only avenue that promised a job subsequent to programme completion. In response to decisions such as this, the Zimbabwean Chief Economist, Erich Block (2013) commented in a news report that it was common-place to find people remarking at the wisdom of accepting whatever job they could rather than not having a job at all! Teacher training colleges thus enrolled both the vocationally interested and vocationally disinterested pre-service teachers.

As quality education is generally believed to produce good learning outcomes World Bank (2012); Balyer and Özcan (2014); Serin (2017), teacher education is expected to contribute to this objective. This is given that teacher quality has become a key focus of the United Nations' efforts to provide quality education in schools. The particular sample group explored in this study are pre-service teachers in four selected teacher training colleges in Zimbabwe. Looking at them enables an exploration of issues that intersect with the bigger debates. These include whether it is a good idea just to expose both vocationally interested and disinterested pre-service teachers to the same treatment during teacher education and then have them all out into classrooms subsequent to graduation.

The mixed bag of vocationally interested and vocationally disinterested pre-service teachers in the Zimbabwean teachers' training colleges, without any special treatment or additional coaching afforded, particularly for the vocationally disinterested teacher trainees, are all expected to emerge as competent and enthusiastic teachers with appropriate attitudes and dispositions and enter the profession as national change agents and torch bearers (Donlan, Loughlin and Bryne

2019). Teacher Education is expected to transform all pre-service teachers, both vocationally interested and vocationally disinterested, so that by graduation they all have the appropriate knowledge, skills, dispositions and attitudes required of teachers to ensure effective teaching and learning of all children (UNESCO 2014). However, contrary to other research (Sakinofsky, Amigo and Janks 2018; Gudel and Muller 2019) which indicates that interest alone may not lead to transformation, more research reveals that in the absence of intrinsic motivation for or interest in teaching, such pre-service teachers are likely not to transform during training and upon joining the teaching profession, and may well lack the zeal, motivation, creativity and the excitement which are the key ingredients for effective teaching (Rogoff *et al.* 2016; Altun 2017).

Lack of commitment and dedication in teachers affect their learners' transformative learning and consequently their achievements. The World Bank (2012) notes that teacher effectiveness is one of the most important school-based predictors of children's learning, and effective teachers can offset the learning deficits of disadvantaged learners. Further, teacher commitment is at the core of quality education as committed teachers inculcate and nurture values that will guide the subsequent learning in the wider world outside the classroom and lecture theatre (Razak, Darmawan and Keeves 2009). Hence, without passion for the profession, teaching may not be effective and learners' transformative learning is hampered (Park 2005; Altun 2017). Rahman and Hoque (2017) also indicate that the process of teacher training is a transformative one that goes well beyond the transmission and acquisition of knowledge and skills. It is the ability to reflect on beliefs and understandings in light of new experiences that is crucial for the student teachers' change process. However, questions regarding how pre-service teachers transform generally in training colleges, and in particular Zimbabwean pre-service teachers, have not been answered clearly.

Thus, drawing on Mezirow's Transformative Learning Theory (1991), the study seeks to develop in-depth understanding of how both vocationally interested and vocationally disinterested pre-service teachers experience and understand their transformative learning, and the kinds of support they receive from the college communities to enhance their transformative learning in the selected teacher training colleges in Zimbabwe. The study intends to establish the transformative learning experiences of both vocationally interested and vocationally disinterested pre-service teachers, and juxtapose and compare those experiences and so establish whether or

not they experience transformation at a similar pace and understand the transformative process in a similar manner.

This introductory chapter sets the scene for the study by commencing with a discussion on the concept of transformative learning. A background to the study, which begins with debates on transformative learning in global and regional contexts, followed by a detailed discussion on teacher training provision in Zimbabwe's Post-independence era, is then offered. Thereafter follows the focus and purpose of the study, subsequent to which the researcher presents her personal context and motivation for the study. Thereafter, the chapter discusses the rationale behind the study. Following the rationale is the key question of the study and the sub-questions. An overview of the theoretical framework, a literature review, and methodological approaches follow. The conclusion and overview of the thesis tie up the chapter. In this study the terms, 'pre-service teacher', 'student teacher' and 'teacher trainee' are used interchangeably.

## **1.2 The concept of transformative learning**

Transformative learning in the context of this study implies personality changes, or changes in the organisation of the self, characterised by simultaneous restructuring of a whole cluster of schemes and patterns (Illeris 2009). In other words, this is about a break from existing orientations, understandings and beliefs which typically occurs as a result of a crisis-like situation. Such a situation is often caused by challenges experienced as urgent and unavoidable, that makes it necessary to change one's world view in order to move forward. Transformative learning is thus critical for pre-service teachers as it may change their very personality, worldviews or attitudes given that it occurs in special situations, for example the vocationally disinterested pre-service teachers who choose to train as teachers when in actual fact they do not wish to be teachers. Such changes are often both profound and extensive, and they demand a lot of mental energy in the way individuals think about themselves and their expected new worldviews, and involve a shift of consciousness (Illeris 2009; Mezirow 2012; Lysychkina, Hildenbrand and Reidmatinez 2016).

In this study, drawing from Illeris (2009), transformative learning is understood in the context of the acquisition of knowledge and skills and involves the emotional, social and societal dimensions of change. It is a change in one's self, in others, and in the world as one encounters



situations that challenge one's deeply entrenched assumptions, values, beliefs, and knowledge uncritically assimilated from the various experiences and socialising agencies throughout one's life (Mezirow 1991).

Transformative learning may also be seen as a paradigm shift for an individual, rather than of a community (Illeris 2009). More so, transformative learning changes the way an individual sees himself or herself and it changes the way they continue to learn and construe new meanings about the world (Mezirow 1991). During transformative learning, the vocationally interested and vocationally disinterested pre-service teachers critically question themselves: they question their understandings, beliefs and expectations and they experience a deep swing in perspective which takes them to a new way of being in the world. In this study, transformative learning experiences include personally changing and or reshaping a student teacher's self-conception or self-identity permanently (Paul 2014; Lin 2018). Failure to realise transformation in the case of student teachers may negatively impact their classroom practice and consequently school children's achievements when they begin professional practice, given that a teacher's attitude, passion and enthusiasm shape school children's learning outcomes (Wilson 2014; Serin 2017).

Further, transformative learning brings about higher levels of learning quite different from the traditional methods of instructional and informative learning (Halupa 2017). Halupa (2017), concurring with Mezirow (2000), adds that transformative learning is reflective and critical, and results in a more robust, meaningful, long-term learning experience. Reflection on learning includes making inferences, discriminating how the information meets or challenges one's pre-conceived notions, evaluating and then solving a problem or a dilemma to move forward. Related literature (Tahiri 2010) acknowledges that this process of questioning beliefs and morals is on-going throughout teacher training, as the pre-service teachers continue to evaluate both their acquired knowledge and practice against their previous assumptions.

Transformed teachers are likely to effectively implement the curriculum, use better teaching strategies, show empathy, and employ good leadership styles, and this in turn improves the education quality as they are torch bearers for the nation Frymier and Shulman (1995); Bridges et al. (2019); Nsiah (2014); Laanemets and Rostovtseva (2015); William, McKnight and Phillip (2017); Donlan, Loughlin and Bryne (2019). Further, as highlighted by Clark (1993: 47), "transformational learning of student teachers produces far-reaching changes in their learners

than does learning in general, and these changes can have a significant impact on the learner's subsequent experience. In short, transformative learning shapes people; they are different afterwards, in ways both they and others can recognize". O'Sullivan *et al.* (2002) further write that: transformative learning involves experiencing a deep, structural shift in the basic premises of thought, feelings and actions. It is a shift of consciousness that dramatically and permanently alters our way of being (in this case the way of being a teacher) in the world. For the vocationally disinterested pre-service teachers, joining teaching, a profession they never dreamt of joining, requires a profound shift of consciousness. The shift involves an understanding of themselves, and their self-locations in the world that they live in. Hence, this transformation of existing beliefs forms the basis of Mezirow's (1991) transformative learning theory. Mezirow (1996: 162) posits that "learning is understood as the process of using a prior interpretation to construe a new or revised interpretation of the meaning of one's experience in order to guide future action". Through critical reflection, students may generate beliefs and opinions that guide them to take a justified action.

### **1.3 Background to the study**

Debates at global and regional levels acknowledge disorienting dilemmas as the trigger for transformative learning. Malkki (2017) and Raikou (2018) concur that disorienting dilemmas are a major defining and dramatic aspect for transformative learning to occur. Related to this, Damianakis *et al.* (2019) and Ensign (2019) argue that transformative learning experiences are painful and can occur progressively or suddenly.

Furthermore, Christie *et al.* (2015) report that critical self-examination and critical assessment of assumptions are pre-cursors to transformative learning. In this case the student teachers challenge their previously held assumptions in light of new knowledge through critical reflection, and this will be followed by a change in how they view the world. Enkhtur and Yamahoto (2017) report that transformative learning occurs when individuals change their frames of reference - their presumptions, beliefs and values. In addition, Caruana (2011); Pilonieta *et al.* (2017); and Sakinofsky, Amigo and Janks (2018) also indicate that students make a paradigm shift after undergoing critical reflection.

Students also experience transformative learning through the acquisition of knowledge and skills. Transformative learning goes beyond simple knowledge acquisition, and supports critical ways in which students consciously make meaning. Dakia (2016); and Belnaine (2017) indicate that it is through interaction and communication with others that students acquire new knowledge and eventually experience transformative learning. On top of that, surveyed literature (Sensyn 2018; Ziegler 2019) acknowledges students' transformative learning experiences as the basis for changes in their identity as students. Transformative learning should create students who show observable changes in knowledge, attitudes, skills and behaviours. According to these studies, self-awareness can enhance or limit personal or professional growth. However, the authors argue that transformative learning and the changing of one's frames of reference are never an easy process and that students realise transformative learning at different stages of Mezirow's Transformative Learning Theory.

In order to facilitate transformative learning, student support must form the core of the transformative learning process (Tran 2012; Sanchez 2014; Clouston 2018; Lin 2017; Donlan, Loughlin and Bryne 2019; Niels 2020). The studies by these authors emphasise support from within institutions and communal living as important factors of transformative learning. Further, the need for a supportive learning environment through the provision of teaching and learning support and a physically and socially supportive learning environment are also emphasised (Makwinja 2017; Ngene *et al.* 2018; Ross, Dlungwame and Van Wyk 2019). While a lot of academic work has been carried out globally and regionally on students' transformative learning, no such studies have been carried out in Zimbabwe at any level (university or teacher training college). This study thus adds to the debates on the topic.

#### **1.4 Teacher training provision in Zimbabwe – Post-independence era**

Zimbabwe's independence in 1980 came with massive expansion of education across all levels of the education system Mukeredzi (2009). This resulted in a huge teacher demand which exceeded supply from the conventional teacher training colleges (Zvogbo 2007; Mukeredzi 2009). While massification of the education system was intended to take education to the doorstep of every citizen, ensuring that 'no child was left behind' Zembere (2018); Kangira (2019), and at a later stage to address requirements of 'Education for All', expansion in teacher

education was intended to address the severe teacher gaps in the newly established primary and secondary schools (Nziramasanga 1999; Tarusikirwa 2016; Hove and Ndawana 2019).

At the time, teaching was one of the very lucrative professions in the country. Consequently, several strategies were adopted to operationalise the policy for the massive expansion of the education system. New colleges were established and the government launched an in-service teacher training model: the Zimbabwe Integrated Teacher Education Course (ZINTEC) to be run in these new colleges. The 2-5-2 ZINTEC Model was a three-year programme which was divided into eight months (2 terms) in college, twenty months (5 terms) in schools and eight months in college (A term from a Zimbabwean perspective is 4 months long). The ZINTEC Model adopted a distance education offering approach to develop pre-service, non-graduate teachers for primary schools and its launch responded directly to making primary education free, compulsory and easily accessible. It was for this reason that ZINTEC Model student teachers were deployed in rural primary schools where there was a greater need for teachers (Mubika and Bukaliya 2011; Kangira 2019). The student teachers assumed full responsibility for their classes Tarusikirwa (2016) and received monthly allowances (Zembe 2018).

Meanwhile in the conventional colleges, the teacher training model changed from the three year on-campus training with only one term of teaching practice (TP) that was operational, to the four-year programme: the 2-years in, 2-years out model, where student teachers were in college during the first and third years and out on TP during the second and 4<sup>th</sup> years (Kangira 2019). Additionally, deployment targeted needy rural schools and, as in the 2-5-2 model, during school experience student teachers assumed full responsibility for classes but were attached to a mentor. The model thus extended the teacher training duration from three to four years and was operational until the early 1990s (Mukeredzi 2009; Tarusikirwa 2016).

From the mid-1990s, the teacher education system reverted to the 3-year teacher education model and which adopted the 1.1.1 approach - the Attachment Model. The student teachers were on campus during the first and third years and on TP in the second year. The label 'attachment' emanated from the fact that student teachers were attached to mentors and they had no teaching loads of their own, unlike in the case of the 2-years in, 2-years out model. According to Chiromo (2004), student teachers in the Attachment Model were treated as 'supernumeraries' because they were left to do everything for the mentors, who sort of 'abandoned' their classes to these

trainees. However, notwithstanding, the Attachment Model to some degree enhanced closer liaison between participating schools and teachers' colleges as it was the mentors who were generally expected to provide for and nurture the student teachers' professional growth.

The 1-1-1 was later re-modelled to a 2-5-2 training model which took a leaf from the ZINTEC Model. The 2-5-2, a school-based model, was instituted in 2003, and the then Minister of Higher education in its justification said:

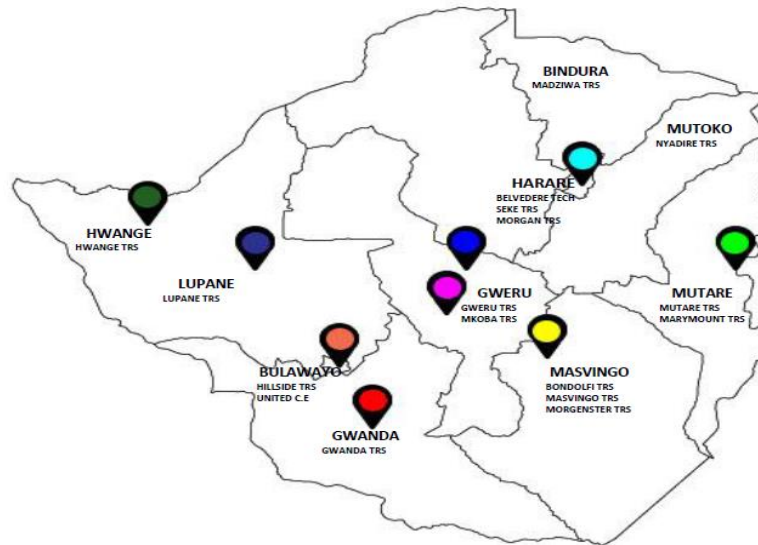
*...To improve teacher education programmes and build a quality teaching force, colleges have adopted a 2.5.2. Model of teacher training. The approach gives trainees more time in the teaching field and emphasizes on the job training, this is the direction that we are going, to control numbers of unqualified temporary teachers serving in our classrooms Murerwa (2004:13).*

The 2-5-2 Model required that student teachers be on campus during the first two and last two school terms (8 months), and during the five terms (20 months) student teachers were out on TP. In the greater part of teacher training, while on school experience, student teachers did not have their own teaching loads but were attached to school-based mentors while receiving tuition through the Open and Distance Learning programme (Murerwa 2004). All except the ZINTEC model were launched in both primary and secondary teachers' training colleges alike and student teacher deployment was mainly directed at rural schools and communities.

It is the 2-5-2- Teacher Education Model that is operational in the teacher training programme in Zimbabwe at the time of the study. Given the worsening economic situation, the unemployed continue to be pushed/pulled into teaching notwithstanding their vocational orientation. How they experienced transformative learning and acquired the requisite knowledge, skills, motivation, values, attitudes and attributes to perform the expected teaching tasks effectively Mukeredzi, Mthiyane and Bertram (2015) at the end of teacher training period was not well known. A closer analysis of the historical development of teacher education in Zimbabwe portrays an upsurge in the enrolment patterns in teacher training colleges subsequent to independence in 1980. There was a phenomenal expansion of teachers' training colleges from a total of seven teachers' colleges (5 primary and 2 secondary) before independence to seventeen teachers' training colleges (13 primary and 4 secondary teacher training colleges after independence (Mapolisa and Tshabalala 2013; Kariwo 2014).

**Figure 1.1: Pre and post-independence colleges**

Source: Researcher (2019)



The government tried to have at least one college in each province, as illustrated on the map of Zimbabwe in Figure 1.1, which shows both the pre- and post-independence colleges. Table 1.1 summarises these pre and post-independence colleges of Zimbabwe.

**Table 1.1: Zimbabwean primary and secondary teachers' training colleges**

Source: Researcher (2019)

Colleges	Towns/Provinces
1. Bondolfi Teachers' College	Masvingo
2. Masvingo Teachers' College	Masvingo Province
3. Morgenster Teachers' College	
4. Gwanda ZINTEC College	Gwanda Matabeleland South Province
5. Madziwa Teachers' College	Bindura Mashonaland Central Province
6. Morgan ZINTEC College	Harare
7. Seke Teachers' College	Harare Province
8. Belvedere Teachers' College (Secondary Teachers)	

9. Mary Mount Teachers' College	Mutare
10. Mutare Teachers College (Secondary Teachers)	Manicaland Province
11. Nyadire Teachers' College	Mutoko
	Mashonaland East Province
12. Mkoba Teacher' College	Gweru
13. Gweru Teachers' College	Midlands Province
14. United College of Education	Bulawayo
15. Hillside Teachers' College (Secondary Teachers)	Bulawayo Province
16. Hwange Teachers' College	Hwange
	Matabeleland North Province
17. Lupane Teachers' College	Lupane
	Matabeleland North Province

Of the 17 colleges, 13 were government owned and funded, while 4 were privately owned and funded teachers' training colleges. Thirteen were primary and four were secondary teachers' training colleges. The selected teachers' training colleges explored in this study are located in Masvingo, Manicaland and Harare provinces.

### **1.5 Focus and purpose of the study**

At the time of this study the Zimbabwean situation has worsened due to a collapsed economy and as alluded to above, teaching is the only surviving 'industry' and the 'be-all and end-all' of the career options for the retrenched and high school graduates. As such, the push/pull of both the vocationally interested and the vocationally disinterested into teaching has also worsened as other options are no longer available (Mukeredzi 2016; Bergmark *et al.* 2018). Thus, teaching presents a 'last resort career avenue' or a stepping stone to 'a' profession to many Zimbabweans. Questions regarding how all these vocationally interested and vocationally disinterested pre-service teachers experience transformative learning in teacher training colleges had seemingly remained inadequately answered. In addition, how the pre-service teachers understood their transformative learning and the forms of support offered by the college communities to enhance transformative learning in these teachers' training colleges remained unknown and needed to be investigated. Such knowledge is vital for reviewing teacher training in teachers' training

colleges and essential if the quality of the teacher education provided is to be enhanced (World Bank 2012; UNESCO 2014). The study was therefore carried out against the milieu of the apparent lack of such knowledge.

Given that while the world over, student teachers who enter teacher education are both passionate and dispassionate, in Zimbabwe the situation is compounded by the economic meltdown that has seen almost all industries folding. Transformative learning experiences at the teacher training level are viewed as encompassing both the vocationally interested and vocationally disinterested in this study. As alluded to above, the vocationally interested are those pre-service teachers who are intrinsically motivated to be teachers, while the vocationally disinterested are those who have extrinsic motives for going into teaching and enter teacher training as a last resort. The study therefore seeks to explore the transformative learning experiences of both categories of pre-service teachers in selected teacher training colleges of Zimbabwe. Data generation attempts to extract information indicating how and to what extent, some or all of the student teachers to be investigated experience transformative learning.

## **1.6 Personal context and motivation for the study**

This section discusses the researcher's personal context and motivation for this study, illustrating how she has become captivated by transformative learning, leading to an in-depth study in this area. Her life journey is analogous to Jack Mezirow's women returning for a re-entry programme after a hiatus (Mezirow 1991). Embarking on a PhD journey in her fifties is like starting a new life with its different demands. The researcher has lived the ten principles of Mezirow's transformative learning journey. Consequently, as a personal reflection, exploring the transformative learning experiences of the vocationally interested and the vocationally disinterested pre-service teachers in four selected teachers' training colleges in Zimbabwe when she is now employed as a lecturer at one college also mirrors her personal life.

The researcher had always wanted to be a police officer, but her dream was shattered when her parents and close relatives discouraged her, saying it was unsafe for a woman to be in the police force. The researcher then trained as a secondary school teacher. During teacher training, as she reflects on it now, it appears that a personal transformation occurred as she eventually became interested in teaching. Through the learning processes, interactions and relationships with



academics and professional staff and peers, she probably critically reflected on and reassessed her prior assumptions and worldviews, consequently becoming passionate about teaching.

On programme completion, the researcher was deployed to teach at a girls' secondary school where she was also the Guidance and Counselling Co-ordinator. In this role, where she counselled both staff and students, she came to realise that many of her colleagues had joined teaching, not because they wanted to be teachers, but rather because of many other influences. This counselling role also further enhanced her vocational interest in teaching, which had developed during teacher education despite the fact that she had not wanted to be a teacher in the first place.

After 13 years in the classroom, the researcher studied for an undergraduate degree, which saw her getting absorbed into the Ministry of Higher and Tertiary Education, Science and Technology Development (MHTESD) as a teacher training college lecturer. When she joined teacher education she always looked at the first-year students, particularly at the time of their initial enrolment, and wondered whether, like her, they were vocationally disinterested or whether, unlike her, they were actually vocationally interested and passionate about teaching.

Three years after her appointment as a lecturer, the researcher was promoted to the position of Dean of Students, the post held at the time of this study. This position enabled a lot of interaction with students throughout their training. It is through these interactions that she has realised that many student teachers are in a situation similar to what hers had been; vocationally disinterested in teaching at the commencement of their teacher training. This has made her wonder how they experienced personality changes and a paradigm shift, turning into vocationally interested teachers by the end of their three years of training. It is this curiosity that had driven her into researching the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers in selected teacher training colleges in Zimbabwe.

## **1.7 Rationale for the study**

As discussed earlier, transformative learning is a process of learning which deals with transformative personality changes within the individual and produces a significant personal impact or paradigm shift (Mezirow 2012; Illeris 2014; Perry, Stoner and Tarrant 2016; Strange

and Gibson 2017). These personality changes, as alluded to above, come about as a result of critical self-reflection and self-questioning of previously held world views. As such, the pre-service teachers in this study critically question their assumptions and beliefs and reconstruct new worlds after consciously making meaning. Exploring the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers is therefore critical to understanding their processes of change that provoke reflection and self-questioning.

Literature surveyed Shandomo (2010; Creemers and Kyriakides 2015; Clinton 2018) highlights that through transformative learning, pre-service teachers come to realise that they can redefine themselves and others and know the world they live in better. Consequently, transformative learning experiences benefit the pre-service teachers' growth and success. Through reflection and conversations with others Mezirow (1996), the vocationally interested and vocationally disinterested pre-service teachers begin to question, evaluate, and compare encounters in order to make sense of diverse experiences. Related literature (Steyn 2017; Hidalgo, Koebernik and Williams 2018) indicates that transformative learning experiences involve learning that causes the student teachers to transform from their previous state to a changed future. This means that the pre-service teachers may become able to validate how and what they understand, as well as develop well-informed judgements regarding their beliefs, attitudes and values. King (2005:155) points out that by reconsidering, "old assumptions and beliefs, learners may develop new ways of understanding". Hence, being part of a learning community, the pre-service teachers challenge and examine their views and the views of others and replace what have become inadequate beliefs about themselves and others with new notions or frames of reference about the world and others in the world (Mezirow 1997). However, the argument is not just about moving pre-service teachers to think differently but also to put what they learn into practice (Mezirow *et al.* 2009; Woodrow and Caruana 2017). In light of this, transformative learning experiences enhanced vocationally interested and vocationally disinterested pre-service teachers' learning.

When pre-service teachers became reflective in their practices, this had ripple effects on the pupils that they taught after graduation (Mukeredzi 2009; Dirkx 2012; Desimone and Stuckey 2014). A transformed pre-service teacher is likely to be able to utilise optimal instructional and comprehension strategies, including varied learning assessments and can promote and offer

learners opportunities for critical reflection( Cohen, Brown and Morales 2014). These reflective, effective and competent student teachers will positively affect the pupils' learning, resulting in their success and achievement. Thus, the student teachers' enthusiasm is an important factor in effecting pupils' learning and motivation (Rogoff *et al.* 2016; Serin 2017). Consequently, it is incumbent upon the lecturer/ facilitator to create a natural critical learning environment that allows the pre-service teachers to challenge their personal assumptions (Mezirow 1991; Cohen, Brown and Morales 2014).

However, not all pre-service teachers may question their prior experiences and interpretations of the world around them, or their personal values and beliefs (Langan, Sheese and Davidson 2009). Mezirow (2003:5) affirms that, "individuals have a strong tendency to reject ideas that fail to fit their preconceptions, labelling those ideas as unworthy of consideration-aberrations, nonsense, irrelevant, weird, or mistaken". Thus, if pre-service teachers do not transform, this will impact their pupils' learning and consequently their achievement. Concomitantly, transformative learning of vocationally interested and vocationally disinterested pre-service teachers is significant in this study as transformed student teachers are reflective, critical, committed, practical and likely to be change agents, always contemplating how changes can take place. To aptly affirm the crucial role of transformative learning for pre-service teachers, Glisczinski (2007: 319) says that higher education must be a place where teacher candidates are prepared to "think and act dynamically"; they need to know how to act out their learning in their own lives. Without this ability, teacher candidates become mere teaching technicians following the prescription of a linear path that does not exist in a non-linear post-modern world.

Further, against a backdrop where many pre-service teachers join the teaching profession as the only available route to employment, the purpose of the study is to develop a deeper understanding of how both the vocationally interested and vocationally disinterested pre-service teachers experience transformative learning during teacher training. While significant academic work on transformative learning experiences has been carried out internationally the work tends to focus mainly on university students and on diverse degree programmes. Notwithstanding the critical value of the transformative learning of student teachers during their teacher education, no academic work has been carried out on the transformative learning experiences of university

students in general, and that of teacher training students in particular in Zimbabwe. This study therefore contributes knowledge in this regard.

Secondly, given that there is a combination of teaching passionate and non-passionate Park (2007); Serin (2017) student teachers in Zimbabwean teachers' training colleges, a deeper understanding of how they experience transformative learning is vital. This is particularly vital in the case of the vocationally disinterested student teachers, because their lack of transformation during teacher training may impact negatively on school children and consequently on the education system at large (Mukeredzi 2016). The Minister of Higher Education at the time of Murerwa's (2004) study pointed out that new teacher graduates should emerge from training with basic competences, commitment, motivation, dispositions, attitudes and values appropriate for the teaching profession. Such cadres are expected to become change agents and the cornerstone of educational development and social transformation to make Zimbabwe competitive in the global market. This was premised on the notion that "when a child's or adult's first teacher is poorly trained and poorly motivated, the very foundations on which all subsequent learning will be built, will be unsound", according to UNESCO's (1996: 146) report commenting on primary school teacher training. Positive teaching attitudes, values, motivations and worldviews are critical and often stimulated, enhanced and or changed during teacher education.

Thirdly, with 17 teachers' colleges in the country that enrol both vocationally interested and vocationally disinterested pre-service teachers, there seems to be limited literature available to policy makers regarding what vocationally interested and vocationally disinterested pre-service teachers in these training colleges have experienced, and are experiencing regarding transformative learning while in college. The daily challenges that they are confronted with, the dilemmas that they experience, particularly at the commencement of the training programme, the stresses that they have to live with, and the experiences that they go through with regard to transformative learning in the unstable and challenging Zimbabwean environment all need to be interrogated, critically analysed and documented (Lin 2017); Zhu 2019). All new teacher graduates are expected to emerge with commitment and motivation to be able to handle children in the classroom and the school community, while interpreting and delivering policies and procedures laid down by policy makers. As such, both vocationally interested and vocationally

disinterested student teachers need transformation to be able to carry out these teacher roles effectively. This study therefore sought to provide some insights into the transformative learning experiences that these student teachers went through in their transformative journeys. This study attempted, “to get behind their ‘faces and skins’ to understand, through their eyes and stories” Mukeredzi (2009: 24) their transformative learning experiences in the teacher training colleges.

### **1.8 The research questions**

In pursuit of the answers to the issues raised above, the purpose of this study is to explore the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in teacher training colleges in Zimbabwe. To enable deep exploration and achievement of this objective, the study attempts to answer one key research question: ‘What are the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers in teacher training colleges in Zimbabwe?’ To answer this key research question, three sub-questions were addressed:

1. What is the nature of the transformative learning that the vocationally interested and vocationally disinterested pre-service teachers experience?
2. How do pre-service teachers understand their transformative learning?
3. What forms of support are offered by the college community to enhance pre-service teachers’ transformative learning?

### **1.9 Overview of the theoretical framework**

This study focused on the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers in selected teacher training colleges in Zimbabwe. Jack Mezirow’s transformative learning theory (2012) guided the study. The theory consists of ten phases/principles that are significant pointers to each level of transformation: 1) A disorienting dilemma; 2) Self-examination, with feelings of guilt or shame; 3) A critical assessment of assumptions; 4) Recognition that one’s discontent and process of transformation is shared and that others have negotiated a similar change; 5) Exploration of options for new roles, relationships, and actions; 6) Planning of a course of action; 7) Acquisition of knowledge and skills for implementing one’s plans; 8) Provisionally trying out new roles; 9) Building of

competence and self-confidence in new roles and relationships; and 10) A reintegration into one's life on the basis of the conditions dictated by one's new perspective.

The phases are all directed towards learning and change Mezirow (2012) and they are useful for this study as they focus particularly on learning through reflection and the self-assessment/self-criticism, re-planning and trailing of new roles, all of which are the basis for transformative learning. The ten phases/principles mentioned above thus inform the generation and unpacking of the data in the study. Once the pre-service teachers are able to “rethink, un-learn, re-learn, change, revise and adapt” Nogueiras, Iborra and Kunnen (2018), they can go out into the classroom as motivated teachers.

This kind of learning involves a reorganisation of the cognitive structure so that this structure can accommodate new knowledge or a shift of consciousness that dramatically and permanently modifies the way of being in the world (Illeris 2014). Concomitantly, in this study, as student teachers interact and socialise with significant others, they develop a self-concept and acquire meaning, perspective and knowledge that influences and alters their ways of thinking, ways of acting, and ways of being. Personal transformation happens when individuals become critically self-reflective of the way they have come to read and understand the world (Banda 2014). Hence, pre-service teachers are able to negotiate meanings and purposes, rather than passively accepting other people's definitions of reality (Inglis 1997). This makes Mezirow's transformative learning theory appropriate for understanding the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in teacher training colleges in Zimbabwe.

### **1.10 Brief overview of the literature**

The literature review revolves around the nature of the transformative learning experiences of students, how they understand their transformative learning, and the forms of support that are offered by their communities to enhance their transformative learning. The literature consulted was drawn from international and regional sources and was useful in helping the researcher understand how this study fitted into the broader context and current debates of teacher training. Furthermore, the literature review provides a wider understanding of what has been studied, the current state of the research on transformative learning experiences and the areas that still need

further exploration. Studies from international contexts generally report on the significance of disorienting dilemmas in students' transformative learning (Green and Malkki 2017; Raikou 2018). These studies resonate with Mezirow's transformative learning theory that describes transformative learning as a highly emotive issue which more often than not causes a lot of pain (Damianakis *et al.* 2019; Ensign 2019). Self-examination and critical reflection of the assumptions lead to transformative learning as the students became self-aware and saw the world through a different lens (Cranton, Stuckey and Taylor 2012). All the studies from the global and regional contexts identified supportive learning environments as central to transformative learning.

### **1.11 Overview of the methodological approach**

The study used the interpretive/ qualitative/case study research design. A case study design is vital as it will provide a powerful tool for the in-depth exploration and replication of the phenomenon in different sites (Yin 2009). The methodology chapter covered such aspects as the research paradigm, the research design, the research approach, the study population, sample and sampling techniques, data generation, the data analysis, as well as issues of rigour covering the qualitative aspects of trustworthiness: credibility, transferability, confirmability and dependability. Ethical issues considered in carrying out this study were discussed. The researcher interacted with and generated data from the participants in four selected teachers' colleges: two primary school teacher training colleges and two secondary school teacher training colleges. Commencing with a questionnaire as a springboard for purposively selecting research participants, data was generated through semi-structured face-to-face individual interviews, focus group discussions and continuum drawing and discussions.

The limitations of the study, which are mainly methodical, are discussed. The paradigmatic design, approach and methodological orientation of the study limited the generalisability of the findings. However, the thick descriptions of the research settings provide for the reader a choice of whether or not to transfer the findings to similar contexts. The subjectivity of the researcher may be another major limitation, but this was addressed by adopting the multi-modal approach to data generation, consequently enabling methods for triangulation of the data, and also by

adopting an open mind when generating and analysing the data. This was discussed clearly in Chapter Four. The limitations of the study conclude this chapter.

## **1.12 Conclusion and overview of the thesis**

This chapter introduced the study, locating it in the bigger picture. Exploring the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in teacher training colleges in Zimbabwe provides some pointers to wider processes related to some of the challenges faced by education systems and teacher education sectors in developing countries emanating from unemployment in depleted economies. The economic down-turn in Zimbabwe radically impacted on teacher education, resulting in both vocationally interested and vocationally disinterested student teachers joining teacher training as it was the only existing window of hope for employment subsequent to completion of their training. Thus, the study seeks to understand how these pre-service teachers experience transformative learning.

### ***1.12.1 Organisation of the thesis***

**Chapter one** defines transformative learning and its justification for the study. The background of the study is discussed next, focussing on contextual issues and debates at global and regional levels. Teacher training provision in Zimbabwe's post-independence era discusses the massive expansion in education, with the subsequent demands on teachers, and this is followed by the focus and purpose of the study, the personal context and motivation for this study, as well as the rationale behind the study. The key research question is defined, before the discussions on the overview of the theoretical framework for the study, the overview of the literature review to be undertaken and the methodological approach to be used. The limitations of the study are briefly discussed, and the chapter concludes with a brief overview of the thesis.

**Chapter two** discusses the reviewed literature related to the field of transformative learning and organises the discussion into a funnel approach of international and regional literature.

Researchers consent that transformative learning centres around critical reflection Mezirow (2012) and disorienting dilemmas, and these are the catalysts for transformation. The literature review is organised conceptually, addressing firstly the nature of transformative learning, then



secondly how students understand their transformative learning, and lastly the forms of support offered by communities that enhance students' transformative learning.

**Chapter three** defines the theoretical framework that informs the study. It begins by tracing and discussing the historical development of Mezirow's Transformative Learning Theory, drawing on researchers like Jurgen Habermas (1984) Paulo Freire (1970) and Thomas Kuhn (1962). The ten phases/principles of the theory are then discussed, with examples drawn from the study. The transformative learning theory is critiqued next by addressing its shortfalls and how this study tries to address them to minimise their impact on the findings.

**Chapter four** provides details of the research methodology adopted in this study under the headings of the research paradigm, the research design, and population and sampling techniques. The chapter further discusses in great detail data generation and data analysis procedures that will be undertaken, justifying all the choices and moves. Aspects of trustworthiness, ethical considerations considered and the limitations of the study conclude the chapter.

**Chapter five** discusses the research contexts and setting. The chapter begins by briefly describing teacher education in Zimbabwe. This is followed by a detailed discussion of each research site and the participants. The biographical data of the participants, as well as their reasons for joining teaching conclude this research setting chapter.

**Chapter six** analyses and presents data that addresses the first research question posed by the study. The transformative learning experiences of pre-service teachers in this study emerge around disorienting dilemmas and learning experiences, both in and outside the classroom.

**Chapter seven** analyses and presents the gathered data, addressing the second research question on how the pre-service teachers understand their transformative learning. Change and the acquisition of knowledge and skills emerge as key findings. The chapter also discusses the findings on the forms of support that the college communities offer to enhance pre-service teachers' transformative learning experiences. The support that student teachers enjoy occurs in the form of resource support, spiritual support, peer support, lecturer support, management support and co-curricular support.

**Chapter eight:** This final chapter focuses on the discussion, conclusions drawn and the synthesis of the study. The chapter provides the methodological reflections, followed by a review of the

study. Further, the chapter also discusses the contribution of the study to the existing body of knowledge, as well as the implications drawn from the study. A conclusion ties up the chapter.

### **1.13 Definition of key terms**

The following is a list of the terms employed in this study and their definitions. The purpose of this list is to clarify the application of these terms by the author in the context of this study.

**Transformative learning** involves constructing and appropriating new and revised interpretations of the meaning of an experience in the world (Taylor 2008). In this thesis, transformative learning is viewed as change in views, attitudes and values after student teachers had experienced dilemmas, reflected on them and realised that they wanted to move on.

**Learning** is the process of using prior interpretation to construe a new or revised interpretation of the meaning of one's experience in order to guide future action (Mezirow 1996). In the thesis, learning is a process of acquiring new knowledge; critically analysing it in view of the existing knowledge.

**Experience** is the process of creating an understanding of or perception of a situation, which often appears to be direct participation in an event and the accumulation of previous experiences, both conscious and unconscious, and stored in the mind (Jarvis 2005). Such experiences would include what the student teachers do, what they believe in, what they can put up with, the way they react to certain situations, what they would be willing to suffer for, and moreover, their desires, perspective, dream, and faith. Experience in this study is regarded as a process of engaging and understanding various transformative learning activities through a combination of critical self-reflection and dialogical engagement that give rise to student teacher shifts in their worldview.

**Pre-service teachers** are students preparing to become teachers (Fajet 2005). In this study, pre-service teachers are also referred to as student teachers or teacher trainees.

**Student teachers/teacher trainees** are individuals studying at college or university to become teachers, who do not manage a class on their own but rather work under the supervision of a qualified professional ([teach-nology.com/tutorials/teaching/student teachers.html](http://teach-nology.com/tutorials/teaching/student%20teachers.html)). In this study, student teachers are trainee teachers who are learning the art of teaching.

**Teacher education:** This study makes a distinction between teacher education and teacher training, which some scholars take as synonymous. Fettes (2006) indicates that teacher education is a transformative journey, where student teachers come to imagine teaching and themselves as teachers, in new ways. Mukeredzi (2020) acknowledges that during teacher education, student teachers are on the journey to self-discovery as they engage in personal reflection. Teacher education promotes reflective, motivated, creative, supportive and innovative teachers who respond to the needs of the learners and society (ACE 2014). Concomitantly, teacher education encompasses all kinds of activities essential for the teaching profession, thus it aims not only at achieving command of methodologies but also of the theoretical perspectives of all aspects of teaching (Asif 2013). This study values both teacher education and teacher training, which is discussed next.

**Teacher training:** Teacher training is defined as the acquisition of pedagogical skills Doves (1986) and it focuses on the development of a specific skill, and by practising the skill the student teacher tries to become expert in that skill (Asif 2013). Training is done in the cognitive domain and generally at the knowledge level and lower, at the comprehension level. Thus, it is concerned with practice and expertise in teaching methodologies and techniques. The training is mainly mechanical and is acquired through rote methods. Therefore, when it is applied in the context of teacher education, it can be said that the aim of teacher training is to get expertise and proficiency in the methodology of teaching and its applicability in the classroom (Asif 2013). In this study, while teacher education is broader and operates at a higher cognitive level than teacher training, which may be viewed as limited to the specific skill of gaining expertise in teaching, teacher training in Zimbabwe encompasses teacher education.

The next chapter discusses the review of related literature.

## **CHAPTER 2**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Introduction**

Through an exploration of 40 student teachers at 4 selected teachers' training colleges in Zimbabwe, the study sought to understand the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers at these colleges. The previous chapter introduced and provided a background to the study. The chapter argued that due to the national economic collapse and high unemployment rates, Zimbabwean retrenchees and high school graduates viewed teaching as the only window of hope for employment following training. This forced teachers' colleges into enrolling both vocationally interested and vocationally disinterested student teachers. While teachers' colleges enrolled this mixed bag of teacher trainees and trained them without special consideration for their passion for teaching or lack of it, very little is known about how these student teachers experience transformative learning. Thus, through a multi-site case study of four teachers' colleges, this study sought to understand the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers in selected Zimbabwean teachers' colleges.

This chapter was premised on the notion that in order to understand transformative learning experiences of student teachers in teacher education in general, and in the four selected colleges under scrutiny in this piece of work in particular, it was necessary to review related literature around how transformative learning occurred. As such, the chapter examined the broad issues relating to the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers. The discussion was organised conceptually, following the concepts derived from the research questions, and the literature was also discussed and critically analysed by context. First, the chapter reviewed literature on the nature of transformative learning. Second, the chapter discussed literature on how students understood their transformative learning. Third, the chapter analysed literature on the forms of support offered by institutional communities that enhance transformative learning. Finally, the discussion sought to establish the implications of transformative learning for Zimbabwe teacher education in general, and the colleges studied in particular. Before discussing the nature of transformative learning

experiences of students, the chapter attempted to unpack the concepts of ‘vocationally interested’ and ‘vocationally disinterested’.

## **2.2 Vocational interest and vocational disinterest**

Vocational interest reflects the level of preference, aversion or indifference to professional fields (Ambiel, Noronha and Nunes 2012). In other words, vocational interest identifies with the degree of preference or dislike of certain fields or professions. Schelfhout *et al.* (2019) highlight that motivation and vocational interests are closely linked. Controlled and autonomous behaviours are performed out of interest. While controlled behaviour is extrinsic, autonomous behaviour emanates from intrinsic motivation (Ryan and Deci 2000). These motivations propel individual commitment to work and the achievement of desired goals. Van Iddekinge *et al.* (2011) point out that with close career-interest alignment, motivation is high to develop the relevant knowledge and skills required, set higher career-related goals, and take action to achieve them. These behaviours often assist individuals to improve their work performance and enhance their career potential.

Holland’s (1997) theory discusses the intertwined interest-career relationship. Holland (1997) asserts that individual interests are the basis for selecting an appropriate career and organises vocational interests into six types: Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E) and Conventional (C), acronymed RIASEC. The theory indicates that individuals may possess a resemblance of one or all of the characteristics which are the key drivers to performance and achievement. People who resemble the realistic (R) personality type are interested in mechanical or technical activities and prefer working with tools or machines. Often, they choose realistic occupations that include these tasks and objects related to surveying or radiology. The investigative (I) type are interested in mathematical and scientific activities, preferring occupations like aerospace engineering or general internships. Artistic (A) individuals are interested in creative and artistic activities such as architectural drafting or genetics. Social individuals (S) are interested in activities that emphasise social interaction and interpersonal relations, and enjoy employments like teaching, service work, music therapy and midwifery. Enterprising (E) people are interested in leading and convincing other people. They prefer

occupations in clinical research or natural sciences. Finally, people resembling the conventional (C) type prefer order and repetitive tasks related to actuarial or electronic drafting.

The teaching profession falls under the Social (S) type, which implies that pre-service teachers should be interested in activities that involve social interaction and interpersonal relations. However, as alluded to in Chapter one, the vocationally disinterested pre-service teachers join teaching for extrinsic reasons, which is incongruent with the career and environment they find themselves in. In the event of disparity between individual interests and the field of work, professional instability may give rise to abandoning that career, or to on-going poor performance (Swanson 2012). Lack of interest is an impediment to transformative learning. In this study, teaching is seen as the only available option for the vocationally disinterested pre-service teachers. Working in an environment that does not fit one's interest and passion Morgan, Isaac and Sansone (2001) is detrimental to performance and goal achievement. Likewise, failure to achieve transformation by these students may be detrimental to their performance either as student teachers or as teachers.

Savickas (1999); Krapp (2003); and Morris (2006) concur that interests contribute to commitment to a goal until it is achieved. While vocationally interested pre-service teachers are likely to be energised during training and achieve success, vocationally disinterested pre-service teachers might reflect indifference and lack the zeal to achieve their intended goal. Morgan, Isaac and Sansone (2001) further emphasise the need for a good fit (congruence) between the individual and the job. According to Roe's Personality Theory of Career Choice (1990), the stronger the relationship between the individual's profile of motivations, interests and skills and the job's demands, requirements and environmental characteristics, the higher the prospects of achieving more positive outcomes. This implies that an individual's career-interest results in their elevated enthusiasm to fulfil their job expectations, and this may apply to the vocationally interested pre-service teachers.

Concomitant to vocational interest, the Socio Cognitive Career Theory Lent (2003), drawing on Bandura's (1986) Social Cognitive Theory, asserts that what people think, believe and feel affects how they behave. The theory highlights three variables related to individual interest development and career choice: self-efficacy outcome expectations, and personal goals. Self-efficacy radiates greater effort and persistence, which stimulates better performance. On the

contrary, lower efficacy results in less effort and giving up easily Tschannen-Moran, Woolfolk and Hoy (1998), which in the context of this study may lead to poor teaching outcomes. The personal drive for self-fulfilment Morgan, Isaac and Sansone (2001) is vital for transformative learning. The vocationally interested student teachers will probably be motivated to work hard to achieve their desired outcomes. In concurrence, Eccles and Wigfield's (2002) Expectancy Value Model indicates that people with job-interest work hard to achieve success and fulfil their goals.

However, the vocationally disinterested pre-service teachers who find themselves in work environments incongruent with their career choices may have problems meeting the expectations of those careers (Assouline and Meir 1987; Roberts 2006; Willie, De Fruyt and Feys 2010). Incongruence is associated with job dissatisfaction, instability and little success. In this study, such student teachers will probably lack work enthusiasm, which might affect their performance and subsequently their achievement. Low *et al.* (2005) highlight that interest and environment influence performance outcomes either positively or negatively. If the vocationally disinterested pre-service teachers do not transform during training, this may negatively affect their work quality and consequently learner success and education quality as a whole.

Fried (2001) indicates that passion or interest is not a personal feature found in some people and not in others; rather passion is discoverable, teachable and reproducible. Vocational interests can be refined throughout a person's life as new learning experiences are gained Ambiel, Noronha and (Nunes 2012). Likewise, the vocationally disinterested pre-service teachers can make a paradigm shift as they acquire new knowledge and skills during training and develop an interest in teaching.

On the whole, vocational interest is a crucial aspect of the transformative learning of pre-service teachers as its absence may trigger long-term stress and anxiety, which have been found to diminish teacher enthusiasm (Yong and Yue 2007). These researchers propose comprehensive teacher education induction programmes that set student teachers smoothly on the navigation route for their training processes, juxtaposing their interests and coping skills with the environment and its demands.

Learning involves change causing one to transform from a previous state to a changed future state (Knowles 1973). Learning involves change causing one to transform from a previous state

to a changed future state (Knowles 1973). This literature review chapter addresses the research questions which are as follows: *What is the nature of transformative learning that the pre-service teachers experience? How do pre-service teachers understand their transformative learning? What forms of support are offered by the college community to enhance pre-service teachers' transformative learning?*

## **2.3 The nature of the transformative learning experiences of students**

This section draws on the global literature on how students experience transformative learning. As highlighted in the background in Chapter One, most studies on the transformative learning experiences of students have been carried out in the United States of America (USA), investigating university students. These studies include those by (Brock 2012; Chen Tsai 2013; Kumi-Yeboah 2014; Bella *et al.* 2014; Senyshyn 2018; Sakinofsky, Amigo and Janks 2018; and Onosu 2020).

### **2.3.1 Global studies**

According to the global studies, students are plagued by emotional experiences emanating from disorienting dilemmas, which then give rise to transformative learning. This section presents a critical analysis of global studies that discuss the nature of transformative learning experiences in relation to emotional experiences caused by disorienting dilemmas. Transformative learning experiences are realised through: creative learning, study abroad programmes, holistic learning, catalysts, a transition from informational to transformative learning, and the generation of meanings and visions. These transformative learning experiences are discussed next.

#### **2.3.1.1 Transformative learning is an emotional experience caused by disorienting dilemmas**

Studies conducted in the USA by (Chen Tsai 2013; Kumi-Yeboah 2014; Bella *et al.* 2014; and Senyshyn 2018) suggest that transformative learning experiences are riddled with emotions. For example, Senyshyn (2018) studied intercultural transformative learning experiences. As in the current study, Mezirow's Transformative Learning Theory (Mezirow 1991; 2000) provided the theoretical lens for interpreting the intercultural transformative learning experiences. The participants in Senyshyn's (2018) study were 41 undergraduate students who provided data



through daily journals, reflective papers and oral presentations. The participants in the current study are 40 pre-service teachers in 4 selected teacher training colleges in the Zimbabwean context. Senyshyn's (2018) study found that the university students experienced lots of disorienting dilemmas, caused by being in new cultural environments away from home. They experienced shock as they tried to adjust to new cultural and academic environments. Consequently, they became lonely, home-sick, frustrated, anxious and confused.

These emotions, according to Dirkx (2006), are deeply entrenched in the process of transformative learning as it is through these that critical reflection essentially occurs as students question and invite an exploration of alternative ways of being in the world. However, through reflection and exploration of assumptions the students in Senyshyn's (2018) study gained confidence through these intercultural transformative learning experiences. The transformative learning experiences helped the students to fit into and get accommodated in their new environments. Drawing on Senyshyn's (2018) study: while it is not clear which programmes the American students pursued, it is yet to be established how the pre-service teacher participants in the current study would experience transformative learning, and whether or not they experienced disorienting dilemmas as Senyshyn's participants did.

While other students experienced dilemmas from being in a different environment, some students experienced dilemmas related to the different culture they were being exposed to, consequently experiencing disorientations related to cultural shock. Studies by (Bella *et al.* 2014; Strange and Gibson 2017; Kwo 2018; and Onosu 2019) examined transformative learning experiences in study abroad programmes. Bella *et al.* (2014) studied students' transformative learning experiences in Australia, New Zealand and Fiji. The students experienced new situations that 'took them outside of their comfort zones' when reflecting on their world views. Being in new environments with different cultures was a source of their dilemmas and they experienced cultural shock disorientation which eventually led to transformative learning.

The students experienced culture shock in the form of a psychological disturbance, a negative reaction to their new surroundings and a longing for a more familiar environment. Given that student teachers in the Zimbabwean teachers' colleges come from all over the country, the current study also established whether they experienced cultural shock on arrival at these

colleges. Students in Bella *et al.*'s (2014) study had to contend with novel social and academic expectations and behaviours, and had to deal with the problems of adjustment common to students in general (Zhou *et al.* 2008). Through critical reflection and self-reflection Mezirow (1991), the students in Bella *et al.*'s (2014) study navigated the disorienting dilemmas and emerged out of them transformed. This American study identified transformative learning experiences related to critical reflection, gaining new knowledge about the American economy, and intercultural relationships with others.

Surveyed literature (Cranton, Stuckey and Taylor 2012; Green 2018; Phillips 2019) suggests that critical reflection propelled the potential to shift the students' worldviews. According to Mezirow (2012), critical reflection which is a key process in transformative learning, may lead to the questioning of different world views and provide alternative ways of thinking and testing out such alternatives through dialogue and action. Mezirow (2003) explains that where a change occurs to the students' frames of reference, they can expect to see a subsequent change in action, and this is what is classed as transformative learning. The students challenge their own world views and create a pathway to facilitate change. Thus, in this current study the researcher established whether students experienced critical reflection, since critical reflection was central to transformative learning (Mezirow 2000).

Similarly, another study in the USA by (Onosu 2020) found that attitude change was a unique process where students became culturally sensitive and aware of their own biases. As in Bella *et al.*'s study above, Onosu (2020) investigated the impact of transformative learning on students' attitudes towards diversity during a study abroad programme before, during and after their cultural immersion. Similar to Bella *et al.*'s study findings, the students experienced dilemmas because of the different culture and language, and had difficulties in adjusting to the new environment, which thus created shock. Similar to Onosu's (2020) study, the current study explored the transformative learning of pre-service teachers during training, where they might have also been exposed to different environments, cultures and languages.

Literature by (Yan *et al.* 2015; Terzuolo 2018) indicates that participation in the study abroad programmes increases transformative learning outcomes such as cultural tolerance, self-development, listening skills, intercultural communication and critical thinking. More so, related studies on study abroad programmes show that the cultural experience triggers a new

consciousness that enables students to re-evaluate their view of self and of others (Trilokekar and Kukar 2011; Slimbach 2017). Another important finding was the significance of the host families which provided support for the students' transformative learning experiences during the study abroad programme. A participant reported that the host family was key to transformative learning experiences because they provided situations that forced people to step out of their comfort zones and venture into the unfamiliar. Whether such outcomes played out as vital in the current study was yet to be determined.

While the focus of Onosu's (2020) study is different from that of the current one in terms of methodology, Onosu's study informs the current study as it employs a qualitative approach to generate and analyse data. Marshall and Rossman (1999); and Patton (2002) argue that the use of qualitative research methods allows the researcher to gain in-depth insight into the concept examined. Onosu's (2020) study used the snowball sampling technique to recruit 26 participants, arguing that it produced a distinct category of participants that provided rich knowledge of the subject of interest, however the current study will use purposive sampling for the same reason. The American study used interviews just as the current study, however, the secondary data process which involved reviewing the programme information from different sources marks a point of departure from the current study's methodology which incorporated continuum drawings and discussions.

#### *2.3.1.2 Transformative learning experiences through study abroad programmes*

King (2003); Fullerton (2010); Kumi-Yeboah (2012); and Strange and Gibson (2017) investigated the transformative learning experiences of students in university level study abroad programmes. As in the above study abroad studies, mixed methods approaches were used to generate and analyse the data, except for Onosu (2020) who adopted a qualitative approach. Kumi- Yeboah's (2014) participants were from Africa, Asia, Europe, and Latin America. Kings's (2003) participants were from Belize, Ghana, Sri Lanka and the Dominican Republic. The mixed-methods approach enhanced the understanding of the transformative learning experiences faced by these international graduate students while they pursued their education within or outside the US. Their dilemmas emanated from different cultural contexts and languages which created disorientation in form of homesickness, loneliness, anger, frustration,

isolation, anxiety and other emotional factors experienced in an unfamiliar environment. An online survey was used to describe these students' transformative learning experiences (Brock 2007; Wansink 2007). However, using an online survey posed an epistemological distance between the researcher and the researched, since there were no qualitative interviews to authenticate the data (Wansink 2007). This study which is qualitative in its nature differed from the study abroad studies notwithstanding the fact that the current study's participants also experienced cultural, language and new environmental dilemmas.

Data collected in the studies above were analysed using the (Statistical Package for the Social Sciences (SPSS) and the Learning Activities Survey (1997), contrary to this study which will use open coding. The students experienced transformative learning by critically reflecting on their dilemmas through essay-writing and in-depth student-led class discussions. Strange and Gibson (2017) concur with Mezirow (1991) that central to transformative learning experiences is engaging students in active and problem-centred activities that enhance their critical assessments of assumptions. The very nature of study abroad programmes is that they are traumatic due to the new culture and/or environment dilemmas which give rise to context shock, as noted by Bella *et al.* (2014) in their American study discussed earlier and hence Kumi-Yeboah (2014); and South (2016) concur that critical thinking and personal reflections must occur if any transformative learning is to take place.

Surveyed literature by Tarrant (2010), echoing Mezirow (1991), says that desirable student outcomes of study abroad programmes are the ones that encourage students to become more inclusive, discriminating, open, reflective and emotionally able to change, and show higher connectedness to the global environment. How such aspects may play out in the current study is yet to be established. Mezirow's Transformative Learning Theory (1991) asserts that through reflection, active learning, placing themselves in uncomfortable situations, students are able to develop their understanding of the new world and of themselves, allowing a potential change to their perspectives and frames of reference. The aspects of reflection and critical thinking were looked out for in the current study.

In another study in Belgium (Sari, Backer and Lombaerts 2018) investigated university pre-service teachers' transformative learning experiences while teaching in remote areas, and the role of pupils' problems in this transformative learning process. This study used a qualitative

approach and conducted in-depth interviews with 41 teachers from 3 universities in Indonesia following a pre-service teacher education programme. Sari, Backer and Lombaerts' (2018) study relates to the current study in that it targeted pre-service teachers, however it is distinct in that their participants were university students, while the participants in the current study are college students. Another distinction from the current study is that the data in the previous study were analysed using NVIVO 11. Their findings showed that pre-service teachers' transformative learning experiences were triggered by their pupils' lack of study motivation and their low ability to understand concepts being taught. Literature by (Cranton 1994) and (Taylor 1998) indicates that the nature of the disorienting dilemmas can have a minimal or a devastating impact on the performance of pre-service teachers. In the Belgian study, the dilemmas were caused by the pupils' lack of motivation and understanding of concepts, and these caused disorientations such as frustration, anger and sadness in the pre-service teachers.

These disorienting dilemmas were the source of the pre- teachers' transformative learning. Related literature confirms that disorienting dilemmas can either facilitate or impede transformative learning (Roberts 2013; Choppo 2016; Green 2017). According to Mezirow (1991), learners who experience positive changes in their mental models see dilemmas as a challenge, which increases their determination and persistence to acquire new knowledge, practice new skills and to change their attitudes. However, some pre-service teachers are negatively affected by dilemmas and some of the disorientations that they may experience relate to loss of focus, feelings of guilt, frustration and humiliation. As a result, the opportunity for expressing the painful emotions or disorientations is often self-censored as they may be unbearable Wang (2005; Tamashiro 2018). As such, pre-service teachers may find it difficult to critically question their assumptions for fear of challenging their habitual traits and hence impede their transformative learning. Whether the pre-service teachers in the current study embraced critical reflection in their transformative journey was yet to be established.

#### *2.3.1.3 Transformative learning experiences through creative learning*

Another study in the USA by Chen Tsai (2013) investigated the transformative learning experiences of undergraduate students through creative learning. While Onosu's (2020) study discussed above focused on study abroad students and how they transformed through cultural

experiences, Chen Tsai's (2013) study examined the significance of creative learning in students' transformative learning. The results portrayed that creative learning enhanced transformative learning experiences as it facilitated personal growth for students. Through creative learning, someone can re-examine their worldview by thinking outside the box and revisiting their assumptions (Mezirow 2012). Creative learning has been recognised as effective in helping students open themselves to new possibilities, to play with ideas, to experiment, and to modulate their reactions to fast-changing environments (Halpern 2010; Kuan *et al.* 2013).

A number of studies (Davis-Manigaulte, Yorks and Kasl 2006; Young 2009; Wiggins 2011) indicate that creative learning is a vital resource for change, hence aligning with Mezirow transformative learning which induces change after critical examination of experiences (Mezirow 2012). Thus, creative learning, may bridge the gap between affect and rationality in transformative learning. Students learn holistically through both the intuitive and emotional/imaginal aspects of learning. Consequently, Davis-Manigaulte *et al.* (2006) and Jones (2015) suggest a supportive transformative learning experience to facilitate creative learning, which in turn provides a positive effect on students' learning. While Chen Tsai (2013) results and other studies have portrayed transformative learning experiences through creative learning, one wondered how the vocationally interested and the vocationally disinterested pre-service teachers experienced transformative learning.

#### *2.3.1.4 Transformative learning experiences through a holistic approach*

Singleton (2015) in another American study came up with a model for a holistic approach to transformative learning. This study differs from the other American studies referred to earlier as Singleton (2015) used a symbolic model focusing on the significance of a transformative learning context while the study abroad researches focused on how disorienting dilemmas in a new cultural environment influenced transformative learning. This current study can draw lessons from this symbolic presentation of the nature of transformative learning in which the cognitive, the affective and the psychomotor domains work coherently to promote transformative learning. The model also included context as an aspect that influences transformative learning. Transformative learning is context-dependent. Based on empirical studies (Cranton 1997; Taylor 1998; Daloz 1999; Dirkx 2012), differences in learning contexts, learners, and teachers all affect

transformative learning experiences. Further, Garcia (2001); Grant-Vallone *et al.* (2003); Jones (2015); and Singleton (2015) highlight that context provides a framework of authentic experience for deeper reflection, a sense of belonging and body/sensory stimulation that act as a catalyst for the deep engagement required for transformation. In addition, Hutchison (2004) indicates that places are invested with meaning and shape our consciousness, social identities, attitudes and behaviour. This resonates with Mezirow's definition of transformative learning as involving a deep, structural shift in basic premises of thought, feelings, and actions. Hence, context impacts on how students make a paradigm shift from their previously held beliefs, values, attitudes and emotions, including their behaviour. The current study found out whether context had any effect on pre-service teachers' transformative learning experiences.

#### *2.3.1.5 Transformative learning experiences through catalysts*

Again, in the USA, while the studies discussed above studied university students, Fortes (2016) studied how transformative learning experiences could be fostered in an Online ESL Professional Development Programme for 24 purposefully sampled K-12 teachers. Fortes' (2016) analysis employed the transformative learning precursor measurement instrument, Dedoose, which is a qualitative data analysis software tool. This digital software was not used in any of the American studies discussed above and was not used in the current study either. The current study used manual analysis to gain an in-depth understanding of the themes that emerged from the data generated.

The findings of Fortes's (2016) study identified the catalysts of transformative learning experiences as textbook or journal article reading, assignments or activities, critical reflection, class experiences, videos, interaction with student families, dialogue with classmates or professional colleagues, discussion forums and PowerPoint presentations. However, Fortes (2016) argued that the presence of the precursors did not guarantee that a transformation had been experienced, but rather indicated that some shift in perspective had taken or would take place if the individual continued the process of reflecting on and revising his or her assumptions. The data for the study came from reflective journals which provided the participants with the space to express how they made "sense of themselves and their experiences" ( Cranton and Hoggan 2012:524).

Contrary to the present study whose participants are college student teachers, Fortes' (2016) participants were K-12 teachers. While the present study used Mezirow's Transformative Learning Theory (1991) to understand transformative learning experiences, it would not specifically focus on perspective shifts, but they were likely to emerge from the participants' narratives of their transformative journeys. This study also attempted to establish whether some of these enhancers in Fortes' (2016) study played a role in student teachers' transformative learning experiences.

The global literature discussed above, predominantly from the USA, views transformative learning experiences as emanating from dilemmas which cause disorientations such as fear, loneliness, frustration, anxiety, sadness, anger and confusion, emanating from a different environment, language, culture and distance from home. The researchers highlighted the value of critical reflection in every transformative learning experience. Mixed and qualitative approaches were adopted. The next section discusses other international studies on the nature of transformative learning.

#### *2.3.1.6 Transformative learning experiences through transition from informational learning to transformative learning*

Other international studies that addressed the nature of transformative learning experiences were carried in Singapore, where researchers like Khoo (2018) in the medical field advocated for a transition from informational learning which increased one's knowledge and skills base, to transformative learning which changed the way people saw themselves and their world. Khoo (2018) recommended that two important aspects were key to inculcating management skills into medical education: a disorienting dilemma and critical reflection. The surveyed literature (Hjeltne *et al.* 2015; Hassel and Ridoul 2017; Moghadam *et al.* 2017) indicated that disorienting dilemmas were the precursors of transformative learning. Thus, after critical reflection, the junior clinicians actually adopted the new perspectives and made new changes to their daily practices (Khoo 2018). At the beginning of their training they were fearful, uncomfortable and anxious. Through critical reflection, they were able to question their disorientations, attitudes, beliefs and values, resulting in transformative learning.



In another study outside the medical field, (Filho *et al.* 2018) conducted a survey which entailed the documentation of seven case studies from different countries (Brazil, Serbia, Latvia, South Africa, Spain, Syria and U.K.) and universities, assessing the extent to which transformation in learning was taken into account, by higher education institutions. This study resonated with the study abroad programmes done in different countries by Kings (2003); and Kumi-Yeboah (2014) discussed above. While disorienting dilemmas were precursors to transformative learning in the global studies, this multiple country study found that transformative learning experiences also took place through the process of questioning and re-defining the frames of reference, experiences and assumptions to generate new meanings and new visions of the future.

Similarly, the American and Fiho *et al.* studies focused on the influence of cultural diversity on transformative learning experiences. Literature by (Marsick and Mezirow 2002; Dirkx 2006; Taylor and Snyder 2012; and Jones 2015) indicates that central to Mezirow's Transformative Learning Theory is the concept of structures of meaning - the frames of reference which are acquired uncritically through processes of socialisation and acculturation and which are often distorted as a result of the internalisation of dominant socio-cultural assumptions prevailing in the social context. It is through critical reflection that these meaning structures are questioned and this may lead to a change in how the students create new meanings and are able to see the world differently.

Mezirow (1997) argues that effective transformation is enhanced by encouraging learners to move towards positions of greater autonomy where they can experience a fundamental shift in their thinking to become broader and more reflective and inclusive. Hence, educators should use learner-centred, group-oriented and participatory approaches, according to McVeigh (2002); Dirkx (2012); Gambrell (2016); Enkhtur and Yamahoto (2017); Kalu (2018); Sanchez (2014); and Ableser and Moore (2018). These approaches enable the questioning and re-defining of one's frames and in the process promote transformative learning. However, Langan, Sheese and Davidson (2009) state that transformative learning may not occur within some students as transformation may be met with resistance, particularly within a multicultural classroom space. One's personal and cultural world views can contribute to this resistance, hidden from our consciousness (Kennedy 1990).

The findings in the seven case studies above suggest that innovative content and pedagogies for a sustainable education Marques, Maruyama and Maciel (2015) foster transformative learning experiences, as they foster cultural and transformative shifts to the learning frameworks. Hence, universities should operate as knowledge and reflective institutions that develop critical thinking and not only as teaching institutions that transfer knowledge (Blake, Sterling and Goodson 2013; Tien, Namasivayan and Ponniah 2019). These authors argue that transformative learning differs from informative learning in that its aim is not about adding to a person's store of knowledge, but is about facilitating changes to the person's worldview, self, epistemology, ontology, behaviour or capacity. These are useful pointers for this study which seeks to understand the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers. Critical thinking questions the long-held beliefs, values and attitudes and this often gives rise to transformative learning. Consequently, teaching, learning and assessment strategies enhance transformative learning through diverse pedagogical approaches that emphasise critical thinking. According to Mezirow (2012), it is through a combination of critical self-reflection and dialogical engagement that student teachers are able to make shifts in their worldview, thus producing a more inclusive world view.

#### *2.3.1.7 Transformative learning experiences through precursors*

Distinct from the Belgian study by (Sari, Backer and Lombaerts 2018) which investigated university pre-service teachers' transformative learning experiences (discussed above), Deveci (2014) in Turkey studied the transformative learning experiences of students studying English as a foreign language (EFL) in the School of Languages at Sabanci University. The study revealed that 25 per cent of the sample completed a cycle of transformation stages. In other words, they went through Mezirow's ten stages of transformative learning: 1) Experiencing a disorienting dilemma; 2) Examining one's feelings of guilt or shame; 3) Critical assessment of assumptions; 4) Recognition that others have experienced what they are experiencing; 5) Evaluating options for new roles, relationships and actions; 6) Developing a course of action; 7) Acquiring the knowledge and skills for implementing new plans; 8) Trying of new roles; 9) Building competence and skills for the new plans; and 10) Reintegrating into one's life, based on new perspectives and understandings.

However, it was noticed that the number of students moving through the ten stages decreased as the stages progressed Cranton and Taylor (2012); Enkhtur and Yamamoto (2018). While Mezirow's transformative learning stages are numbered sequentially Malkki (2012), the students did not follow a linear way to achieving transformation. Clark and Rossiter (2008) indicate that transformation is a series of integrating, unending, multiple and simultaneous events implying a non-linear, iterative or cyclic nature of the process of transformative learning. Mezirow (1981) acknowledges that the catalyst for transformative learning might be gradual, occurring by a series of transitions which permit one to revise specific assumptions about oneself and others until the very structure of the assumptions become transformed.

Literature indicates that not everyone passes every stage, the completion of one stage is not necessary before starting another, and stages can be repeated during the transformative learning process (Isopahkala-Bouret 2008; Brock 2010). Against this background, where transformative learning seems developmental Daloz (1999), the question about the linearity of transformative learning is contentious. This study on the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers will try to establish whether the pre-service teachers will achieve all ten stages of the Transformative Learning Theory and also if their transformative journeys will follow the chronological order stipulated by Mezirow. In Deveci's (2014) study, the data were generated using an adapted version of the Learning Activities Survey formulated by King (2005), but this researcher used a multi-modal approach to elicit data through focus group discussions, individual face-face interviews and continuum drawing and discussions in this study.

Further, a transformative learning journey is in most cases gradual, not epochal. Literature by (Taylor 2000; Kumi-Yeboah 2014; and Peer 2017) describes the transformative process as involving much looping, twisting, halting, and regrouping. Participants in Deveci's (2014) study faced various disorienting dilemmas, causing their awareness to be raised in terms of language learning, cultural knowledge and the help they could access. Thus, language schools were key supports in the undergraduates' transformative learning experiences. Literature surveyed (Decapua and Marshall 2016; Edwards and Walker 2019) highlights that transformative learning is fostered through the story-telling nature of people's experiences and actions. Thus, language is key in the transformative learning process.

Mezirow (2003) clarifies the role of discourse in transformative learning, stating that to take the perspective of another requires an intrapersonal process. While residing at the psychological level, transformative learning is an active and social process (Habermas 1984; Taylor 1998). Thus, transformative learning is enhanced in interaction. According to Goleman (1997), there is a need to listen to others empathetically and to exhibit self and social awareness in the transformative learning process. Mezirow (2003) further insists that critical self-reflection and critical judgement are hinged upon critical-dialectical discourse. Student teachers in the current study might engage in critical reflection and re-evaluate the assumptions they made about themselves and their world through language.

Related literature indicates that in any communicative process, the students use language to share experiences, to argue, to express, to explain, to guide, to analyse, to interpret etc. (Kegan 2000; Cranton 2006). Thus, language is the path to freedom, or emancipation from reliving the past (Merriam 2004). As critical reflection is not a process that comes naturally to every individual, the ability to reflect and the language to use when presenting an argument have to be taught or facilitated in formal classroom settings or through learning processes such as coaching (Gray 2007). Therefore, the facilitator may use the student-centred approaches alluded to earlier on. Following this argument, it remained to be established in the current study whether language was key in story-telling to facilitate transformative learning. As much as this study revealed the supportive role of language in transformative learning, issues about support are discussed in detail later in the chapter.

#### *2.3.1.8 Transformative learning experiences through passion*

In the United Kingdom (UK) Blake, Sterling and Goodson (2013) sought to establish whether the processes across mainstream higher education offered transformative learning experiences that prepared students sufficiently to graduate with the capabilities or motivation to shape and create a future that was life-sustaining. The authors highlighted that the central role of higher education is to shape future leaders and to nurture graduates into critical thought. This reflexivity of the students resonates with Mezirow's Transformative Learning Theory which encourages the graduates to:

... Negotiate and act on their own purposes, values, feelings, and meanings rather than those they have uncritically assimilated from others - to gain greater control over their lives as socially responsible, clear thinking decision makers... who can transform frames of reference - their own and those of others... (Mezirow 2000:8).

The quotation above refers to higher order transformative learning experiences which lean on the critical examination of assumptions and values, resulting in a shift of perspectives Ball (1999); Cranton (2012). The other aspect of transformative learning that characterised this UK study was the need for passion and enthusiasm for work. According to Brock and Amy (2012), passion lays the right foundation for transformative learning and this leads to improved learner performance. Passionate teachers are known for loving their job and for this reason are always making efforts to increase student achievement. According to Fink (2003), these teachers are enthusiastic and can encourage students and turn them into passionate individuals to achieve more successful outcomes.

On the other hand, non-passionate teachers have lost faith and put less effort in their jobs. Studies indicate that teachers show a strong tendency and willingness to teach through learning and experiencing new ideas (Day 2009; Serin 2017). Enthusiasm, excitement, commitment and creativity are all ingredients of transformative learning. In the current study, it remained to be established whether or not the pre-service teachers were motivated in their learning, since motivation is a significant component of transformative learning and was vital for teachers.

The UK study employed a qualitative approach premised on an explicitly interpretive research paradigm and this resonates with the current study. In order to enhance the interpretability of the data in the UK study, a mixed method approach which involved semi-structured interviews, a survey and focus group discussions was adopted. Contrarily, the current study employed focus group discussions, individual face-to-face interviews and continuum drawings and continuum discussions. The UK study's findings suggested that not only communal living but also multi-method approaches of teaching had a profound bearing on transformative learning experiences. Transformative learning was also characterised by an epiphanic experience - the 'I have seen the light' experience (Ball 1999). Whether these findings would emerge in the current study was yet to be established.

#### *2.3.1.9 Transformative learning experiences through self-awareness*

In Australia, Jones and Miles (2018) explored the ways in which the Transformative Learning Theory was used in understanding and facilitating undergraduate students' learning during their international experiences. The authors argued that without critical orientation Brock (2012), and emancipatory concerns, the international travel for study just became a voyeuristic or tourist gaze without any significant changes occurring in terms of transformation (Simm and Marvel 2015); Morley 2016). The international studies were meant to change the undergraduate students' ways of relating with the world. Translated to the current study, the critical reflection of assumptions is a pointer worth seriously considering in this study. The Australian study also found out that the international study programmes yielded significant transformative learning changes for students, particularly in the realm of self-awareness, personal growth and appreciation of cultural diversity. These pointers were vital to look out for in the current study.

#### *2.3.1.10 Transformative learning experiences through work-integrated learning*

With regard to the nature of transformative learning, McRae (2015) in Canada explored the conditions for transformative learning in work-integrated education (WIL) and a key topic examined was how the theory-practice gap could be bridged (Anderson and Freebody 2012; Álvarez 2015). Generally, these researchers argue that universities tend not only to teach their students pure theoretical knowledge, but also to equip them with relevant skills that can help them achieve success in practical situations. Consistent with Mezirow's Transformative Learning Theory, the intentional use of critical thinking skills in the process of reflection and resulting in deep learning Mezirow (2000) assists students in work integrated learning to cope in their different work-related contexts, as they have to engage in on-going reflection of their practice.

In McRae's (2015) study, the Activity Theory was the framework used to develop an understanding of transformative learning. The Activity Theory considers the individual's critical reflection within the context of an activity system, made up of rules, mediating influences, multiple players and perspectives, historicity, division of labour, relationships and interactions with others (Taylor 2008); Avis 2009). The understanding of how subjects (people) transform

objects into outcomes is the goal of Activity Theory (Keengwe and Jung-Jin 2013). The current study instead used Mezirow's Transformative Learning Theory (1991).

In McRae's (2015) study a multi-perspective approach was adopted, where four case studies were analysed based on the interviews conducted in the case studies. This relates to this current study, which adopts a multi-site case study. McRae (2015) revealed that the enablers of transformative learning were opportunities for work and learning, a supportive environment, student capabilities, co-workers, supervisors, and assessment and reflection practices as these provided a supportive learning environment. This support was more than the provision of encouragement, as it included respect, validation and role modelling (Roth and Lee 2007). An implication for this study was that the workplaces were powerful sites of transformative learning. Whether the teachers' colleges in this study will also emerge as powerful sites for transformative learning is not yet known. Echoing Mezirow (1998), McRae's (2015) study concluded that the enablers of transformative learning were opportunities to learn and to apply learning, assessing and reflecting, students' capabilities, supervisors, the team and a supportive environment. Premised on the findings of the study, the current study draws lessons and looks out for pointers to enablers for transformative learning. Surveyed literature by (Modipane 2011) supports the enablers for transformative learning mentioned above and the creation of a supportive environment to minimise frustrations at work and promote transformative learning Agbakwuru (2009). Illeris (2007) and Mezirow (2009) highlight the supportive role of the social, cultural and material environments. While McRae's (2015) study was held in a work-integrated education setting, the current study was located in four selected teachers' training colleges.

#### *2.3.1.11 Transformative learning experiences through social media*

Cruz and Cruz (2013) in the Philippines explored the use of social media as a tool for enhancing student's transformative learning experiences, by using online instruction as a supplement to a face-to-face general education course. While the current study will use qualitative methods, the Philippines study adopted quantitative approaches. The findings of Cruz and Cruz's (2013) study revealed that students had better experiences and engagements, and appreciated the social learning support from the online social network.

Transformative learning has the potential to deeply impact the lives and understanding of students through technology King (2002), as students can engage in academic exchanges and dialogue worldwide. This means that education has taken a new twist. It has taken on an expansive, more inclusive dimension, rather than the restricted classroom context (South 2016). Against this background, where students are faced with a new teaching context, they may be challenged to engage in critical reflection on their practice.

Using Mezirow's classification of the kinds of habits of the mind, they may question their psychological perspective - who am I as a teacher? The students are bound to question their assumptions if they have always seen teaching as involving direct, face-to-face communication. Wang and Cranton (2013) and South (2016) indicate that technology helps students to grow, change and develop as they critically realise that there is a pressing need to apply technology in their transformative learning. This study sought to examine the role of technology in enhancing transformative learning. Related literature (South 2016) indicates that a conducive learning environment should prevail, supported by authentic, project-based learning where the student teachers have agency, ownership and the commitment to achieve their learning goals. They should become knowledge creators and problem solvers. These aspects were looked out for in the current study.

#### *2.3.1.12 Transformative learning experiences through graduate competencies*

While Fleming, Hughes and Zinn (2008) in New Zealand explored employers' expectations of key student and graduate competencies, to ensure that students were work-integrated learning ready, Iqbal *et al.* (2013) in Malaysia investigated the impact of training on the expectations of employees and employers, and McRae's (2015) study focused on work-integrated learning where the focus was on transformative learning experiences through marrying theory with practice. The multi-perspective approach was employed in McRae's (2015) study, and a mixed method approach was used in (Fleming, Hughes and Zinn's 2008) study. The quantitative method was adopted in Iqbal *et al.*'s (2013) Malaysian study, but the current study used a qualitative method.

According to Mezirow (2000), examining the students' beliefs and assumptions is a crucial element of the transformative learning process. The New Zealand and Malaysia studies found that transformative learning experiences were promoted by the ability and willingness to learn,



initiative and personal planning, organisational skills, relationship building, teamwork and cooperation. The value of cooperative work is that it improves graduate competencies in industry Santalucia and Johnson (2010); Greer (2012). Similarly, in a study by (Steyn 2017) in South Africa, cooperative work and empathy (relationship building) emerged as key promoters of transformative learning. The findings suggest that participants agreed on the necessity for teacher learning through teacher collaboration. The value of cooperative work is to improve teaching practice for the sake of enhancing student performance. Aligning these findings to graduate competencies in industry, one can conclude that transformative learning experiences are not bound to the classroom only.

Drago-Severson (2007)) indicates that there are positive changes in practice when cooperation is employed. While the New Zealand and Malaysian studies found these transformative learning experiences and supports, it is not known whether or not the participants in the current study will experience similar support. Studies by (Willingham, Pollack and Lewis 2002; Tess 2013) and another study by (Lyschikina, Hildenbrand and Reid-Martinez 2016) highlight the expected outcomes of transformative learning as better teamwork, collaboration, initiative, personal planning, organisational skills and empathy.

#### *2.3.1.13 Transformative learning experiences through critical reflection*

The nature of transformative learning related to critical reflection was studied by Tran (2012) in Australia. The study explored international Chinese and Vietnamese students' transformative learning and adaptation experiences to Australian higher education academic practices. A similar qualitative study by (Wu, Garza and Guzman 2015) in the USA examined international students' transformative learning experiences in academic and socio-cultural settings. On the one hand the USA study focused on international students from different countries, such as China, Taiwan, South Korea, Japan, Saudi Arabia and Mexico who had come to study in the USA. On the other hand, Tran's study focused on the Chinese and Vietnamese students who were studying in Australia. In both studies, transformative learning was viewed as a changing process in which international students constructed reality through revisiting their existing assumptions and moving towards life-changing developments in their personal and professional perspectives (Mezirow 2000; Cranton 2002).

Cross-border intercultural experiences were intimately linked to opportunities for self-transformation, and the challenging experiences fostered transformative learning as they prompted dilemmas and consequently critical assessment and reflection in order to chart the way forward (Schoo *et al.* 2015). The students experienced evolution in their professional outlooks, attitudes and personal qualities through the process of critical self-reflection and adaptation to disciplinary demands in higher education. The current study sought to establish if the student teachers went through similar transformative experiences prompted by critical reflection. In the case of Tran's (2012) study, moving between different life worlds represented the catalyst for self-discovery and self-reconstruction (Brown 2009). Overseas learning indeed entails transformative learning, given the dilemmas that often emerge from cultural/environmental differences that are often experienced, leading to shock, fear and loneliness (Akinade 2005).

The global literature discussed above addressed the nature of transformative learning experiences which were mainly influenced by emotions and learning experiences. When students found themselves in new environments, particularly on study abroad programmes, they experienced cultural shock caused by having to learn a new language, make new friends, adjust to new study habits and face new learning environments. As a consequence, they became frustrated, lonely, isolated, angry, sad and anxious, and some of the students suffered from homesickness. These dilemmas triggered critical reflection and self-interrogation, which gave rise to transformative learning. As the students tried to adjust to their new environments, they faced traumatic experiences and had to critically reflect on their previous assumptions to reconstruct a new world and a new self.

This paradigm shift of frames of references Mezirow (2000) challenged their own world views and created a pathway to facilitate transformative change. However, attitude change was unique to individual students as they became aware of their own biases. According to Mezirow (2018), students critically reflect on whether they should see the world anew or remain stuck in their old habits or comfort zones. This process emerged as a painful one, and while some students experienced the dawning of a new understanding and way forward, others opted to 'remain safe' in their known, secure environments and carry on as before (Illeris 2009; Taylor and Cranton 2012; Lysychkina, Hildenbrand and Reidmatinez 2016). The change process is emotional and requires supportive learning environments that are student-centred.

Further, these studies highlighted the transformative learning experiences of university students as being enhanced by critical reflection, and the outcomes of the reflection were self-awareness and personal growth. In all the transformative learning experiences explored, critical reflection was at the heart of personal change. Catalysts to transformative learning experiences were identified as diverse teaching and learning methods inclusive of technology, supportive learning environments and or contexts, and critical reflective practices. There was consensus among researchers that although sequentially numbered, transformative learning of students did not occur in a linear manner, but was instead spiral in nature.

Methodologically, mixed and qualitative approaches were adopted by some studies which used the Statistical Package for Social Sciences (SPSS) and the Learning Activities Survey (LAS) software as the data analysis tools. However, the majority of the studies used qualitative approaches and the NVIVO 11 data analysis package. The next section discusses regional studies on the nature of transformative learning experiences.

### ***2.3.2 Regional studies***

The regional studies consulted on the nature of transformative learning experiences were conducted in the Democratic Republic of the Congo (DRC), Egypt, Botswana and South Africa. The following section discusses these studies under the categories of integrative learning, spirituality, social change, willingness to learn, learning activities and emotional intelligence.

#### ***2.3.2.1 Transformative learning experiences through integrative learning***

A study by (Bunduki 2017) in the Democratic Republic of the Congo examined the influence of integrated learning on transformative learning experiences, education and social change at the *Université Chrétienne Bilingue du Congo* (UCBC). Integrated learning is the process of making connections among concepts and experiences so that information and skills can be applied to novel and complex issues or challenges. In Bunduki's (2017) study, the goal of integrative learning was to develop thinkers, critical and analytical problem solvers, and reflective students who had both depth of understanding in a major discipline and a broad range of skills and knowledge to succeed at university and in their future lives. According to Mezirow (2018), one of the goals of transformative learning is to effect social change in the student in order to modify

oppressive practices, norms, institutions and socio-economic structures, and allow every student to enter a dialogical relationship with each other. Aligning the study with Mezirow's Transformative Learning Theory, social change was only possible through dialogical discourse. A qualitative approach in the collection and analysis of data was employed. The findings indicated that through integrated learning, students became change agents in their communities. The studies revealed that the curriculum fostered transformative learning experiences by equipping students with academic knowledge and skills, and also fostered character and servant leadership skills in them.

Studies by (Blake, Sterling and Goodson 2013; and Raikou and Karalis 2016) acknowledged that transformative learning and change influenced the whole person. In other words, transformative learning was holistic. As a result of the transformative learning experiences, students in Bunduki's (2017) study became role models and learning-teachers to their colleagues and community members. Just as in Bunduki's (2017) study, other literature indicated the benefits of Christianity in transformative learning experiences, and the embodiment of the whole person - body and spirit together (Dirkx 1998; Cranton 2006; Glanzer et al. 2011; Charaniya 2012; Bowman and Small 2012; Papastamatis and Panitsides 2014). Religion is often very impactful in students' lives and therefore significant in providing a religious enabling environment (Austin 2011, Cranton and Dirkx 2012). Whether these same findings would emerge in the current study remained to be established.

#### *2.3.2.2 Transformative learning experiences through spirituality*

The aspect of spirituality seems to have been topical in regional studies, for example (Bunduki 2017) in his study pointed out the crucial role of spirituality in the students' transformative learning experiences. Similarly, Ensign (2019) commented on the significance of the spirituality of the Batswana citizens on their transformation. Ensign (2019) also commented on (Merriam and Ntseane's 2008) study on disorienting events in the lives of Batswana citizens. The study found that lived events triggered transformative learning experiences in the participants. In Ensign's (2019) study, typical triggers such as the death of a loved one, a disrupted relationship, or a health crisis catalysed Mezirow's transformative learning experiences and phases. However, there was a culturally unique contextual element in this study. The unique context was the

emphasis on the interactive aspects of spiritual, community and gender roles in Botswana society that shaped the subjects' transformative learning experiences.

Bunduki (2017) in the Democratic Republic of the Congo also found that transformative learning experiences embraced spiritual and physical aspects. A study by (Addleman, Brazo and Cevallos 2011) in Ecuador, trying to demonstrate the significance of culture and quoting Harper Lee (1960:30) wrote, "You never really understand a person until you consider things from his point of view... Until you climb into his skin and walk around in it". Bennett (1998:3) defined culture as, "the learned and shared patterns of beliefs, behaviours, and values of groups of interacting people". Students attached a lot of meaning to cultural transformative learning experiences. In Ensign's (2019) study, culture affected transformative learning experiences as students made meaning of their cultural histories and reshaped these histories in light of their current lived moments, thereby weaving new threads of meaning about their own and others' cultural lives (Huber, Murphy and Clandinin 2003). In this case transformative learning experiences occurred when students encountered death, which called into question what they believed in, persuading them to revise their perspectives (Cranton 2006). Hence, the interactive nature of spirituality, community and gender aspects fostered transformative learning experiences. Whether cultural aspects informed the pre-service teachers' transformative learning was yet to be known.

### *2.3.2.3 Transformative learning experiences through social change*

Despite the influence of spirituality on transformative learning experiences, Radwan (2016) in Egypt explored the nature of the transformative learning experiences of students involved in civic collective action, particularly during the 2011 Egyptian Revolution and the role of Web 2.0 in the learning and collective action process. Qualitative, in-depth interviews were conducted with five student activists in Egypt. While Radwan's (2016) study relates to the current study in that it used a qualitative approach and in-depth interviews, it differs from this study which uses 40 participants in 4 sites. Radwan (2016) found that involvement in the emancipatory struggle and social action, facilitated by Web 2.0 technologies, promoted transformative learning experiences. The term 'emancipatory' is associated with Freire's (1970) pedagogy of the oppressed and the process of conscientisation. The idea lies in the freedom that is initiated by the oppressed. Taken to the education environment, emancipatory pedagogies challenge the

traditional/ banking methods of teaching where there are knower-knowee, depositor-recipient relationships Kitchenham (2008). Modern pedagogies, as used in Radwan's (2016) study, are effective for enhancing transformative learning experiences. Social action involves the participation of students in a collective action which may lead to a social change (Cranton 2006). In this Egyptian study, the students could only emancipate themselves through transformative learning experiences leading to social action. Mezirow (2003) states that students are able to change their beliefs, perspectives or understanding through a process of experiencing a 'disorienting dilemma' and resolving this through reflection and discussion, consequently experiencing transformative learning.

Those transformative learning experiences led to the acquisition of new knowledge and the development of new skills, which enabled formerly voiceless students to break away from teacher-centred models of teaching and learning in Egypt, take control of their own learning, and consequently become autonomous thinkers ready for participation in a democratic society. Literature surveyed (Dirkx 2012; Singleton 2015) confirms that autonomous learning is an enabler of transformative learning experiences.

#### *2.3.2.4 Transformative learning experiences through willingness to learn*

In a related study, the nature of transformative learning experiences was also investigated by Ziegler (2019) in Nigeria, who explored how social and familial relationships were challenged, altered, or sustained following transformative learning experiences. The study focused on how three students navigated their way through new and existing social networks and how the transformative experiences altered their pre-conceived ideas and perceptions (Mezirow 2012). This study is similar to (Radwan's 2016), where modern technology influenced transformative learning experiences. The qualitative study used semi-structured interviews and a reflexive journal to generate data which was thematically analysed. This study informs the current study on the use of semi-structured interviews and the approach to data analysis. Ziegler's (2019) study revealed that transformative learning experiences were prompted by a willingness to learn, a boost of confidence, trust and relationships, social interactions and a sense of belonging, which encouraged stepping out of their comfort zones and challenge their perspectives.

A similar study by (Fleming, Hughes and Zinn 2008) in New Zealand also reported students challenging their perspectives and this led to transformative learning experiences under the influence of relationships, teambuilding and cooperation. Several studies indicate that transformative learning experiences are fostered by disorienting dilemmas, social interactions and engaging in a diverse range of pedagogies Illeris (2007; Malkki 2012; Saragi 2017; Sihotang, Setiano and Saragi 2017; Biasin 2018; Mukeredzi and Nyachowe 2018; Zafran 2020). Thus, learning experiences that confront the students' habitual ways of action can promote transformative learning.

#### *2.3.2.5 Transformative learning experiences through emotional intelligence*

In South Africa, a study that investigated the nature of the transformative learning experiences of pre-service teachers was carried out by (Palmer and Wyk 2013). These authors explored the student teachers' views of their transformative learning and autonomy experienced during practice teaching sessions. Critical inquiry was used as the guiding framework to teach for transformation. This current study explores pre-service teachers transformative experiences, and this researcher is guided by Mezirow's Transformative Learning Theory (1991). Palmer and Wyk (2013) adopted an interpretive qualitative methodology and a narrative inquiry-based research approach to explore the experiences of pre-service teachers with regard to autonomy in teaching for transformative learning experiences. While this researcher also uses a qualitative approach and semi-structured interviews, continuum drawings and discussions are used to generate the data instead of narratives. Semi-structured interviews were used by Palmer and Wyk (2013) to generate data from 20 purposively selected participants, whereas this researcher used 40 purposively selected participants in the current study. The results were that emotional intelligence was a much-needed competence in transformative learning experiences because it is positively associated with work performance. Emotional intelligence can be defined as the ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behaviour. Competencies such as empathy, optimism and self-control are important factors contributing to emotional intelligence.

Contrary to his critics, Mezirow (1991) acknowledges that extra-rationality is a much-needed aspect in transformative learning. When students encounter disorienting dilemmas, they make use of both the cognitive and emotional aspects to critically reflect on their previous experiences and then transformative learning occurs. In the South African study by (Palmer and Wyk 2013) emotional intelligence embraces empathy (care for others), optimism (seeing the world with a positive eye) and self-control (maintaining a stable mind), all elements of self-awareness which is crucial in transformative learning experiences. Goleman (1997); Kasl and York (2016); and Giotopolous and Pavlakis (2018) highlight the importance of empathy in real life and in students' relationships with others. Informed by the results of Palmer and Wyk's (2013) South African study, the current study also established how emotional situations may trigger transformative learning. Swartz and Tisdell (2012:325) assert that in the process of adult education, "emotion must be recognised as essential, elemental, always present, [and] worthy of reflection". However, in the process of critically questioning distortions, prejudices, stereotypes, and unquestioned belief systems Cranton (2006), students may experience disorienting dilemmas which lead to some confusion, and these are triggers for transformative learning experiences. Mezirow (2009) and Taylor and Elias (2012) indicate that disorienting dilemmas are strong influences of transformative learning.

From the above studies conducted in the African region on the nature of transformative learning experiences, all of which were conducted in universities, the similarities noted with the current study are the research paradigm and the theoretical framework. However, differences between the past and present studies highlighted in the discussion range from context, data generation methods and data analysis methods.

The key issues that emerged from the regional studies are similar to those that emerged from the global researches. Transformative learning experiences were fostered by disorienting dilemmas, social interactions and engaging in a diverse range of pedagogies. In both global and regional studies, it emerged that transformative learning experiences were holistic. Further, another theme that came out in global and regional literature was the significance of a supportive learning context to influence the transformative learning process. Again, it was the willingness to learn that propelled the students' transformative learning experiences.



By comparison, the findings from the global studies on the nature of transformative learning experiences revealed that transformative learning may be studied in any field: business, medical, industry, education, etc. However, regional studies focused on education. While studies were conducted in universities globally and regionally, the global studies mainly focused on participants in study abroad programmes. The major issues in global studies emerged as cultural shock, work integrated learning, integrative learning and diverse pedagogies. On the other hand, regional studies revealed the need for spirituality or cultural tolerance and autonomy for transformative learning experiences to occur. Pedagogical diversity was common in both contexts where student-centred strategies were adopted to facilitate transformative learning experiences.

In terms of methodology, the global studies employed mixed methods and qualitative approaches. Quantitatively, on-line surveys were the most popular, particularly King's Learning Activity Survey (LAS). The use of longitudinal approaches was also adopted by some global studies. E-methods of generating and analysing data such as Dooze and N-VIVO 11 data analysis software tools were common in the global studies but missing in regional studies. Generally, the regional studies adopted qualitative approaches in generating and analysing data. Only one study used the mixed method approach. In terms of participants, global studies drew their participants from international contexts either in education, industry, or medicine. The regional participants were drawn from local education settings.

Despite the various studies on the nature of transformative learning experiences in different contexts internationally and regionally, no study on transformative learning experiences or transformation had apparently been carried out in Zimbabwe generally, and in teacher training colleges in particular. Hence, the current study adds value to the bigger debates on the transformative learning of students.

Having discussed the nature of transformative learning experiences at global and regional levels, the discussion moves to examine how the students understand their transformative learning experiences.

## **2.4 How students understand their transformative learning**

While the next section discusses the ways in which the students understand their transformative learning, starting with studies carried out in international contexts, limited research has focused on students' actual understanding of their transformative learning process, as most research has focussed on the nature of the transformative learning experiences.

### ***2.4.1 Global studies***

Just like the preceding section where most studies on transformative learning or transformation were done in the USA (Chirume 2015; Snyder, DeJoy and Oppelader 2017), this situation also plays out here. These studies are discussed below under transformative learning as a change of personal dispositions, transformative learning as empathy, and transformative learning as leadership.

#### ***2.4.1.1 Transformative learning as a change of personal dispositions***

Snyder, DeJoy and Oppelader (2017) in the USA established the difference in what post graduate students self-reported as their transformative journey and compared that to the actual theory on the subject. A similar study was carried out in Australia where students undertaking three different clinical placements were longitudinally tracked over four years through medical training into full registration as doctors. This study explored how the different contexts that the students were placed in influenced the process of their transformative learning experiences. The American and the Australian studies relate to the present study as they adopted Mezirow's Transformative Learning Theory (1991) as the lens through which to analyse the data. A mixed method approach was used to generate data in the American study and a longitudinal approach was used in the Australian study.

Responding to how the students understood their transformative learning, the American study found that the students linked their transformative learning to entering a professional programme excitedly uninformed and experiencing context shock (Snyder and Taylor 2012). The students were overwhelmed with work and therefore understood transformative learning as related to experiencing disorienting dilemmas Mezirow (2012). Similar to the Australian findings, the students in this study associated their transformative learning with becoming aware of the

choices they had made, the doubt they experienced, questioning and reappraisal. Some students reported that they had eventually understood transformative learning as gradually building the social and intellectual capacities to succeed in the professional programme and that they were confident about their skills and ability to enter their profession.

From a medical approach, the Australian study found that the students understood transformative learning as change that occurred related to their ways of seeing the world, which they described as insights which were shaped by their clinical training. They also generally understood their transformative learning through self-awareness, patient centeredness, systems thinking, self-care, clinical scepticism, and understanding diversity. The changes were all aligned to Mezirow's Transformative Learning Theory (1991). The contexts of the two studies are different; one was in the USA in education, and the other one was in Australia in the medical field. In both studies, the students understood their transformative learning as a gradual change. Related literature (Hodge 2019; Sakinofsky 2018) highlights that self-beliefs and understandings are bound to change in a transformative learning encounter.

Further, a study by (Pilonieta *et al.* 2017) in Germany explored how a study abroad experience affected pre-service teachers' dispositions towards teaching English language learners. The mixed method study involved 16 elementary education initial licensure pre-service teachers who participated in a 2-month study abroad trip to Germany. Data were generated using surveys, interviews, and self-reflections. As the pre-service teachers faced the challenges of studying abroad, they developed ways of coping, which influenced their dispositions toward English language learners and the accommodations they wanted to make when teaching these learners in their future classrooms. At first the pre-service teachers felt they 'did not fit in' in the new environment. The cultural differences in terms of language, gender, customs and race made them feel like outsiders. However, upon their return to the USA, the pre-service teachers reported understanding their transformative learning as associated to perception changes related to language and culture. The changes they envisioned making when teaching English language learners in the future were based on dispositions of empathy and advocacy. They understood that through their transformative learning they were going to advocate for and be supportive of the English language learners.

In addition, the pre-service teachers understood the changes in their understanding and knowledge about teaching English language learners as transformative learning. The students had developed self-efficacy, had gained knowledge regarding second language acquisition and language and intelligence (that it was a myth that children who do not speak English were intellectually slower than English speakers), which they all associated with transformative learning. The changes experienced by the pre-service teachers are critical lessons that the present study may draw from. Having experienced cultural shock at first, the pre-service teachers made a paradigm shift and experienced changes that had to do with their self-awareness and the teaching profession, and they understood their transformative learning through these changes. Thus broadly, they understood their transformative learning as change related to personal growth. Related literature (Ward, Bochner and Furnham 2000; Zhou *et al.* 2008) indicates that cultural shock influences transformative learning, as experienced by the study abroad pre-service teachers in the study. Again, the disorienting dilemmas (first stage of Mezirow's Transformative Learning Theory) made them question the assumptions they had about cultural differences, thus leading to transformative changes.

#### *2.4.1.2 Transformative learning as empathy*

Again, in relation to how the pre-service teachers understood their transformative learning, Decapua, Marshall and Frydland (2017) in the UK explored Nan's (study participant) transformative journey during her graduate studies. This case study provided important insights into how the Transformative Learning Theory shed light on the struggles of one woman to achieve her twin goals of reaching a marginalised group of learners she cared deeply about and earning her Master's Degree in Teaching of English to Speakers of Other Languages. Mezirow's transformative learning informed the study as it sought to depict Nan's transformative journey. In the process of studying for her masters, Nan was frustrated and confused. These emotions made her understand herself better and she worked hard to achieve her Master's Degree. Having transformative learning experiences herself, she was able to understand the struggles that her students faced in order to master the English Language. She thus created a positive learning environment for her class.

The qualitative case study used checklists, journals and observations, which are different from the tools that are used in the current study. The results suggested that through the support of her mentor, Nan was able to shift her teaching to address the needs of her learners. Being empathetic created a positive learning environment, not only for her learners but for herself during the course of her studies. Taylor and Cranton (2013) have described empathy cognitively and behaviourally. Cognitively, empathy is an intellectual ability used to comprehend another's perspective and mental state Bailey, Henry and von Hippel (2008), and is inclusive of reasoning, analyzing, and critical thinking about another individual's behaviour. Behaviourally, empathy is seen as the ability to communicate with others, both verbally and nonverbally, demonstrating concern and understanding. Empathy is embedded in emotions which guide transformative learning. However, it is in the context of dialogue, critical reflection, and experience that the role of empathy comes to life Dirkx (2006); Boyatzis (2012); Taylor and Cranton (2013); Burton (2015); Kokkos (2015); Kasl and Yorks (2016); Pavlakis and Giotopolous (2018). It is empathy that provides the motivation (altruistic interest) to 'listen' to others, the means to better understand the perspective of another, an awareness of their feelings, understanding of their mental state, and the ability to accurately demonstrate that understanding. Thus, empathy and transformative learning are intricately interwoven and therefore, in Nan's transformative journey, she understood her transformative learning as the development of empathy towards her learners.

#### *2.4.1.3 Transformative learning as leadership*

In another study, (Chirume 2015) in the USA researched pre-service teachers in institutions of higher learning to practise instructional leadership with at-risk students in K-12 education. The purpose of the study was to identify a conceptual transformative learning framework for understanding the concept of instructional leadership and enhancing the professional practice of teachers with students at risk of academic failure in K-12 education. A mixed approach to data collection was adopted. Data analysis was through multivariate analysis of the same data: teacher involvement, change agency, teacher collaborates and knowledge bases for diversity. The results were that not only did pre-service teachers understand their transformative learning as change; they also understood it as leadership, which gave rise to their capacity to expand their world views about themselves and others. Supporting this view, the South African Education Policy (RSA 2000) indicates that a teacher is a leader who makes decisions appropriate to the

level of the students being taught, manages learning in the classroom while carrying out their classroom administrative duties, and participates in other school decision making structures. Thus, these pre-service teachers related their understanding of transformative learning to leadership.

As alluded to earlier on, the studies that explored the students' understandings of transformative learning were limited. The international studies however revealed that the students understood their transformative learning as changes in perceptions, dispositions, values and attitudes, all leading to personal awareness and personal growth. In terms of methodology, the researchers employed mixed methods of generating data. However, one qualitative approach and one longitudinal approach were used in the UK and Australian studies respectively. The regional studies on the students' understandings of transformative learning are discussed next.

#### ***2.4.2 Regional studies***

Like the global context, there was limited literature on students' understandings of transformative learning. Again, like in the global studies, students also understood transformative learning as a change and as self-awareness. These are discussed next.

##### ***2.4.2.1 Transformative learning as a change***

Cubajevaite (2015) in SA based her study on a single multi-site case study on a social movement cohering around literacy issues in Gauteng, South Africa. Semi-structured interviews and focus group discussions were held with 13 learner activists and 2 adult educators. The Gauteng study revealed that transformative learning emerged through learner engagement in the social movement, which challenged and changed learners' understandings of educational statuses within their respective communities. This in turn led to their understanding of transformative learning as change where the students took action to address the community problems identified. The students became more empathetic, tolerant and willing to cooperate with those of different political ideologies and were able to tap into community resources. Literature (Ableser and Moore 2018; Kalu and Kelly 2019) notes that increasing student teachers' engagement can be done through collaborative interactions and active learning activities. The authors suggest activities such as authentic case studies in small groups, presentations on current issues,

discussion prompts, and the use of creative projects as effective in enhancing transformative changes. The students in these studies understood their transformative learning as changes involving experiencing fundamental shifts in their thinking which became broader, more reflective, more active and more inclusive (Mezirow 1991). This study tried to establish whether the pre-service teachers understood their transformative learning as skills development.

#### *2.4.2.2 Transformative learning through self-awareness*

A similar study which attempted to examine how the pre-service teachers understood their transformative learning was conducted by Senyshyn (2018) in Kenya. The study examined a short-term, cross-cultural, service-learning immersion undertaken by 21 undergraduate pre-service teachers in an internally displaced people's camp in Kenya for 3 weeks. The study explored the impact of the service-learning experience from the perspective of transformative learning around the personal growth and professional competencies of the pre-service teachers. As a result of the immersion, pre-service teachers developed a greater understanding of their transformative learning through self-awareness of their aptitudes and an ability to acknowledge and understand their students' strengths and limitations, which made it easier to make significant connections with the community. Literature surveyed (Taylor 1997; Dirkx 2012; Lonie et al. 2015) indicates that students understand transformative learning as involving self-awareness.

Although there were limited studies on the students' understandings of their transformative learning, as alluded to earlier on, similar themes discussed in the global literature emerged in the regional studies. The students understood transformative learning as a change in their beliefs, attitudes, values and dispositions.

Methodologically, qualitative methods were employed to generate and analyse data in the regional studies, and yet the global studies mainly adopted the mixed methods approaches. Following is the discussion on the forms of support offered by the communities to enhance the students' transformative learning.

## **2.5 Forms of support offered to students to enhance their transformative learning**

The forms of support offered to students to enhance their transformative learning are discussed in the following section, starting with global studies.

### ***2.5.1 Global studies***

International studies by (Brock 2012 in the USA; Sanchez 2014 in Columbia; Laanemets and Rostovtseva 2015 in Estonia; and Niels 2020) in Denmark show that the most important factors in enhancing transformative learning experiences are the quality of the teaching and learning and the service systems and support for students. The following sub-sections discuss the global studies on student support to enhance their transformative learning experiences under the headings of teaching strategies, emotional support, a model for effective teaching and learning, project-oriented learning and the physical learning environment.

#### ***2.5.1.1 Teaching strategies as a support mechanism for transformative learning***

Brock (2012) in the USA conducted a study called, ‘Learning Climate for the 21st Century: Applying Transformative Learning to Teaching Methods in Business Schools’. Two hundred and fifty-six undergraduate business students at a large North-eastern university constituted the sample. Mezirow’s Transformative Learning Theory was used as the lens to create more participatory classrooms that placed emphasis on how students learnt. In Brock’s (2012) study, the supportive learning activities which enhanced transformative learning experiences emerged as enabling writing and talking about concerns, deep concentrated thinking, personal journaling, internships, and self-evaluation. In a related study on student support, Grant-Vallone *et al.* (2003) in the USA highlighted that students were able to develop significant relationships with others and in turn felt more integrated into campus life when their social and academic lives were supported. The authors identified support programmes such as the Educational Opportunity Programme (EOP), the Academic Support Programme for Intellectual Rewards and Enhancement (A.S.P.I.R.E.), and the Faculty Mentoring Programme (FMP) as enablers for students’ transformative learning. These support structures often play a critical role in advancing successful student engagement and enhances academic performance.



Surveyed literature King (2005; Taylor 2009; Mukeredzi and Nyachowe 2018) indicates that a transformative learning environment should manifest itself by engaging students in critical reflection, and creating trusting and authentic relationships in which learners become increasingly adept at learning from each other and at helping each other to learn. The current study established whether or not teaching strategies promote interpersonal relationships, which in turn lead to transformative learning.

#### *2.5.1.2 Emotional support for transformative learning*

In addition to teaching strategies, another study around fostering a supportive environment was conducted by Sanchez (2014) in Columbia. Sanchez (2014) explored pre-service teachers' beliefs about their roles in an elementary school classroom with regard to the pedagogical and emotional aspects of students. This study took place at a private university in Bogota and field notes and the teachers' log were used to collect data. Patton's (1987) Analysis Model was used to analyse the data and the findings suggested that language teachers needed to consider an emotional component as part of a successful transformative learning support system.

Literature surveyed (Preston, Ogenchuk and Nsiah 2014; Kasl and Yorks 2016; Pavlakis 2017; William, McKnight and Phillip 2017; Giotopolous and Pavlakis 2018) acknowledges the relationship between critical thinking and emotional health in supporting transformative learning. This was also confirmed in a study by Darling-Hammond *et al.* (2020) who commented that teachers should infuse skills such as self-management, empathy, collaboration, and responsible decision making into instruction to support the transformative learning experiences of students. By being empathetic, the teachers strengthen students' abilities to focus and persevere in their transformative learning. Thus, teachers also play a supportive role in shaping students' beliefs about their own abilities, their sense of belonging, and their academic mind set, and this promotes transformative learning. In another study by (Rainie and Anderson 2017), the authors suggested peer-mentor support where the mentor listens, counsels and advocates for the student. Further related literature (Dirkx 2001; Taylor 2007) indicates that learning itself is inherently an imaginative and emotional act, and that significant transformative learning is impossible without emotional support. This vital aspect of support is a pointer which was looked out for in the current study.

#### *2.5.1.3 A model for effective teaching and learning as a support mechanism for transformative learning*

Another article related to support that communities offer students to enhance their transformative learning was compiled by Donlan, Loughlin and Bryne (2019) in the USA. The study was called, ‘The Fearless Teaching Framework: A Model to Synthesise Foundational Education Research for University Instructors’. In a study by (Donlan, Loughlin and Bryne 2019) they identified four vital aspects of support for effective teaching and student transformative learning: classroom climate, course content, teaching practice and assessment strategies. Ambrose, Bridges and DiPietro (2010) describe classroom climate as encompassing the social, emotional, and physical environment of the learning space. The USA study indicates that instructors can promote a positive classroom climate by fostering warm and supportive relationships with students, listening to their perspectives, using inclusive language and practices, encouraging student questions and cooperation, and attending to students’ needs for accessibility. Course content refers to topics, skills, materials, and organisation that an instructor includes in the class, which need to be aligned with the students’ personal and professional goals. Assessment practices (for example; projects, tests and assignments) have emerged as key supports and drivers for students’ transformative learning in higher education as they signal to students which course content is the most important and to what extent they should prepare and master the material. Donlan, Loughlin and Bryne (2019) emphasise that classroom activities should support transformative learning.

#### *2.5.1.4 Problem-oriented projects as a support mechanism for transformative learning*

Another article was by Niels (2020) in Denmark explored how problem-oriented project learning could be organised in a context that met the pedagogical transformative learning needs and support of first year students. In Niels’ (2020) case study, a set of scaffolding structures were put in place to support the transformative development of first year students on entry for them to acquire the study habits of problem-oriented project learning. Findings were that a highly structured approach to entry level problem-oriented project learning (PPL) supported students’ academic achievements and their sense of meaning in the PPL programme. Consequently, the

PPL can function as a framework not only for the transition from secondary school to tertiary study, but as an essential aspect of transformative learning.

Literature surveyed (Choppo 2016; Garibay 2016; Mukeredzi and Nyachowe 2018) highlights the need for orientation programmes for first year students, for settling them in and introducing them to high-level thinking skills during learning, and thereby supporting their transformative learning. In addition, Ciobanua (2013) indicates that when redesigning a curriculum that focuses on the students, institutions should take into consideration the fact that they need more guidance and counselling in order to find their individual academic paths in a more flexible and supportive learning environment. Without effective student support systems, students that do not have an academic, emotional and social connection with the tertiary institution are more likely to drop out (Tinto 2003). The current study investigated whether or not the student participants have support systems that enhanced their transformative learning experiences.

#### *2.5.1.5 The physical learning environment as a support mechanism for transformative learning*

Another study to determine the types of support offered by communities to enhance transformative learning was carried out by (Laanemets and Rostovtseva 2015) in Estonia. This pilot study sought to determine how Estonian music teachers could provide support and opportunities, to create the best possible learning environments for teaching music in general comprehensive schools and kindergartens. The design and development of environments conducive to learning largely depended on the teachers' professional competence, especially their ability to structure different supportive learning environments with regard to space (school architecture, classroom facilities, health requirements), study materials (traditional textbooks and workbooks, musical instruments, opportunities to make use of virtual environments), and social environments (class size, positive atmosphere, rational timetables, individual curricula/consultations, differentiation and individualisation of learning processes). The study adopted a mixed methods approach that employed document analysis, questionnaires and focus group interviews. The findings revealed that teachers needed to pay attention to supportive learning environments, as identified above. Related literature (Goss, Cuddihy and Michaud-Tomson 2010) notes that to foster transformative learning, curriculum designers should pay attention to supportive learning experiences, reflective practices and supportive, diverse pedagogies.

In summary, the international studies discussed have highlighted crucial themes related to the use of supportive teaching and learning models. These provided support in terms of teaching and learning strategies that promoted transformative learning experiences. As noted earlier on in the section on students' understandings of transformative learning, the role of spirituality and emotions embracing empathy and compassion emerged again as vital supports in enhancing students' transformative learning. Students' engagements in creative activities and problem-oriented learning emerged as support mechanisms for the transformative development of students. Physically supportive learning environments also came up as crucial in enhancing transformative learning. The next section discusses regional studies about the forms of support offered by communities to enhance transformative learning.

### ***2.5.2 Regional studies***

The regional studies on forms of support offered to students to enhance their transformative learning were conducted by (Belnaineh 2017 in Ethiopia; Ndirangu and Udoto 2011 in Kenya; Eshun, Osei-Poku and de-Graft-Johnson 2013 in Ghana; and Ngene *et al.* 2018) in Nigeria. In this section they are discussed under the categories of a supportive learning environment, learning resources, creative learning environments and physical learning environments.

#### ***2.5.2.1 The learning environment as a support mechanism for transformative learning***

Belnaineh (2017) in Ethiopia examined the learning environment at Mizan Tepi University from the students' perspectives and their approach to learning, and evaluated the implication of the type of learning environment on the quality of the support for transformative education. The study used a quantitative approach and utilised a descriptive survey for data collection. The Course Experience Questionnaire (CEQ) and the Approaches and Study Skills Inventory for Students (ASSIST) were employed to measure the supportive aspect of the learning environment on transformative learning. The learning environment was supposed to focus on student success; foregrounding their learning; establishing high expectations for them; investing money in support services; asserting the importance of diversity; and preparing students for learning in higher education.

The study, a large-scale survey, targeted six colleges of the Mizan-Tepi University and randomly selected 382 students to participate in the study. The current study was a small qualitative study of 40 participants from 4 selected teacher training colleges. A statistically significant and positive relationship was found between a supportive learning environment, a deep approach and students' transformative learning. It was confirmed that those students who perceived their learning context as being conducive and supportive of their learning experienced transformative learning and had a better academic achievement. Related literature (Taylor 2007; Clapper 2010) notes that a supportive environment allows learners to reflect upon their fears, expectations and future goals critically, leading to transformative learning. A similar study by (Kuh *et al.* 2008) indicates that the university support structures should create a successful student support culture in order to enhance transformative learning. An example of a support service is in the area of technology, and Fabian, Topping and Barron (2018) indicates that digital technologies provide an important catalyst for transformative learning.

#### *2.5.2.2 The learning resources as a support mechanism for transformative learning*

With regard to resources, an environment conducive to learning is an enabler for transformative learning, and this was examined by Ndirangu and Udoto (2011) in Kenya. Their findings were based on the perceptions of the quality of the educational facilities in Kenyan public universities, the implications for teaching/learning, and the learning support environment. The study investigated the quality of the learning resources available from the perspectives of students and academic staff. Overcrowded facilities and the consequent deterioration of the in-door air quality, poorly maintained lecture and library buildings susceptible to weather hazards, and inadequate teaching and learning resources were reported to be impacting negatively on students' transformative learning and achievement, and also on the academic staff's motivation. The study adopted an exploratory descriptive design. A total of 332 undergraduate students and 107 academic staff members from 5 public universities were randomly selected to participate in the study.

While this study involved both students and staff as participants, the present study focused only on pre-service teachers. The results of Ndirangu and Udoto's (2011) study showed the need for university managers to focus on the improvement of the quality of the support related to the library, online resources, and internet and lecture facilities. The existing facilities were unable to

support the desired transformative learning programmes effectively and facilitate the development of learning environments that supported students and teachers in achieving transformative learning goals. Further literature surveyed Clapper (2010; Freeman 2015; Shernoff *et al.* 2016) highlights that supportive learning environments such as lecture theatres, classrooms, laboratories and different technologies provide a sense of achievement for the learners and staff. One wonders if the above-mentioned resource supports also emerge in the current study.

#### *2.5.2.3 Creative learning environments as support for transformative learning*

Another study from the region was conducted by (Eshun, Osei-Poku and de Graft-Johnson 2013) in Ghana. The study examined pupils' perceptions of factors that supported and were likely to impact on their creativity development in public and private primary schools. Questionnaires were administered to the pupils to examine their attitudes, beliefs and the school and classroom environments. Pupils were found to possess accurate conceptions regarding what constituted creativity and they revealed conflicts with the school and classroom environments. The findings were that the institutions needed to provide a supportive environment where students could think creatively. While the Ghanaian study explored primary school pupils in a different context, as opposed to student teachers being investigated in this study, it remained to be seen whether similar conceptions about support would be raised in this study as those in the Ghanaian study.

#### *2.5.2.4 Physical environment as a support mechanism for transformative learning*

Still in relation to forms of support offered by the communities to students, a study by (Ngene *et al.* 2018) in Nigeria assessed the status of the physical environments of institutions of learning, government policy directions and the philosophical orientation of the educational system in relation to students' support mechanisms. An appropriate supportive environment required a combination of physical structures, the right timing of teaching and learning, the right seating arrangements, an adequate level of sanitation and lack of pollution of the environment, suitable climate conditions within the environment, and closeness of the learning environment. The method employed was a combination of descriptive and philosophical analyses of the physical environment and government policies and issues. The results revealed that the pathway to standard quality education was the right combination of effective support related to resource

management, adequate educational infrastructural development and an appropriate governance structure that would drive all the other factors in the quest for attaining Nigeria's educational goal. The research concluded that there existed a wide infrastructure deficit, in spite of government intervention, mainly due to the lack of political will and the mismanagement of scarce resources. However, a marked improvement was seen with the intervention of the private sector in improving support mechanisms in the key areas of learning. The study recommended, among other things, purposeful support from a synergy between parents and the government for an improved physically supportive learning environment. Mezirow (1991) indicates that when students are placed in an environment that can 'challenge their prejudices, prior experiences and assumptions', they learn about themselves and can develop relationships within any supportive community. The pertinent issues raised in the Nigerian article are crucial pointers to what this current study looked out for concerning the forms of support offered by the college communities.

From the above discussion, there seems to be consensus among global and regional contexts that support should be rendered to teaching and learning contexts to enhance students' transformative learning. The regional studies enumerated support as including text books, on-line resources, internet connectivity and lecture facilities. The issue about infrastructural support was raised in both the international and regional literature. While the global studies suggested empathy as a support system that enhanced transformative learning, the regional literature was mum about it. Peculiar to the regional studies was their attack on the political leaders for lacking the will to be supportive of transformative learning environments that would promote students' achievement. Qualitative methods were mostly used in the regional studies, except for one that used a mixed method approach.

Generally, global literature focussed on improving teaching and learning resources as critical support mechanisms to enhance transformative learning. On the contrary, the regional studies seemed to want to persuade policy implementers to take the issues about educational support that enhanced transformative learning more seriously. The policy implementers should have the 'willpower', quoting the Nigerian study above, to improve infrastructure and teaching and learning resources( Ngene *et al.*, 2018). On the whole, the aspect of support mechanisms emerged as being at the heart of transformative learning experiences, and the current study attempts to establish whether the college communities explored are supportive of student's

transformative learning. Methodically, a descriptive analysis was adopted in the regional studies, while the global studies employed both mixed and qualitative approaches.

The literature presented above indicates that a lot of research has been carried out internationally and regionally, mostly in universities, about how the institutional communities can support the transformative learning experiences of students. Regrettably, however, the literature search did not yield academic work on this phenomenon in Zimbabwe, either in universities or in colleges. This is the gap to which this study contributed.

## **2.6 Conclusion**

The study is about exploring transformative learning experiences of the vocationally interested and the vocationally disinterested pre-service teachers in teacher training colleges in Zimbabwe. This chapter discussed literature related to the three questions of the study which are:

1. What is the nature of transformative learning that the vocationally interested and vocationally disinterested pre-service teachers experience?
2. How do pre-service teachers understand their transformative learning?
3. What forms of support are offered by the college community to enhance pre-service teachers' transformative learning?

An exploration at the global level regarding the nature of the transformative learning that students experienced indicated that transformative learning embraced the cognitive, personal, social and affective aspects of learning Dirkx (2012); Taylor and Snyder (2012). Rarieya (2005) added that transformative learning entails examining issues from both the micro and macro levels and from various dimensions, including the ethical, moral, political, and social dimensions.

The global studies concurred that emotions could either facilitate or impede transformative learning, unless supportive environments were created. The disorienting dilemmas experienced could cause traumatic experiences, particularly in study abroad students who experienced a cultural shock in their new learning environments (Swartz and Tisdell 2012). The essence of critical reflection in fostering transformative learning was discussed in every study. Again, because critical reflection challenged the very deeply entrenched values of the students' life



experiences, the students found it as a dilemma which disoriented them by creating anger. Resounding Mezirow's Transformative Learning Theory (1991), the global studies affirmed that although sequentially numbered, life experiences did not follow a chronological pattern. For some students the life changes were sudden or epochal, for others they were gradual or cumulative, and for yet others they were static. The paradigm shifts were spiral in nature, and attitude was an important factor in transformative learning. Further, the nature of transformative learning also revolved around learning experiences. The global literature raised such themes as expanding students' knowledge through a variety of teaching and learning activities; and providing suitable and supportive learning environments as enhancing transformative learning. Empathy and compassion were highlighted in the international literature as the back-bone for transformative learning. Methodologically, as highlighted earlier, the studies adopted the mixed methods and qualitative approaches of generating and analysing data.

The international studies on the nature of the transformative learning of students raised almost the same issues as the regional studies. The transformative learning experiences that emerged in the regional studies were disorienting dilemmas as students moved to new environments. Critical reflection was also at the heart of transformative learning. Transformative learning emerged as a holistic experience because like religion, it was an embodiment of the body and spirit together. Hence, the regional studies emphasised the spiritual and affective domains as propelling transformative learning. Emotional intelligence was associated with the willingness to work and therefore also enhanced transformative learning. As alluded to in the global studies, pedagogical approaches and context/environments were viewed as supportive to students' transformative learning.

However, while the global literature presented a wide range of methods of generating and analysing data, from software packages to qualitative approaches, the regional studies relied mostly on qualitative approaches. Only one study adopted a mixed methods approach.

The reviewed literature also explored ways by which the students understood their transformative learning. Although there was limited research on the students' understanding of their transformative learning, there emerged similar themes from both global and regional studies. The students understood their own transformative learning experiences as a change in their beliefs, values, attitudes and dispositions leading to self-awareness and personal growth.

The difference between the global and regional studies was noted in terms of methodology. While global literature employed mixed methods, the regional studies adopted the qualitative approach.

The discussion on the forms of support that the students received from their communities was already hinted at by the nature of their transformative learning experiences and by how the students understood their transformative learning. In each case, literature reiterated the need for a supportive learning environment to promote transformative learning. The kinds of support mechanisms were discussed globally and regionally. The themes that emerged from the international studies highlighted provisions in terms of teaching and learning resources that supported transformative learning experiences. Student-centred pedagogies including the role of spirituality and emotions were critical support mechanisms in enhancing students' transformative learning. Physically supportive learning environments also came up as significant in enhancing transformative learning experiences. Qualitative methods were employed in generating and analysing the data.

Regionally, the same kinds of support mechanisms emerged as in the global literature. The learning contexts were said to be supportive of transformative learning experiences. The provision of a library, online resources, internet connectivity and infrastructure offered learning support mechanisms/systems conducive to transformative learning. Student engagement in a variety of diverse transformative learning activities emerged as a critical theme in both the global and regional studies. The researchers also highlighted the supportive role of the facilitator in a transformative learning environment. Methodologically, there were no differences as the researchers made use of descriptive and philosophical analyses of the learning contexts.

Having discussed the reviewed literature to contextually locate this study, as well as highlight some of the academic work that has been done around transformative learning experiences, the next chapter describes Mezirow's Transformative Learning Theory (1991) upon which this study is anchored.

## **CHAPTER 3**

### **THEORETICAL FRAMEWORK**

#### **3.1 Introduction**

This study which seeks to explore the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers in teacher training colleges in Zimbabwe is guided by Mezirow's Transformative Learning Theory (1991). The previous chapter highlighted that transformative learning has occurred almost exclusively within the domains of adult education and equally, many researchers have expressed the view that this is a uniquely adult phenomenon (Kegan 2009; Kitchenham 2010; Taylor and Laros 2014; Cranton and Taylor 2016; Enkhtur and Yamamoto 2017; Moyer and Sinclair 2020).

Although the theory was originally proposed around the 1970's, its fame continues to grow and develop (Malkki and Green 2014; Christie *et al.* 2015). It stands out as a guiding theoretical framework to understand how adults learn, grow, challenge themselves and engage in transformative processes (Taylor and Cranton 2012). It is then imperative for higher education settings to create professionals who can question and come up with new ideas to develop the education system. The Transformative Learning Theory envisages that institutions of higher learning produce graduates who can think, that challenge the students' assumptions, and help these graduates develop inclusive and open perspectives (Frenk, Chen and Bhutta 2010). As Kegan (2009) noted, adults need transformation, not information. Instead of just filling the 'containers' of the students with information, there is a need to expand those containers so that they are conscious of how they make meaning. Mezirow's ten stages of the Transformative Learning Theory (1991) help the researcher to understand how the vocationally interested and vocationally disinterested pre-service teachers experience transformative learning. The stages of the theory provide the basis for comparison with the pre-service teachers' experiences and also enable the determination of whether or not the experiences are linear, iterative or cyclic in their nature (Clark, Carolyn and Rossiter 2008).

This chapter is organised into three main sections: the historical development of Mezirow's Transformative Learning Theory, its principles or phases and application, and finally its critique. The next section describes the theory's historical development.

### **3.2 Historical development of Mezirow's transformative learning theory**

Mezirow's theory began to emerge during his impact assessment of a nation-wide US study on community colleges Biasin (2018). Of particular interest were re-entry programmes encouraging women who had previously abandoned or interrupted their studies. Mezirow noticed that transformation began occurring as the women in the study became aware of the cultural and social constraints to their progress, and helped them to see the in-built psychological barriers in their lives and in their views of their identities. Mezirow (1981) observed that the domination of ideologies, the psychological constraints affecting people's lives and oppressive education all slow down social and personal transformation. He posits that political, social and individual change can only occur through "emancipatory action synonymous with perspective transformation" Mezirow (1981: 6). In order to generate transformation, Mezirow focussed on changing meaning. In the context of this study, changes in the way pre-service teachers view teaching stems from each individual's perspective transformation. Mezirow's seminal work on perspective transformation, as Hoggan (2016) puts it, offers vital insights into processes of learning and change on both the individual and the collective level. The current study wants to understand how the pre-service teachers experienced transformative learning during their training and therefore perspective transformation will assist the researcher to explore the process of their transformative learning. Literature surveyed (Cranton 2002) indicates the intricate relationship between perspective transformation and transformative learning. The next section discusses perspective transformation.

#### ***3.2.1 Perspective transformation***

Perspective Transformation, from which transformative learning evolved, addresses perspective change by challenging the learner to identify the historical experiences and beliefs that may be limiting personal growth and relationships. Mezirow (1991) contends that if culture permits, people move away from uncritical and rigid relationships to more inclusive, integrative perspectives. Related literature (Clark 1991) identifies the process of perspective transformation as having three dimensions: psychological (changes in understanding of the self; convictional (revision of the belief system) and behavioural (changes in life style). In the context of this study, pre-service teachers come to college with preconceived ways of thinking about teaching,

unaware that learning to teach is a process that includes challenging and changing assumptions about what happens in the classroom. Related literature (Borg 2006) reveals that teacher identity is constructed from a complex cognitive dimension that involves what teachers know, believe and think. The student teachers take on a new identity over a period of three years and construct a sense of what it means to be a teacher (Alsup 2005; Clark, Carolyn and Rossiter 2008). As a part of the training process, a teacher builds a sense of affiliation with the teaching profession or gives it up (Clandinin *et al.* 2009). In the case of this study, where the pre-service teachers had to challenge their pre-existing assumptions, the process of perspective transformation was likely to be a challenging one. In Colombia, for example, once a student teacher is offered a place in a teacher education programme, coping with assignments, assessments or practicums may challenge the motivation and the professional expectations of these student teachers. Such experiences could demotivate them and switch them off, and in this instance transformative learning may not be realised.

According to Mezirow (1991), perspectives are people's actions and statements of ideas that go with these actions. Perspective Transformation is the basis for the Transformative Learning Theory, as alluded to above. Literature (Marsick and Mezirow 1978; Mezirow 2012) describes transformative learning as:

*The conceptual domain of consciousness-raising, improving, becoming free from the past, undoing twisted views of the world, raising above self-limitations, being future-oriented, becoming enlightened, unfolding spiritually, metaphorically of butterflies emerging, and all this through an inner awakening, creating a stirring of discontent that generates a drive in a person to enlarge their understanding and appreciation of life.*

Hence in the perspective domain, the individual's way of the world can become more inclusive, discriminating, reflective, open, and emotionally able to change (Mezirow 2012). The essence of education should be seen in this light, where the learners are open and inclusive in the way they understand the world. With regard to this study, transformation of perspectives is crucial because student teachers have to undergo training and become enlightened and learn to appreciate the world they live in. Learning should be seen as having a transformative effect on the learner's life. Illeris (2014) emphasises that learning should bring about a fundamental shift in the way the learners (in this case student teachers) view the teaching. Hence, Mezirow (2000)

comments that after a transformation in a frame of reference, a person is said to view themselves and their world in a superior manner to the view previously held, as a result of their assumptions and expectations having been challenged and modified to better fit their reality or context. Both the vocationally interested and disinterested pre-service teachers' beliefs and attitudes about teaching are challenged, and at times they undergo a dramatic change, but in other cases they maintain the status quo. During the course of their teacher training, transformative change can occur either in an epochal way in which a sudden major reorientation is required, or in a cumulative manner, when a progressive sequence of events creates dissonance. Once a person has had an epochal change they never go back to the old way of seeing the world (Mezirow 2012). This means that changing the habits of the mind requires the purposeful and deliberate participation of the pre-service teachers. It is from the student teachers themselves that perspective transformation is realised when they participate in active learning activities.

Furthermore, perspective transformation, which refers to changes in the way a person thinks, can occur at different levels. Surveyed literature (McEwen, Strachan and Lynch 2010) indicates that learning is not necessarily gradual, progressive and linear, but may have significant thresholds for change. Seemingly simple, perspective transformation is quite demanding. The process consists of complex and varied responses yielding change for some but not for others (Mezirow 1990). With regard to this study, the student teachers may find it difficult to let go of their previous assumptions they were socialised in. Their frames of reference are those cultural structures, including language, that guide meaning by shaping and delimiting their perceptions, beliefs, understandings and expectations (Mezirow 2000). People have both meaning schemes (rules that govern how the world operates) and meaning perspectives/frames of reference that propose how abstract relationships function (Mezirow 2000). The meaning perspectives guide the decisions that the pre-service teachers take in their transformative journey of becoming teachers.

A frame of reference has two elements: a habit of mind which includes assumptions around morals, episteme etc., and a point of view which shapes people's interpretations of the world around them (Mezirow 2000). When people's meaning schemes and meaning perspectives have sufficiently transformed, they have experienced perspective transformation. In the case of the current study, transformative learning will have occurred when the pre-service teachers shifted their old ways of seeing the world and they embraced new ways of giving meaning to the various

situations in life. Literature Mezirow (2000; D'Amato and Krasny 2011) notes that perspective transformation is a permanent shift in one's frames of reference and therefore may or may not manifest in behavioural changes. The discussion on what transformative learning entails assists in understanding how the vocationally interested and vocationally disinterested pre-service teachers experience transformative learning. The next section discusses how the theory evolved over the years.

### ***3.2.2 Main conceptualisations of transformative learning***

#### ***3.2.2.1 Kuhn's 1962 paradigm***

Kuhn's (1962) conception of paradigms provided a basis for Mezirow's notion of transformative learning. The influence of Kuhn's (1962) paradigm was quite apparent in Mezirow's (1978a; 1978b; 1981; 1985) work. Kuhn used the term 'paradigm' to refer 'to a collection of ways of seeing, methods of inquiry, beliefs, ideas, values and attitudes that influence the conduct of scientific inquiry' (Mezirow 1991a). This came about as a result of Kuhn's realisation that among the social scientists and the natural scientists, there was a major disagreement as to what constituted a legitimate scientific inquiry (Mezirow 1991b; Kitchenham 2008). According to Kuhn, a paradigm is based on a shared world view. The current study uses the interpretive paradigm because it is premised on the subjective perspectives and views of the reality of the student teachers. Mezirow (1991) refers to this as a definition of a situation that organises and governs social interaction or a frame. A frame tells us the context of a social situation and how to understand and behave in it Mezirow (1991).

A frame of reference comprises habits of the mind and meaning perspectives, which in turn lead to a perspective transformation. Perspective transformation alters meaning structures (frames of reference) that adults have acquired over a lifetime through their individual cultural and contextual experiences, for example in this study, the pre-service teachers bring to the teaching profession a diversity of experiences and understandings that they have accumulated over the years. Such deeply ingrained experiences influence how an individual behaves and interprets events (Taylor 1998). Related to the current study, Kuhn's ideas about a paradigm influence the pre-services teachers' transformative learning experiences. If any transformation has to be

experienced the student teachers will challenge their frames of reference, that is their beliefs, ideas, values and attitudes that they have brought to teacher training. The idea of prior experience is critical if any transformation is to take place.

### *3.2.2.2 Paulo Freire: transformation as consciousness-raising*

Paulo Freire (1970: 73) gained insights into pedagogy through working in the field of adult literacy in poor communities in Brazil. He regarded the mainstream education of the time as fostering political, social and economic oppression as it minimised or annulled the students' 'creative power', preparing adaptable learners who could only catalogue and collect knowledge and information, rather than challenge norms and invent new ways of doing things. Related literature (Kitchenham 2008) indicates that Paul Freire likened traditional education to the 'banking' method of learning, whereby the teacher deposited information into those students whom the teacher deemed worthy of receiving the gift of knowledge.

The problem with this kind of education is that students become dependent on the teacher, whom they see as the 'knower', and they are the 'passive recipients' of the knowledge. If this knowledge is not critically questioned, it remains at a superficial level. Transformative learning implies that the mechanical knowledge goes beyond the literal level Asif (2013) through critical reflection and critical evaluation. The student teachers become creative and can engage in critical problem-solving activities. According to Freire (1970: 60), "the more students work at storing the knowledge deposits entrusted to them, the less they develop the critical consciousness which would result from their intervention in the world as transformers of that world".

Freire coined the term 'conscientisation', which emphasises the development of consciousness that has the power to transform reality. He defined conscientisation as "learning to perceive social, political, and economic contradictions - developing a critical awareness - so that individuals can take action against the oppressive elements of reality" Freire (1970: 19). Freire (1970) argued that for education to be empowering, the teacher needs not only to be democratic but also to form a transformative relationship between him or her and the students, as well as between students and their learning, and students and society. To Freire, education does not stop in the classroom but continues in all aspects of a learner's life. Therefore, education is always political in nature - regardless of whether the learner and teacher realise their politics



(Shor and Freire 1987). For instance, politics influences the way the teacher discusses concepts with students, the types of tests used, the activities and materials chosen for study, and the level of risk taking in the classroom.

Mezirow's Transformative Learning Theory was influenced by Freire's highest stage of consciousness called 'critical transitivity', reflected in individuals who think globally and critically about their present conditions and who decide to take action for change (Mezirow 1985). As much as critical transitivity is crucial in the training of teachers, this process is difficult for many students who are in many cultures trained not to question authority. This level is opposed to the first level which is called the 'intransitivity' stage, where the individuals do not act to change their situation but leave everything to fate or God. In the context of the current study, this is a situation where these student teachers may wait to be spoon fed by the lecturer. They may not think outside the box but instead prefer and expect to be taught through lecture exposition or teacher/content centred methods.

The second stage is the 'semitransitivity' level, where individuals are half committed to liberate themselves but look up to others to lead them in the liberation process. In the current study, an example can be of student teachers who do not act and instead wait for others to decide for them, for instance in group discussions such students are passengers who support decisions put forward by their domineering counterparts. Paul Freire's Conscientisation Theory has relevance to this study about exploring the transformative learning experiences of the vocationally interested and disinterested pre-service teachers in Zimbabwe. The student teachers are expected to be their own liberators in the way they learn and interact during the training period. From the researcher's experience as a lecturer, Freire's ideas about how students should learn to avoid being 'containers' are very relevant. This researcher has witnessed the lecture method taking up about 80 per cent of the teaching in the colleges. It is high time that student teachers are allowed to be in charge of their learning. In Freire's own words, there should be a transformative relationship between the teacher and the student.

Grounded in humanism, Freire asserted that, "human beings are not built in silence, but in word, in work, in action reflection" Freire (1970: 88). Emancipatory education, he argued, has to challenge the 'culture of silence' where people are not able to actively reflect on their situation. He viewed effective dialogue as an essential part of truly emancipatory education, yet something

that can only be fostered in a learning environment that is inclusive, interactive, respectful, humble, and loving. As a part of this process, it is important to understand where the student teachers are situated and relate that to their experiences. As Freire (1970: 96) wrote, “it is not our role to speak to the people about our view of the world; nor to attempt to impose that view on them, but rather to dialogue with the people about their view and ours”. Through radical, student-centred teaching that employs reflection and action, Freire argued that educators can foster transformation by raising learners’ awareness of the structures within their society that contribute to institutionalised oppression and inequality. Based on this argument, the current study fits well in the transformative learning journey as the pre-service teachers in this study have an opportunity to freely air their subjective views, without any influence or oppression, in an environment where they are considered as partners and collaborators in the research process through focus group discussions, individual face-to-face interviews, continuum drawings and continuum discussions.

### *3.2.2.3 Habermas’s domains of learning and communicative action*

Habermas (1971) also influenced Mezirow’s Transformative Learning Theory. Habermas (1984) stressed the importance of the domains of learning and of people communicating with each other in an effort to come to a common understanding. With regard to this study, the student teachers must always speak and act in order to understand one another. Mezirow (1991) explains that communicative action allows people to relate to the world around them, to other people, and to their own intentions, feelings and desires. The student teachers are free to discuss issues and views, for example their reasons for joining teaching. Mezirow’s theory was influenced specifically by Habermas’ three domains of learning: (a) the technical; (b) the practical; and (c) the emancipatory. Technical learning is mechanical and repetitive, for example, the students learn facts which they can regurgitate or reproduce (Asif 2013).

Practical learning which involves social norms and emancipatory learning is introspective as the learner is self-reflective and experiences self-knowledge (Kitchenham 2008). In this study, the pre-service teachers are asked, for example, to justify why they value group work in their transformative learning. As they discuss the issue, the student teachers are reflective and, in the process, develop self-knowledge. Mezirow’s (1978) initial theory became more developed as he

expanded the view of perspective transformation by relating the emancipatory process of self-directed learning to form three revised types of learning: (a) instrumental; (b) dialogic; and (c) self-reflective learning (Mezirow 1985).

The original three types of learning (technical, practical, and emancipatory) were based on Habermas's (1971) work. Simply stated, learners ask how they can best learn the information (instrumental), when and where this learning can best take place (dialogic), and why they are learning the information (self-reflective). The three processes are significant in this study because student teachers' transformative learning is progressive. The student teachers may ask how to perform a task (instrumental) and dialogic learning involves working with peers and becoming self-reflective - they may ask for the reasons behind performing a particular learning activity. The dialogic and self-reflective approaches enhance transformative learning.

Related literature (Calleja 2014) indicates that what distinguishes emancipatory knowledge from the other two knowledge sources is its origin from critical self-reflection, thus it is knowledge which is appraisive rather than prescriptive or designative (Mezirow 1991a). This domain helps student teachers understand the psychological and cultural assumptions that constrain the way they see the world and this influences the way they think, feel and act. Such self-knowledge which comes as a result of self-reflection and self-awareness emancipates them through awareness of the origins and reasons behind their problems; a step towards achieving rational control over their lives. Therefore, this form of learning is meta-cognitive in nature because the pre-service teachers learn not only to see the world more clearly but also to 'see themselves seeing the world' (Jesson and Newman 2004).

Habermas's (1971) learning domains and communicative action are crucial in this study for they lay the ground for self-examination; a critical aspect in transformative learning. The pre-service teachers, through critical self-examination and reflection, question the psychological and cultural assumptions that constrain them from understanding the world. Reflecting upon meaning perspectives and meaning schemes is critical in their transformative journey. Kuhn (1962), Freire (1970) and Habermas' (1971) conceptualisations have great influence on Mezirow's Transformative Learning Theory. The idea about the paradigm (Kuhn 1962), conscientisation of the oppressed (Freire 1970) and domains of learning and communicative action (Habermas 1971) impacted on the philosophical and sociological thought of Mezirow's theory. Consequently, the

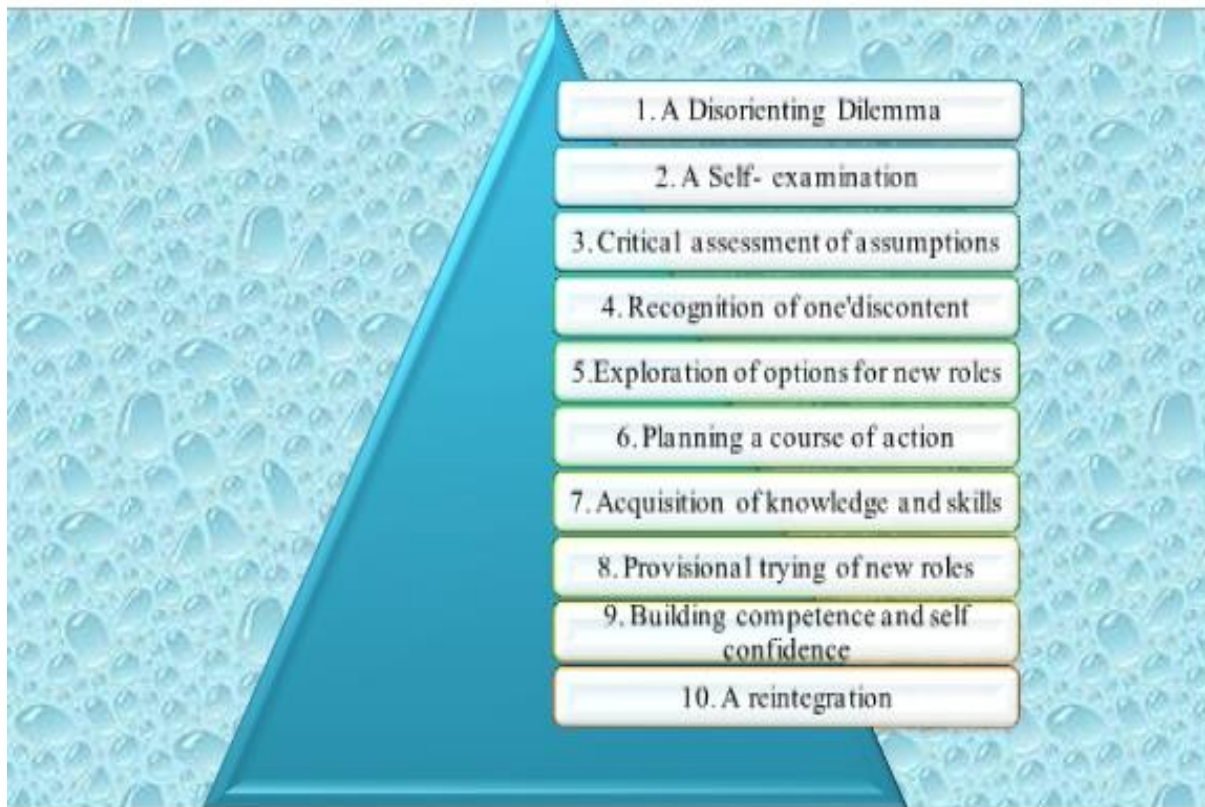
conceptualisations are infused in the discussion of the pre-service teachers' transformative learning journeys because the theorists heavily influenced Mezirow's early thoughts on transformative learning. The next section discusses the tenets of Mezirow's Transformative Learning Theory.

### 3.3 The principles/phases of Mezirow's transformative learning theory

As alluded to earlier on, this study is guided by Mezirow's Transformative Learning Theory which was influenced by the works of Kuhn, Freire and Habermas. The process follows ten key stages, as reflected in Figure 3.1.

**Figure 3.1: Mezirow's principles of the transformative learning theory**

Source: Researcher (2019)



The discussion now looks at each principle and at the same time applies them to the study.

### ***3.3.1 Disorienting dilemma***

The disorienting dilemma was one of Mezirow's original findings. Disorienting dilemmas are primarily the major disruptive events that initiate a process of metamorphosis (Mezirow 2009). In his seminal work on the factors that impede or facilitate women's progress in re-entry programmes for women after a period away from formal education or the work force, Mezirow assigned a disorienting dilemma as one of the major phases that such adult learners go through in their personal transformation. In this study, the pre-service teachers are adults who have come to college from different walks of life; hence they will have experienced disorienting dilemmas during their training, particularly at the beginning. Being in a new environment is a dilemma that causes disorientation that may result in fear, frustration, shame, confusion, being overwhelmed and shock. Consequently, they will have gone through personal transformation just like the women in Mezirow's theory.

Related literature (Taylor and Elias 2012) defines disorienting dilemma as experiences that illuminate and challenge invisible and unquestioned assumptions that determine how we know ourselves and the world around us. As such, the pre-service teachers challenge their previously held beliefs about teaching as they come to terms with the teaching process. Mezirow believed that a disorienting dilemma is triggered by a life crisis or a major transition. In this study, the idea the student teachers have translocated from their familiar environments could trigger a sense of loss from environmental or cultural shock. The trigger might be caused by the transition from high school or the 'streets' as industries where some of the pre-service teachers used to work were closed. Being in new college environments triggers disorienting dilemmas.

Boyd and Myers (1989) comment that a major critical phase that can be considered as a disorienting dilemma is grieving. In other words, the disorientation causes grieving. They say grieving takes place when the individual realises that old patterns or ways of perceiving are no longer relevant. The student teachers grieve for various reasons. For some, they have left their familiar environments and for others, especially the vocationally disinterested who have joined the teaching profession which they never dreamt about entering and have just joined as a last resort will grieve. The student teachers adopt or establish new ways and finally integrate new patterns of adjusting to the new contexts. Mezirow (1999) says such dilemmas cannot be resolved simply by acquiring more information, enhancing problem solving skills, or adding to

an individual's competences. Rather they must be resolved through a process by which the individual moves from an unexamined way of thinking to a more examined and critical reflective way.

Clark (1993) suggests that a trigger can go beyond a single moment or a single emotion. It can be caused by integrating circumstances. According to Mezirow (2009) a sudden and dramatic transformative learning experience is labelled epochal, or momentous; while transformative learning over time is viewed as incremental or gradual (Mezirow 2009). In this study where there is a mixed bag of vocationally interested and vocationally disinterested pre-service teachers, their transformations cannot be realised in one go. For some, it might be sudden, while for others it might be gradual, and yet another group might not experience transformation at all. This dilemma causes a significant level of disruption or disturbance in a person. It is that level of crisis that renders one with the sense of the inability to move on and one feels oneself plunged into non-sense or chaos (Green and Malkki 2017). This extreme discomfort elicited from such a crisis can motivate the development of the transformative learning process.

In the context of this study, joining teaching as a career can be a disorienting dilemma. The student teachers are coming for training with different assumptions. The new experiences at the college can therefore be the source of a disorienting dilemma. Meeting new management, new peers and being in a new community can be stressful and threatening. Being detached from their families can also be a disorienting dilemma. Surveyed literature (Mezirow 2000; Cranton 2006) notes that the content of the trigger can be traumatic or subtle, positive or negative, or internal or external. Student teachers can be internally stressed or relaxed, which potentially affects how they respond to the disorientation. However, the nature of the disorienting dilemma is not universal. An individual reacts differently to a prevailing situation (Cranton 2006). Hence the individual experiences are core components of transformative learning. Related literature (Fenwick 2004) describes experience as involving the whole person: physically, emotionally, sensually, mentally and spiritually. The vocationally interested and disinterested pre-service teachers have to critically examine the assumptions they previously had (experiences) before they joined teaching. This is the reason why Taylor (2009) comments that experiences are the well from which learners draw and react to as they engage in dialogue and reflection, and it is the nature of the experiences that offer the means for fostering transformative learning. Hence, a

dilemma and the subsequent disorientation is a bridge between experiences and reflection in this study, leading to transformative learning (Mezirow and Taylor 2009).

However, Taylor (2007) notes that dilemmas and their disorientations vary greatly. In one of their critical reviews of Mezirow's Transformative Learning Theory, Taylor and Synder (2012) noted that there is no common language or set of attributes that describe the disorienting experience, hence, it is referred to by different names by different theorists. At times it is referred to as expectation failure Schank (1999), life crises or identity crises Erickson (1968), disjuncture in life-long learning Jarvis (2006), cognitive dissonance Festinger (1962), culture shock Kim (1988) or trigger events (Mendenhall et al. 2018). In this study, the term 'disorienting dilemmas' represents stresses, predicaments, problems, quandaries, disorientations or disruptions that student teachers experience or find themselves in at college that can overwhelm them, especially during their transition from the old to the new. Related literature Taylor (1998) highlights that in a transformative learning environment, after the dilemmas the student teachers may begin to perceive themselves differently. Thus, as a facilitator in the learning process, this researcher needs to treat the student teachers (this researcher's students) differently and consider that each one is unique. Mezirow's second principle is discussed next.

### ***3.3.2 Self-examination with feelings of fear, anger, guilt or shame***

There is an intricate relationship between a dilemma, disorientations and Mezirow's second principle about self-examination with feelings of fear, anger, guilt or shame. Paul Freire (1970) influenced Mezirow's conceptualisation of critical self-reflection through his understanding of conscientisation. Self-examination leads an individual to move away from the status quo. In this study, after self-examination the pre-service teachers might begin to examine their pre-conceived ideas, in this case about teaching. Transformative learning occurs after self-reflection following dilemmas, when they have a Damascene moment and realise that teaching is not so bad after all, particularly the vocationally disinterested student teachers. According to Mezirow (2012) and Mezirow *et al.* (2000), critical self-reflection can bring about transformation of a frame of reference that comprises habits of the mind and subsequently points of view. Mezirow (1991) originally highlighted three habits of the mind: epistemic (knowledge of how a person uses acquired or possessed knowledge); sociolinguistic (how one uses language in a social setting);

and psychological (how people perceive themselves). The three habits of the mind are critical for the transformative learning of pre-service teachers. They need to have the knowledge, the ability to communicate with others, and the self-knowledge.

According to Mezirow *et al.* (2000), self-reflection leads to four types of learning / transformation. The pre-service teachers learn through elaborating on their existing frames of reference, through forming new frames of reference, through their transforming habits of the mind, and finally through transforming their points of view as the highest level of learning. The present study will explore these experiences. In a study by Fethersten and Kelly (2007), findings revealed that students from diverse cultural and socio-economic backgrounds, when experiencing learning in a new environment such as a university, underwent disorientation or disruption of their existing values and beliefs. Similarly, the present study might present such aspects to the pre-service teachers, where their habitual lives are disrupted. If this happens, this can lead to anxiety and provoke a change in their perceptions of self and identity Zhou *et al.* (2008). In Fethersten and Kelly's (2007) study it was through reflection that problems were identified, and the ways to solve those problems.

Another study by (Einfalt and Turley 2012) identified the transitional problems encountered by first year students in a business studies course at one of the universities, and suggested that these students had special needs due to the social and academic transition they were experiencing. In the present study, the pre-service teachers could face similar disorienting dilemmas, especially in adjusting to the academic culture, but also due to culture shock, stress, anxiety, loneliness, isolation and having to make any other adaptations in their college life. A study by (Akarowhe 2018) identified four ways in which to help students to survive in new environments: counselling, awareness campaigns, acculturation and co-operation. These remedies could also assist student teachers to adjust to the new college environments.

In the current study, the pre-service teachers will probably be feeling uneasy about embarking on a new career and hence be experiencing feelings of fear, anger, guilt or shame. They may feel guilt at having left their families, or ashamed at having joined the teaching profession as it was not in their initial plans. As they undergo the process of self-reflection, they will learn to challenge their existing mental frames and hence learn new frames of reference by transforming their habits of the mind and their points of view. Related literature (Cranton 2002; Malkki and



Lindblom 2012; Green and Malkki 2017) indicates that the cultivation of reflection and critical thinking serve the purpose of deconstructing culturally derived assumptions that may no longer serve the individual. According to Green (2012), self-reflection gives the individual the freedom necessary to construct more adequate premises as they move through their liminal experience. As such, in this study the student teachers need a learning environment where they can challenge their pre-conceived assumptions and feel safe to express or disclose their reflections of their alternative views based on their new perspectives (Stover 2016). When the student teachers are placed in an environment that will “challenge their prejudices, prior experiences and assumptions”, they may learn about themselves and develop relationships with others (Stover 2016:17). Against this background, self-examination is a critical component that propels transformative learning.

Self-examination allows the learner to look inside himself/herself while standing outside himself/herself. Simply put, it allows the learner to explore and evaluate long-held cultural constructions like perceptions, thoughts, feelings and actions when facing new and challenging encounters (Cranton 2006; Nuangchalem and Prachagool 2010). As indicated earlier on, entering college can be an overwhelming life and cultural transition, where student teachers face challenges in adjusting to the facets of their new college life. However, researchers (Castelli 2011; Roberts 2011; Green and Malkki 2018) highlight challenges faced by learners as they are called to self-examine their previous held assumptions. One of the major challenges is to their comfort zones. Literature surveyed Santalucia and Johnson (2010) indicates that people experience pleasantness and comfort when they carry on with their lives and interpret events, their social relations and themselves unproblematically. People feel safe and secure in their established meaning perspectives.

In the case of this current study, the student teachers are used to their established ways of life and their understandings of their worldviews, and questioning those understandings, beliefs and attitudes through self-reflection may be traumatic. As much as the pre-service teachers know that their knowledge of the world might be limited, and that there are multiple ways in which to interpret the world, they may hold on to their old knowledge Taylor (1997) and this could impede their transformation. Literature (Malkki 2011) acknowledges that although aware of the

possibility of multiple alternate interpretations, people tend to apprehend the world through their expectations and previous understandings.

Furthermore, Malkki (2011) comments on ‘edge emotions’, asserting that they stall self-examination. Edge emotions refer to the unpleasant emotions such as fear, anxiety, shame, guilt, and frustration that appear when people’s meaning perspectives are challenged. In the current study asking the student teachers, particularly the vocationally disinterested student teachers, why they joined teaching could cause anxiety, fear or frustration because confronting their deeply entrenched assumptions is a disorienting dilemma. Some conditions that produce edge emotions include the following instances: when people are unable to utilise previous experience to understand their current situation; when people’s values, assumptions, or cherished viewpoints become questioned by others; and when people’s interpretations of a particular situation carry with it the risk of social exclusion and isolation. In this study, the pre-service teachers may feel withdrawn and lonely because of the anxiety that what they believe in conflicts with what is expected of them in their new environments. Thus, unpleasant emotions have an existential basis as people basically work to preserve their sense of continuity and equilibrium, thereby, maintaining a stable identity and a consistent worldview. The edge emotions can, in fact, be seen as the path toward more rational thinking. When people are able to embrace, feel and live through the unpleasant edge emotions, the resistance to reflection that they provoke can be transcended, leading to transformative learning.

Arguably, transformation is a complex process because it restructures a person’s way of being in the world. With regard to this study, the vocationally disinterested participants in particular might have to reconstruct their views about teaching. Having joined teaching unwillingly, creating passion is an extremely difficult task which might require a high level of reflective thinking to lead to transformative learning (Schoo *et al.* 2015). This restructuring is painful because not only does it change one’s understanding of the self, it also changes one’s beliefs about the world (Mezirow 1991; Kegan 2009; Taylor 2007). This is the struggle that pre-service teachers in the current study probably face when undergoing the process of self-examination. The third principle, the critical assessment of assumptions, is discussed next.

### 3.3.3 Critical assessment of assumptions

By far the most significant learning experience in adulthood involves critical self-reflection and reassessing the consequence and origin of one's meaning structures (Brookfield 2000). People engage in critical reflection and re-evaluate the assumptions they have made about themselves and the world. The same process of challenging prior knowledge and re-examining existing assumptions may be experienced by the student teachers in this study. Both the vocationally interested and vocationally disinterested pre-service teachers might be questioning the assumptions they hold about the teaching profession. Critical assessment of these assumptions about teaching might change as they undergo transformative learning. Literature (Schoo *et al.* 2015) states that transformative learning occurs when a student is presented with information and experiences that challenge and alter their attitudes, values and behaviours. According to Hogan, Malkki and Finnegan (2017), transformative learning allows one to critically move beyond seemingly self-evident assumptions governing one's thinking, feelings and actions that have been unquestioningly internalised through socialisation and education. Assumptions are personal and variable. They shape a person's expectations, perceptions, understandings and feelings, and therefore their actions. Assumptions shape what people see, influence how they interpret events, and guide which action they choose to take (Hooper 2008). Consequently, during training the pre-service teachers may be guided by critical evaluation of their assumptions and experience transformative learning.

In this study, the pre-service teachers could discover anomalies with or distortions of their long-held assumptions, and challenging these assumptions results in the construction of better versions of themselves Cranton (2006); Malkki (2014). By building new relationships in college, the pre-service teachers will learn in a warm and welcoming environment. This is important because West, Fleming and Finnegan (2013) are of the opinion that most people are born with a fundamental need and yearning for social connection and that they cannot cope alone without the support of others. When the student teachers reflect on their meanings and challenge their assumptions, they are at the same time 'playing' with the fundamental threat of being rejected or excluded. This implies that student teachers might play it safe for fear of being rejected by others, and thus not question their previously held assumptions; however, this may mean that they will remain glued in their original state.

Mezirow (1991) asserted that there is overwhelming evidence to support the idea that there is a tendency to accept and integrate experiences that comfortably fit one's frame of reference. The student teachers should engage in student-centred activities such as dialogues, projects, field trips, and discussions as these will help foster transformative learning through critical assessment of assumptions as they interact with each other. Recognition of one's discontent is Mezirow's fourth principle and is discussed next.

### ***3.3.4 Recognition that discontent and the process of transformation is shared***

The fourth principle which is about the recognition of one's discontent, is interconnected with the preceding principles of a disorienting dilemma, self-reflection and the critical assessment of assumptions. In this study this involves student teachers engaging in transformative learning activities where they share experiences with others through reflective dialogues. Mezirow (1997) suggests that the process of dialogue with self and others is an essential medium through which transformation is encouraged and developed.

Learning activities promote the sharing of experiences, either in the form of group work, debates, field trips, journaling, story-telling, role plays and reading Gray (2007); Brock (2010); Hogan and Cranton (2015). These activities are a trigger for transformative learning. Related literature (Mezirow 1996; Brown 2004) highlights seven guidelines that must be followed before learners are engaged in reflective dialogues. First, the student teachers must have accurate information. For example, if they are discussing the dress code of civil servants, they should have knowledge of the teachers' dress code as outlined in the (Zimbabwe Public Service Standards of Dress 2006). Second, the students should air their views freely, without coercion. Literature by (Mezirow 2000; and Cranton 2006) indicates that students should never be judged, and must be allowed to say what they want. A debate topic such as, 'teaching is a noble profession' can be given to the pre-service teachers so that they have an opportunity to question their assumptions about the teaching profession. Here, the student teachers are allowed to actively participate in the debate and self-examination is enhanced. The student teachers could also discover that their joys or fears are not unique to them; they are shared emotions.

Third, the student teachers should be able to weigh evidence and assess arguments objectively. It is encouraged that students be self-directed in order to examine their own beliefs, assumptions,

and perspectives (Santalucia and Johnson 2010). Reflective learning occurs when the student teachers learn from their past experiences. Fourth, the student teachers should be open to other people's views and compare them with their own. Fifth, the student teachers should be able to reflect and reconstruct themselves by leaving out assumptions that have now become irrelevant to them and merge their old values with the new to come up with a new person different from the old one. Sixth, the student teachers must have an equal opportunity to participate in the dialogue. They should be given a chance to challenge, question and refute, and hear others do the same. All this promotes reflective dialogue. Lastly, the pre-service teachers should be able to accept an informed, objective and rational consensus as a legitimate test of validity.

These seven guidelines to a reflective dialogue promote transformative learning, and the student teachers will come to recognise that the experiences that they had previously were inadequate. By sharing experiences, they might discover that their prejudices, stereotypes and unexamined beliefs create limitations/barriers that are inimical to transformative learning. In order to foster transformative learning, there is a need to establish an environment that builds trust and facilitates development among all members of the group (Cranton 1994). Related literature (Franz 2010; Carrington and Selva 2010) highlights that peers, people in general and a supportive environment facilitate transformative learning. The next section discusses the fifth principle.

### ***3.3.5 Exploration of options for new roles, relationships and actions***

Similar to the fourth principle above, exploration of options for new roles, relationships and actions is based on experiential learning. After going through critical self-examination and recognising the source of discontent, the learners explore options for new roles. The vocationally disinterested pre-service teachers in this study, having failed to fulfil their dreams regarding their desired professions, have joined the teaching profession as a last resort. Meanwhile, they bring vast assumptions to the teaching field and therefore have to undergo a process of transformative learning so that they are ready for the new roles, relationships and actions as teachers. Related literature (Daloiz 1986; Dirkx 1998) highlights that the construction of meaning is a significant factor that motivates adults to participate in formal learning

experiences. Having critically examined their assumptions, the pre-service teachers are ready to explore new roles, relationships and actions as their world is no longer the same.

As a classroom activity, the pre-service teachers may discuss the ways they learn at college. Implicitly, they will be contrasting high school learning with tertiary education learning. They may discuss the topic and provide answers using dialogues, class presentations, question and answer sessions, problem-solving activities, or by writing assignments and tests etc. These classroom strategies enhance transformative learning since critical reflection is likely to occur when the student teachers converse about what they have experienced or learned King (2004); Cranton (2006). The learning activities and engagements draw the student teachers into deeper reflection. King (2004) notes that class discussions allow adult learners to experience perspective transformation because they receive and share ideas based on their individual backgrounds and academic experiences. There is therefore a need to create an enabling environment that allows more time for the student teachers to critically reflect on their new roles and actions.

Fajet *et al.* (2005) indicate that aligning pre-service teachers' pre-conceived perceptions with the pedagogical aspects improves teaching practice and ultimately student achievement. The pre-service teachers will become better teachers if they are able to critically reflect on their new roles, relationships and actions (Meyers 2008). With regard to relationships, the pre-service teachers can work with other students to construct a shared understanding. For example, they can discuss the value of the teaching profession in groups. Both the vocationally interested and disinterested pre-service teachers stand to benefit from such a discussion as they will be reassessing their previously held assumptions about the teaching profession. To achieve transformation, they thus learn with and from each other. Next is the discussion on the sixth principle.

### ***3.3.6 Planning a course of action***

The sixth principle of Mezirow' Transformative Learning Theory, which is about taking a course of action, leans on critical reflection (Cranton 2006). The individual critically reflects on an experience and then restructures the way they construct meaning (Mezirow 1991; Taylor 2007).

Consequently, by being open to looking at alternative points of view, the individual makes a final judgement based on their newly acquired information and plans a course of action to take.

In this study, the pre-service teachers will critically reflect on the teaching profession. The vocationally disinterested student teachers in particular, who joined teaching as a last resort, will revisit their assumptions and perspectives. Through discourse with others Mezirow (1991) they will become more open and justify the reason for changing their points of view, or remain in their former state. Hunter (2008) indicates that transformative learning should ignite a deep structural change in basic thoughts, feelings and actions. Furthermore, Mezirow (1997) highlights that an individual can become more accepting and transform their overall habit of the mind. If this happens, planning a course of action occurs. The transformed student teachers are now willing to engage in meaningful tasks that enhance transformative learning. For example, the student teachers may work on a project and this may improve their analytical and problem-solving skills. Similar to the fifth principle above, transformative learning is fostered through transformative activities such as group work and group presentations. Following group engagements, student teachers may share their feelings and attitudes about teaching and whether they will still view it as a stepping stone or a career for life.

Taylor (2007) found that offering direct and active experiences fosters transformative learning. Through such approaches, student teachers become confident to say how they feel, and whether or not they have changed, and the change of attitude is transformational (Kim *et al.* 2013). Cranton (2002) warns though that even after questioning, reflecting and discussing, the student teachers may not undergo any significant change because of a deeply seated need to hold onto their 'truths'. The vocationally disinterested student teachers in the current study may not want to change their previously held assumptions, understandings and world views and thus decide to maintain the status quo. Planning a course of action is therefore riddled with back and forth movements as student teachers decide which action to take (Bentz and Shapiro 1998; Schon 1983). The acquisition of knowledge and skills is Mezirow's seventh principle, and is discussed next.

### ***3.3.7 Acquisition of knowledge and skills***

The acquisition of knowledge and skills is also a critical aspect of the Transformative Learning Theory Mezirow (1991), given that students enrol in programmes that they do not have any knowledge of. By virtue of having enrolled in those programmes, they expect to gain new knowledge and skills. However, in the process of acquiring this new knowledge, they encounter changes that challenge their assumptions, in particular their sense of self.

With regard to this study, the vocationally interested and vocationally disinterested pre-service teachers are likely to come from diverse backgrounds; hence they will each have different understandings of teaching. Nolan and Molla (2018) highlight that students enter the learning space with prior knowledge and experiences. The ‘what’ and ‘how’ they learn is built upon the assumptions they bring to the classroom (Cranton and Taylor 2007). As such, lecturers and facilitators need to create an environment which promotes collegiality and respect, where student teachers not only feel secure and free to share their experiences and ideas, but also ask questions and seek clarification on issues that matter to them and to others (Nolan and Molla 2018). In a safe and comfortable environment, the student teachers may freely and reflectively express and challenge their dilemmas. Thus, through knowledge and skill acquisition, transformative learning is enhanced. Furthermore, aligning learning experiences with practical problems promotes transformative learning. Lecturers and instructors can therefore provide background information on course requirements, inclusive of implicit and explicit rules and regulations as well as extra curriculum activities. This crucial information offers student teachers an understanding of what they have to accomplish as they embark on their teaching journey.

However, gaining this new knowledge might create disorienting dilemmas where the student teachers will question the existing knowledge. They might feel confused being in a crisis-like situation where the old knowledge that they possess and the new knowledge which they have acquired seems to be in conflict. The student teachers might feel overwhelmed by the learning expectations since they might still be uncomfortable and expectations might be unsettling (Mezirow 2000). Related literature by (Dirkx 1998) indicates that many adults in formal learning environments experience ‘in between’ phases of development, where the meaning structures of the old seem ‘frayed’ or no longer relevant to their life experiences. Through reflection, the pre-service teachers realise and acknowledge the value of unsettling events as part



of the learning process (Brown 2005; Cranton 2006; Taylor and Laros 2014). The design of learning activities is such that student teachers not only acquire knowledge and skills; their critical thinking skills are also enhanced. Darling-Hammond, Hyler and Gardner (2017) attest that authentic artefacts, interactive activities and other strategies provide deeply embedded and highly contextualised learning that promotes the acquisition of knowledge and skills; which in turn enhances transformative learning. The next section discusses the eighth principle of Mezirow's Transformative Learning Theory.

### ***3.3.8 Provisional trying of new roles***

The spiral nature of Mezirow's principles is evident as principle eight is directly related to principle seven above. After acquiring new knowledge and skills and restructuring the meaning perspective, the student teachers try out new roles.

In this study, the vocationally interested and vocationally disinterested pre-service teachers will take up the new roles of being teachers, having gained background information of the teaching profession they will adopt the new roles and behaviours related to the teaching profession. Related literature (Akinade 2005; Choppo 2016) highlights the need by pre-service teachers to make a smooth landing into the teaching profession. The idea of creating an enabling environment, such as having comprehensive orientation programmes where the student teachers are exposed to the new teacher education environment enhances the transition from high school to tertiary level. Programmes arranged in different departments and schools to induct and orientate new student teachers are intended to enhance their settling in and adjustment (Choppo 2016).

The emotional balance of the student teachers should be kept in check by facilitating safe and secure learning environments. Emotions such as fear, frustration, guilt and embarrassment Mezirow (1991) are disorienting and the student teachers must work on these as they try new roles to enhance their transformative learning. Furthermore, the design of the learning activities inside and outside the classroom should be interactive and student-centred to promote transformative learning. In this study classroom pedagogies like research Mezirow (1997), group work Lave and Wenger (1991); Gillies and Boyle (2011); Hammer Chiriac (2011), demonstrations Mukeredzi (2009); Mezirow (2012) and question and answer sessions Mezirow

(2003); Tofade, Elsner and Haines (2013) support transformative learning. The student teachers must become engaged in these various learning strategies as they try their new roles. Principle nine about the building of competence and self-confidence in new roles and relationships is discussed next.

### ***3.3.9 Building of competence and self-confidence in new roles and relationships***

The interdependence of the principles shows that they are all focussed on one goal that is transformative learning. Having tried out new roles and relations (principle eight above), principle nine suggests that they will now demonstrate confidence in those roles. Related literature (Hicks 2001; Hargreaves and Fullan 2012; Sihotang, Setiano and Saragi 2017; Mukeredzi and Nyachowe 2018) note that teacher confidence is an essential element of teacher professionalism.

Confidence is described as having the right aptitude for the job. Hargreaves and Fullan (2012) describe confidence as possessing the human, social and decisional forms of human capital such as having a strong knowledge base, participating in collegial learning communities and having the ability to exercise professional agency such as decision making. Simply put, some of the qualities of a good teacher include: confidence, enthusiasm, patience, passion, empathy, flexibility, sincerity and authenticity, and the ability to manage conflicts (Brown 1997; Berger 2004; Cranton 2006). However, gaining confidence is not an easy ‘walk in the park’. It requires careful planning and preparation in order to adapt one’s behaviour and communication style (Mezirow 2003). The student teachers may revisit their assumptions over and over again to re-examine their new roles. Related literature by (Taylor 2009; and Biasin 2018) confirms that individuals have to revisit various steps in a circular fashion as new opportunities for exploring assumptions arise. This is the reason why the transformative learning process is not a linear process.

In this study, the pre-service teachers may demonstrate confidence in their ability to present information, plan, organise, argue, research, write assignments, and use technologies in learning. Darling-Hammond *et al.* (2019) acknowledge that learning activities should be well designed to encourage students to question, explain, and elaborate on their thoughts. These capabilities should effect change in the student, thus promoting transformative learning. Darling-Hammond

*et al.* (2019) also highlight the importance of a caring, culturally responsive learning environment where students are valued and their learning is physically and emotionally supported. Furthermore, there should be relational support among the student teachers and their lecturers. This boosts the pre-service teachers' confidence. The design of learning activities also needs to infuse opportunities to learn using social-emotional and cognitive skills inclusive of intrapersonal and interpersonal awareness skills, conflict resolution and good decision-making skills. King (2005) identifies class discussions, content-related projects, hands-on experience, reflective activities and assigned readings as contributing to most perspective transformations.

As part of a system of support, the learning environment should provide access to integrative services such as health, sports, adequate learning space and any other extended forms of support (Hammond 2016). Thus, building of competence and self-confidence in new roles and relations may be assured. However, as alluded to above, the spiral nature of the Transformative Learning Theory Mezirow (2000); Isopahkala-Bouret (2008); Brock (2010) comes into play when the student teachers have to revisit their assumptions - asking themselves whether or not they are doing the right thing - in an appropriate manner and for what benefit. By questioning their assumptions, the pre-service teachers test their acquired skills and check on their confidence. This means that at each stage, critical reflection is crucial as it forms the bridge between experience and learning (Gray 2007). The last principle of the Transformative Learning Theory, reintegration, is discussed next.

### ***3.3.10 A reintegration into one's life on the basis of conditions dictated by one's perspective***

This is the final stage of transformation. Biasin (2018) observes that the last principle is dependent on the ninth principle - whether the learner has revisited previously held assumptions, was engaged in creating new meanings, and worked on building their confidence when engaging in new roles. A reintegration into one's life on the basis of conditions dictated by one's perspective marks the final lap of the transformative learning journey. Surveyed literature (Synder 2008; Sprow, Forte and Blouin 2016) highlights that it is important to note that Mezirow's Transformative Learning Theory is a 'process' which improves learning. Mezirow (1991: 209) believes that taking action "is an integral and indispensable component of transformative learning". The action, which requires emotional strength, willpower and freedom

to act, may be immediate or delayed or it may be an existing pattern that is reaffirmed as a result of critical reflection (Mezirow 2009). However, taking action is risky so individuals need guidance and support to help them put into practice new approaches. This is notwithstanding that as Mezirow (1990: 1) points out; transformative learning is “the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation, and action”. The cycle is iterative in nature, in the sense that after reaching the integrative stage, the student teachers can discover more disorienting dilemmas and then the cyclic process starts again (Freeman 2015).

In this study, which is about exploring the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers, these students will be asked questions which will elicit answers that integrate their new perspectives about the teaching profession. Examples of such questions will be: ‘Are there any changes that happened since you started training?’ and ‘What challenges have you faced in your learning?’ However, Merriam (2004) and Mezirow (2004) acknowledge that adult learners need a certain capacity to realise their perspective transformation, but that this capacity does not occur in all or even in most adults. There is therefore need for lecturers and instructors to help students realise the capacity for transformative learning. In this study, the learning activities mentioned earlier on can assist student teachers to see themselves in the new world which they have reconstructed. This is the emancipatory nature of the Transformative Learning Theory, where the individual students take learning as a path to freedom; emancipation from reliving the past (Ensign 2019).

The ten principles of Mezirow’s Transformative Learning Theory guide this study. Mezirow (2012) notes that the students’ expectations in life are not always met and things do not always turn out the way they want them to, and as such transformative learning theory assists them to revise their mental model to make meaning of their experiences.

Generally, Mezirow’s Transformative Learning Theory has been praised for championing adult education over the years, however like any theory, it has gone through rigorous scrutiny and a number of contentions have been raised. The discussion that comes next infuses the critique into the application of the theory in this study.

### **3.4 Critique of Mezirow's transformative learning theory**

#### ***3.4.1 Transformative learning as individuation***

The major critique of Mezirow's Transformative Learning Theory relates to its epistemological stance. Mezirow argues that knowledge is constructed in the mind Mezirow (2012). In other words, from this stance knowledge construction is an individualised activity, a matter that resides purely at a psychological level. Transformative Learning Theory was criticised for its excessive focus on the individual's transformation, rather than social action and change Collard and Law (1989); Baumgartner (2012); Brookfield (2012); Taylor and Cranton (2012); Tisdell (2012). Mezirow draws upon Critical Social Theory Habermas (1984), where both communicative and emancipatory factors are foundational components for his theory, but he does not make social action a key part of his Transformative Learning Theory (Taylor 1998; Wiltse 2009). Central to Mezirow's Transformative Learning Theory is the individual making meaning from their experiences through reflection, critical reflection, and critical self- reflection (Dirkx 1998). Mezirow's perception is that individual transformation precedes social action (Mezirow 1991). He maintains that arriving at a more inclusive epistemology should be independent from ideological, political, religious, class, gender and race constraints (Mezirow 2004). 'Change starts with me, you and us' is a catchy phrase for most of the change advocates and could have originated post Mezirow's idea. The critics, however, do not view individuals as separate from society, but rather as products of their historical and socio-cultural contexts Collard and Law (1989), and they consider social action as central to learning.

Arguably, Mezirow (1997) believes that to assume a particular form of social action as a learning outcome will be to impose the educator's own view of social reality on students. However, critics such as Regan (2002) argue that personal transformation and social change are intimately connected. Although Mezirow's Transformative Learning Theory was influenced by Freire (1970), who saw the community as vital for transformation, Mezirow states that transformation starts at the psychological level, at an inward personal dilemma (Gambrell 2016). It is the mind of the individual that perceives reality devoid of social interactions (Freire 2000). According to

the Transformative Learning Theory, it is how the mind perceives and responds to social interaction that will bring about transformation (Merriam and Kim 2012).

With regard to this study, both individual and social constructions of knowledge are critical components of the transformative learning experiences of student teachers in teachers' colleges. As a lecturer, this researcher should be aware that student teachers are diverse in terms of culture, race, gender, sexual orientation, age, language, nationality and disability (O'Sullivan 1999). By acknowledging these differences, the student teachers can work collaboratively and collectively. The pre-service teachers come to deeply understand their individual pasts by working together (Mezirow 1997). Self-empowerment is one of the cardinal goals of transformative learning.

### ***3.4.2 De-contextualization of the transformative learning theory***

Another critique of Mezirow's Transformative Learning Theory is its failure to fully acknowledge context. Clark (1993) found in her research that learning is shaped and structured by the learner's context. Mezirow fails to adequately consider the influence of multiple contexts on who the person is and how she or he interprets contextual experiences (Gambrell 2016). Context also influences classroom teaching and learning experiences (Johnson-Bailey and Alfred 2006; Cranton and Taylor 2012; Tisdell 2012). Taylor (1994) suggests that 'setting the stage' - what persons bring to transformative learning experiences, such as goals, critical life events, prior education, and training - should be added to the beginning of Mezirow's process of transformative learning. The studies found that context influenced the learning of college students. To them, higher education was measured according to its utility. The men wanted to look for jobs while women wanted to improve on their homemaking skills. These contextual dimensions, along with fear of alienation from family or religious communities, may have prevented these college students from engaging in the process of perspective transformation. Related literature (Snyder 2008) indicates that learning, like transformative learning, must take place in a contextually relevant setting for the learner. With regard to this present study, the four college sites offer appropriate contextual dimensions for understanding the student teachers' transformative learning experiences.

### ***3.4.3 Spiritual and emotional dimensions of transformative learning theory***

Some critics advocate for the inclusion of emotional and spiritual learning aspects, social context and power relationships into the theory Taylor (2009); Taylor and Cranton (2012). Some critics argue that habits of the mind are long held concepts or beliefs that may affect an individual's ability to accept new concepts (Timperley 2011). Timperley's (2011) study indicates that critical reflection and self-criticism, though salient in the transformative learning process, are difficult to undertake. The three dimensions of transformative learning are: psychological (structure or understanding of one's self is altered); convictional (belief systems are revised); and behavioural (lifestyle is changed) (Clark 1991). The application of the Transformative Learning Theory is relevant in the current study because the researcher will be able to infuse refined ideas to address the research questions about the nature of transformative learning, how the pre-service teachers understand their own transformative learning, and the forms of support offered by the college communities to enhance transformative learning. Related literature (Tisdell 2012: 22) acknowledges that transformation should "alter our very being, our beliefs, and our core sense of self"; it should determine the future of "how we live". This is very critical to both vocationally interested and vocationally disinterested pre-service teachers as they undergo the training process, because self-identity promotes transformative learning.

Another argument for the importance of spirituality and emotions in the transformative learning process is presented by (Dirkx 2006). His approach is consistent with and encompasses the work of Mezirow, but his focus is on the learner's spirituality, the 'inner world' rather than the cognitive, epistemic and socio-cultural dimensions of the learning process (Formenti and Dirkx 2014). He notes that, "... this aspect of transformation, the ways of mythos, reflects a dimension of knowing that is manifest in the symbolic, narrative and mythological" (Dirkx 1997: 1-2). Dirkx emphasises the role of emotions in learning. With regard to the current study, the lecture room practices should evoke the inner soul, and address the intrinsic values inherent in the student teachers. For example, the pre-service teachers may be asked to draw and discuss their learning journey from the time they started training. This activity incorporates what Dirkx (1997) calls the 'symbolic, narrative and mythological' dimensions.

Similarly, Boyd (1989) emphasises the emotional aspect of transformative learning. He sees feelings, affects, and emotions, which come up during the learning process as reflecting transformative learning. Compared to Mezirow, Boyd is less concerned with the rational, problem solving process but focuses on the conflicts with the psyche and the process of discernment (Boyd 1989). In this study, learning activities should ensure that they address the feelings, affects and emotional aspects of the pre-service teachers. Davis-Manigaulte, Yorks and Kasl (2006) suggest that teaching strategies such as guided visualisations, art activities (such as drawing, clay work and collages) and group discussion promote expressive ways of knowing. An example will be the use of group work to explore the student teachers' attitudes towards teaching. This type of activity provokes emotions and addresses the intrinsic, extrinsic and altruistic values of the teaching profession.

Another study by Miller (2002) also stresses the spiritual perspective as an aspect of transformative learning. Focusing on the spiritual aspect allows the student teachers to see the world anew. In a similar vein, Robinson (2004) advocates the use of meditation in the learning process, for it reaches deeper into the learner's inner soul. Other studies by (Riyad 2004) and (Charaniya 2012) also claim spirituality as part of being more human, thereby increasing the potential for both individual and social transformation. In the current study, the lecturer/facilitator engaged student teachers in learning activities that demonstrate a holistic approach to learning. Collaborative approaches such as pair work or group work allowed the student teachers to express their emotions, thereby reaching out to their deeply entrenched spiritual aspects.

Further, Boyd and Myers (1988); Hillman (1989); Boyd (1991); Sordello (1992); and Dirkx (1997) add another dimension to Mezirow's transformative learning. These authors recommend a holistic approach to learning; which they refer to as 'metanoia' which attempts to understand transformative learning from an extra-rational perspective. The student teachers learn through their 'souls', which aim at transforming their hearts, characters and wisdom (Moore 1996). The teaching and learning activities should assist in nurturing the souls of the pre-service teachers. The learning activities should promote imagination/fantasy. This means that the lecture room atmosphere should also be supportive. Literature (Dirkx 1997) notes that the soul is nurtured by giving the ordinary, everyday aspects of these environments depth and value.



Arguably, the critics of Mezirow's Transformative Learning Theory may just have spiced it up with complementary ideas which also enhance transformative learning. Reflection, imagination, fantasy, collaboration etc. are all aimed at fostering transformative learning. Therefore, matters about transformative learning, and leaning on social aspects, context and spirituality are all aligned to transformative learning and thus they are welcome modifications. In the current study, the three aspects assist in understanding student teachers' transformative learning experiences.

### **3.5 Conclusion**

Mezirow's Transformative Learning Theory provides a lens for unpacking and explaining the findings of this study. The ten stages offer a methodical way of analysing and understanding how the pre-service teachers experience transformative learning. Unexamined beliefs, attitudes and values adopted in childhood constrain an adult's ability to develop understanding from new experiences (Mezirow 2012). This conflict between the old and the new precipitates a disorienting dilemma, which will be followed by self-examination and critical reflection. Being in a new college environment causes dilemmas, as the meeting of different cultures leads to culture shock, and the pre-service teachers need psychological and socio-emotional support in order to adjust positively to their new context. The pre-service teachers start to critically assess their previous experiences in light of the new ones. Lecturers and instructors are expected to provide a supportive learning environment which assists in fostering transformative learning in the student teachers. The principles have been described in detail, and examples of learning activities given.

The Transformative Learning Theory (1991) was strongly influenced by Kuhn (1962)'s paradigm as it influenced Mezirow's concept of a disorienting dilemma. Recognition of one's view of the world as a thought, paradigm, meaning structure, or mental model in which one lives can cause disorientation, which in turn may initiate the transformative learning process. Freire's (1970) Conscientisation Theory explains the initiation of the disorientation during the process of critical reflection, as a person becomes conscious of the oppressive forces around them. Habermas' (1984) communicative and emancipatory components also influenced Mezirow's Transformative Learning Theory: the learners wrestle with conflicting notions of power and

legitimacy and their encounters with the questions raised create room for perspective learning through discourse.

The timeframe, as indicated by the theorists above, reveals that Mezirow's Transformative Learning Theory has stood the test of time. This means that the critics have strengthened/modified the initial theory instead of abandoning it.

Having discussed the Transformative Learning Theory (1991) which provides the lens for unpacking and explaining the study's findings, the next chapter describes and discusses the methodology that will be followed in this study.

## **CHAPTER 4**

### **RESEARCH METHODOLOGY**

#### **4.1 Introduction**

The study aimed at developing an in-depth understanding of the transformative learning experiences of both the vocationally interested and vocationally disinterested pre-service teachers in four selected teacher training colleges in Zimbabwe. The previous chapter discussed Mezirow's transformative theoretical framework that informed this study. The ten phases of transformation which were used in this study to unpack, describe, analyse and synthesise the findings of the study were discussed in detail. The present chapter describes and explains the research design and the methodology used in the study, which enabled data generation to address the research questions. The specific questions that the research sought to answer were:

1. What was the nature of the transformative learning that the vocationally interested and vocationally disinterested pre-service teachers experienced?
2. How did the vocationally interested and disinterested pre-service teachers understand their transformative learning?
3. What forms of support were offered by the college community to enhance pre-service teachers' transformative learning experiences?

In this chapter: First, I discuss the research paradigms and then the discussion moves on to the interpretive paradigm adopted for this study. Second, I describe the research design, followed by a discussion of the qualitative research approach. Third, I identify the study participants and then describe the process of sampling, followed by a description of the pilot study. Fourth, the chapter gives a detailed explanation of the three selected methods of generating data: focus group discussions, individual face-to-face interviews, and continuum drawings and discussions. This is followed by a discussion of the processes that I followed in data generation and the challenges that I had faced during the process. Fifth, I analysed the data using open coding as the tool for analysis. Sixth, I describe the attempts I undertook to enhance the issues of rigour and trustworthiness: credibility, confirmability, transferability and dependability. Finally, I discuss the ethical considerations that informed the data generation and analyses. The chapter ends with a brief discussion of the major design limitations and how I attempted to address them.

## 4.2 Research paradigms

Paradigms are the researchers' worldviews which provide the conceptual lens through which they examine the methodological aspects of their studies to determine the research methods that will inform the meaning or interpretation of the data gathered Sahi (2017). There are three main research paradigms: positivist, critical and interpretivist. Brief discussion of the positivist and critical paradigms in the following section is meant to clearly show comparisons with and help justify the chosen interpretive paradigm. This also demonstrates an awareness of the other philosophical orientations.

The positivist paradigm defines a research worldview which is grounded in scientific methods of investigation. According to Fadhel (2002), it tries to interpret observations in terms of facts or measurable entities. Its epistemology is said to be objectivist, which holds that human understanding is gained through the application of reason Collins and Hussey (2009) and that there is a single reality. Thus, it aims to provide explanations and make predictions based on measurable outcomes. The positivist paradigm advocates for the use of quantitative research approaches as the bedrock for the researcher's ability to be precise in the description, analysis and interpretation of data in order to understand the relationships embedded in the data (Cohen, Manion and Morrison 2018). Hence, experimental methodologies are often employed that involve the manipulation of one variable to determine whether changes in that variable cause changes in another variable. In terms of generalisability, the results obtained from studies conducted within the positivist paradigm in one context should be applicable to other situations by inductive means (Kivunja 2017).

The critical paradigm, also referred to as the transformative paradigm, situates its research in social justice issues and seeks to address the political, social and economic issues which may bring about social oppression, conflict, struggle, and power structures at whatever levels these might occur Kivunja (2017). Because it seeks to change the politics so as to confront social oppression and improve the social justice in the situation, it is sometimes called the transformative paradigm. This paradigm assumes a transactional epistemology, in which the researcher closely interacts and generates data with the participants. It is dialogic and participatory in nature and makes use of ethno methodology, hence situating knowledge socially

and historically. The interpretivist and critical paradigms fall under the constructivist/post-positivist paradigm.

On the other hand, researchers (Ryan 2018; Aspers and Corte 2019; Ataro 2020) argue that where humans are involved, the social world cannot be studied the same way as the natural world of the positivists. Concomitantly, constructivists believe that there is no single reality, but that the researcher elicits participants' subjective views of reality. Thus, the constructivist paradigm allows for observations without experimentation or formulation of hypotheses to be tested.

This study adopted the interpretivist paradigm as the researcher wanted to understand the transformative learning experiences of vocationally interested and disinterested pre-service teachers, which were subjective.

#### **4.3 The interpretivist paradigm**

The interpretivist paradigm focuses on subjective individual experiences and views as a basis for reality (Ryan 2018). In this study, the vocationally interested and vocationally disinterested participants' subjective transformative learning experiences were the basis for their reality. I wanted to understand the meanings that the pre-service teachers gave to their transformative learning experiences in their different colleges. Due to the epistemological stance of the interpretive paradigm, reality for these pre-service teachers was a result of their own interpretation (Furlong 2013). Surveyed literature (Creswell 2014; Nieuwenhuis 2016) indicates that true knowledge can only be obtained by deep interpretation of what the participants say, because the central endeavour of the interpretivist paradigm is to understand the subjective world of human experience. Concomitantly, in this study the participants made their own reality by giving meaning to their different learning experiences. Hence, in order to understand the lived worlds of the participants, I had to access the authentic words of the vocationally interested and vocationally disinterested pre-service teachers. This was achieved through interaction with them because the epistemological stance of interpretivism views reality as emanating from the minds of the participants. Literature (Kivunja 2017; Ryan 2018) acknowledges that truth and knowledge are subjective, as well as culturally and historically situated, based on people's experiences and their understanding of those experiences. In this study there was no single

shared reality, in the sense that the pre-service teachers were in a state of continuously interpreting, creating, giving meaning, defining, justifying and rationalising their daily actions (Aspers and Corte 2019). And by so doing, they were giving different meanings to their experiences. Further, their interpretations and meanings were subjective because the pre-service teachers interpreted their life experiences differently. The interpretive paradigm was therefore appropriate for studying the pre-service teachers' transformative learning experiences, as it lent itself to the collection of subjective accounts of the participants' experiences (Mukeredzi 2009; Ataro 2020). Hence, the subjective participants' experiences were central to this study.

#### **4.4 Research design**

Boru (2018) notes that a research design serves to plan, structure and execute the research to maximise the trustworthiness of the findings. A research design thus gives directions, moving from the underlying philosophical assumptions, through the research design, to the data generation, and then finally the analysis. Yin (2003:19) highlights that a research design is “an action plan for getting from here to there, where ‘here’ may be defined as the initial set of research questions to be answered and ‘there’ is some set of (conclusions) answers”. This study, which focused on vocationally interested and disinterested pre-service teachers in four selected colleges, was located in a multiple case study design and sought to find answers to address the question: ‘What are the transformative learning experiences of vocationally interested and disinterested pre-service teachers?’ Using a multiple-site case study design, I therefore was able to describe the procedures that I undertook in conducting the research, addressing such questions as: What did I do? Why did I do it? How did I do it? When did I do it? And ‘where did I do it? Surveyed literature by Yin (2018) also indicates that case study research is generally viewed as useful to answer ‘how and why?’ questions, where in-depth research is needed using a holistic lens. The multiple-site case study design is discussed below.

#### **4.5 The multiple-site case study research design**

Given the interpretive/qualitative nature of my study, the case study design provided an appropriate design to understand the social phenomena being studied. The design has been viewed as an empirical research method to investigate a contemporary phenomenon, focusing on

the dynamics of the case, within its real-life contexts and sites (Creswell 2013; Yin 2018). My case study was however located in four selected sites, making it a multiple-site case study in which the case was: the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers in four selected teacher training colleges. Thus, the real-life contexts for these pre-service teachers were their institutions within which transformative learning experiences occurred. I was able to obtain an in-depth understanding of their transformative learning experiences.

According to Creswell (2013), the multiple-site case study or multi-site case study design expresses a real-life bounded system through detailed, in-depth data generation involving multiple locations that provide information. In this study, I explored the transformative learning experiences of pre-service teachers in the four selected teacher training colleges in Zimbabwe. College One, which was located in the capital city Harare, was government owned and trained technical secondary school teachers. College Two was a missionary college owned by the Catholic Church. It was located in a rural context and trained primary school teachers. College Three was also under missionary governance, and was owned by the Reformed Church in Zimbabwe. The college was located in a peri-urban area, and also trained primary school teachers. College Four, was located in an urban context and trained generic secondary school teachers.

Korstjens and Morser (2018) indicate that the diverse contexts and settings in multiple-site case studies are relevant to in-depth understanding of a phenomenon being studied. Thus, a multiple-site case study design was adopted, also given that Yin (2014) regards it as a powerful tool for the exploration of relationships among two or more cases believed to be literal replications. Literal replication in this study meant that cases - the four sites - could corroborate each other and produce similar or different results. Literature surveyed (Anderson *et al.* 2014) indicates that replication allows analysis of data within each situation or site and across situations. This was consistent with this multiple-site case study design where the data were generated at each site, organised and then inductively and independently analysed to identify patterns. All data were subsequently cross-analysed and compiled across the sites (Stake 2006). In this way, I was able to make comparisons of the transformative learning experiences of the of vocationally interested and disinterested pre-service teachers within each college and across the four colleges,

as well as between private and public teacher training colleges, primary and secondary teacher training colleges, and rural and urban teacher training colleges. Other than literal replication, a multiple-site study can predict contrasting results for predictable reasons (theoretical replication), according to (Yin 2018). In order to fully understand the findings, compared and contrasted the transformative learning experiences of the participants at the different colleges, drawing on Mezirow's Transformative Learning Theory (1991) and thus situating the new data into pre-existing research. Again, Ćwiklicki and Pilch (2020) indicate that multiple-site case studies strengthen a study's results by replicating the patterns and thus increasing the robustness of the findings. Consequently, I considered this design appropriate for the study as, given the replication, comparative aspects and robustness, it was likely to yield data which fostered triangulation and enhanced rigour.

#### **4.6 The qualitative approach**

This study adopted a qualitative approach. Teherani *et al.* (2015) define qualitative research as naturalistic since it attempts to study the everyday life of different groups of people and communities in their natural setting. In addition, Aspers and Corte (2019) define qualitative research as an approach to social science research that involves watching people in their own territory and interacting with them in their own language, on their own terms. Through a multiple-site case study, I explored the vocationally interested and vocationally disinterested pre-service teachers' transformative learning experiences within their four sites, their contexts and territories. The participants were all pre-service teachers in the selected teacher training colleges. In Zimbabwe, at the time of this study, the English Language was the official language for teaching and learning, and as student teachers who were learning in English and were going to teach in English, they understood, were comfortable with and fluent enough to communicate in English. As such, all interaction with them was in English.

Human learning is best researched by using qualitative data Denzin and Lincoln (2018) and this justified the qualitative approach adopted in my study which focused on the transformative learning experiences of student teachers. Further, aligned to the interpretive paradigm, qualitative research seeks meaning by focusing on "the social meaning people attribute to their experiences, circumstances, and situations..." (Hesse-Biber and Leavy 2011: 4). These



participants gave meaning to their transformative learning experiences in their different contexts and circumstances, given that some had joined teaching as a last resort.

Critical to the qualitative approach is its flexibility which enables adjustment of the direction of inquiry from ongoing experiences during generation and reflection on the data (Pearson, Albon and Hubbal 2015). I was therefore able to make some modifications to my data generation approach after the first interview, to try and generate more comprehensive data through probing. Further, qualitative research values the multiple-method approach to generating data Johnson et al. (2017). This multi-modal feature facilitated triangulation of questionnaire responses, focus group discussions, individual face-to-face interviews, and continuum drawings and discussions. These methods complemented each other, as shortcomings of one were plugged up by strengths of the other, which minimised method boundedness (Mukeredzi 2009). According to Cohen *et al.* (2018), employing multi-methods minimises exclusive reliance on one and gives a more nuanced picture of the phenomenon under exploration. This multi-modal approach thus also offered me a multi-faceted view of the transformative learning experiences of the participants.

## **4.7 Methodology**

I precede the methodology section by describing how I accessed participants for the study and the steps that I followed when I visited each research site.

### **4.7.1 Gaining access**

Vuban and Eta (2018) indicate that gaining access is not a simple activity as it involves strategic planning and hard work. This resonated with my experiences at one of the colleges where I had difficulties in accessing the participants during my first visit. Whereas in some organisations research clearance from the Ministry was enough to gain access Vuban and Eta (2018), in my study, access granted by the Ministry of Higher and Tertiary Education Science and Technology Development (MHTESTD) was inadequate as I also required access granted by the receiving institutions - the teachers' colleges, as these were autonomous and independent organisations notwithstanding the fact that some were owned by the government - the MHTESTD.

Following receipt of ethical clearance from the Durban University of Technology (DUT), the MHTESTD and the responsible authorities of two private colleges, I sought consent from the

four Principals of these selected colleges. This strategy was used to clear suspicion, given that in Zimbabwe at the time, visitors were often viewed as political figures or intelligence officials trying to dig up some information about the institution. Thus, these approval letters served as evidence that I was indeed a doctoral candidate. I had to show the DUT ethical clearance letter, the letter from the MHTESTD, the research proposal and the letter of information including the documents stated above. In all the cases, the approval letters from the colleges were received timeously. Now armed with the approval documents, my research journey was on course.

On arrival at each college, my first port of call was the principal's office. I introduced myself, explained the nature of my study and the procedure that I was going to follow in conducting the study. I then asked the principal to sign the consent forms, after which I would then be attached to a staff member to guide me to where I would meet first year student teachers during their free period. I elected to explore first year students for three reasons, mainly because of my knowledge of my own college. First, second year students were on TP and this was the group that I would normally teach the English language course. Second, first year students were still new and did not know me and did not know much about college life, hence I believed they would feel free to air their views. Third, I believed that the third-year students would not capture much detail about their transformative learning experiences as they would probably have forgotten some of their early experiences.

The steps outlined above were followed in the four selected colleges and also when accessing piloting participants in College Two. Gaining access in the colleges proceeded smoothly, except in College Three where the principal seemed difficult at first, as detailed in the section under challenges.

With regard to methodology my study, as alluded to above, was located in the interpretive research paradigm, as such I adopted a methodology that was aligned to this philosophical orientation. Methodology refers to the theory of knowing in a practical sense, and epistemology addresses how a researcher comes to know about something in a philosophical sense (Mukeredzi 2009). Further, qualitative research is concerned with participants' own lived experiences of life events, and the aim is to decrypt what participants have said in order to explain why they have said it. Thus, methods should be chosen that enable participants to express themselves openly and without constraint. In my study, methodology embraced the specific methods and techniques

that I used to generate data. I therefore used a questionnaire, focus group discussions, individual face-to-face interviews and continuum drawings and discussions to generate the data required to understand the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in four selected teacher training colleges in Zimbabwe.

#### **4.7.2 Population**

A population is defined as a group of elements or cases, whether individuals, objects, or events, that conform to specific criteria and to which a researcher intends to generalise the results of their research endeavour (Patton 2015). Asiamah, Mensah and Oteng-Abayie (2017) also define a population as the set of all objects that possess one or more common characteristics with respect to a research problem. In the current study, the population was 4760 pre-service teachers in the four selected teacher training colleges in Zimbabwe. This population shared one basic characteristic - that they were all first-year student teachers (trainees) in teachers' training colleges in Zimbabwe. It was this attribute that made them eligible population members Asiamah, Mensah and Oteng-Abayie (2017) in this study.

Table 4.1 shows the four selected colleges from where the participants were drawn for this study, their governance and the level/type of teacher produced.

**Table 4.1: The colleges used in the study**

Source: Researcher (2019)

College	Responsible Authority	Level of Teacher Produced
College One	Public/Government	Technical Secondary
College Two	Missionary Catholic	Primary
College Three	Missionary Dutch Reformed	Primary
College Four	Public/Government	Secondary

This selection of the teachers' training colleges was purposively done from a pool of 13 primary and 4 secondary teacher training colleges to enable comparisons, as explained earlier. As alluded to above and also as reflected in Table 4.1, Colleges One and Four were urban government colleges, training secondary technical teachers and generic secondary school

teachers respectively. Colleges Two and Three were rural and semi-rural, Missionary colleges owned by the Catholic and Dutch Reformed churches respectively, and both trained primary school teachers.

This combination of colleges was meant to enhance replication, comparisons and in-depth understanding of the transformative learning experiences across the colleges. The selection of two colleges run by the state, and the other two under the responsible authorities was intended to enhance the exploration of any similarities or differences in the transformative learning experiences of the vocationally interested and the disinterested pre-service teachers in these different sites.

#### ***4.7.3 Sampling and sampling methods***

Sampling is the process of selecting or searching for situations, contexts and/or participants who provide rich data for the phenomenon of interest (Moser and Korstejens 2018). Forty pre-service teachers in the four selected teacher training colleges in Zimbabwe formed the sample for the study.

In quantitative research, the goal is to conduct a random sampling that ensures the sample will be representative of the entire population, so that results can be generalised (Denzin and Lincoln 2018). On the other hand, the goal of qualitative research is not to generalise but to obtain in-depth understanding, and it therefore targets a specific group (Creswell 2013). In my qualitative research, the non-random sampling designs adopted did not give all the members of the population an equal chance of being selected for participation in the study but they were aligned to the philosophical orientation of the study in order to provide in-depth data to address the research questions.

#### ***4.7.4 Convenience sampling***

Convenience sampling (also known as Haphazard Sampling or Accidental Sampling) is a type of non-probability sampling method that relies on data generation from population members who are conveniently available and willing to participate in a study Saunders, Lewis and Thornhill (2012). In this study, the members of the target population defined above had to meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time,

and the willingness to participate (Gentles *et al.* 2015). Besides being easy to access and willing to participate, convenience sampling was also affordable and easy to conduct. The convenience sample was to provide data by means of a questionnaire. Thus, it was the student teachers in all four selected teachers' colleges who had a free period and were willing to participate - in other words they were accessible and willing to take part in the study Creswell (2013) who were sampled. After gaining permission from the Principals, I would then meet with the students who were on their free period. In total the accessible (free) and willing students numbered approximately 40 from each college, and in the pilot study a total of 25 students were conveniently sampled. These 25 were not used in the actual research. I extracted the purposive sample from these students conveniently sampled.

#### ***4.7.5 Purposive sampling***

Purposive sampling is when participants are selected based on the anticipated richness and relevance of the information they possess in relation to the study's research questions (Mukeredzi 2009; Yin 2014). This means that purposeful sampling takes place when the researcher selects a sample from which the most can be learned Ames, Glenton and Lewin (2019); in other words, the participants in the sample are believed to be information-rich. In this study, the participants were deemed knowledgeable of the phenomenon under study - transformative learning experiences, since they were student teachers. According to Moser and Korstjens (2018), such participants have to be knowledgeable on the phenomenon and must be able to articulate and reflect on, and be motivated to communicate at length and in depth about the research topic under scrutiny. Purposive sampling was carried out to extract ten participants from each college who would provide data through focus group discussions, individual face-to-face interviews and continuum drawings and discussions. Thus, a total of 40 participants participated in this study.

Soon after collecting the completed questionnaires, I embarked on purposive sampling. In order to come up with a sample of ten out of approximately forty participants who filled in the questionnaire, I first separated the vocationally interested and vocationally disinterested participants. There were approximately twenty-three vocationally interested and seventeen vocationally disinterested pre-service teachers per college, with slight variations in the numbers of each in each college. The second inclusion/exclusion criterion that I considered was their

work experience. I believed that experience would have exposed them to many people and many situations, and this would enhance opening up during the focus group discussions, individual face-to-face interviews and continuum drawings and discussions. Thirdly, I selected those who had the longest time period after high school before joining teacher training. This long waiting period would probably help them explain better whether or not they were vocationally interested or disinterested in teaching, and their experiences. These inclusion/exclusion criteria left with about 14 vocationally interested and 16 vocationally disinterested student teachers. I wanted ten (five interested and five disinterested) participants for the study. I repeated the second and third steps, increasing the number of years, and picked up on those who had worked and waited for more than five years before enrolling in college. This finally gave me the participants that I wanted.

I then explained the nature of my study, how I was going to conduct it, and the benefits and risks of the study to the participants. I emphasised that if at any time they wanted to discontinue with the research, they were free to do so.

#### ***4.7.6 Piloting instruments***

Before engaging in the actual data generation process, I pilot tested my instruments. Doody and Doody (2015) recommend a pilot study before plunging into strange and ‘dangerous’ places. I conducted a pilot study with ten participants who would not be involved in the actual study. Piloting was meant to test the instruments to determine the appropriateness of the research structure envisioned, and also to get to grips with some practical aspects of the study. Further, gauging single interview durations and obtaining insights into the technical elements that did not speak to the key question could only be achieved through piloting (Eldridge *et al.* 2016). Consequently, I was able to step back and reflect, and discuss the results with my supervisors and cohort peers. Their critical views prepared me for the field work. This experience also enabled revisions and refinement of the approach to data generation, thereby enhancing the rigour of the study.

Piloting was carried out at College Two where I worked. I met about 25 Group D first year students who had just finished their Theory of Education lecture. I followed the same sampling procedure as outlined above.

#### ***4.7.7 Data generation***

As alluded to in Chapter One, I was a lecturer and Dean of Students in one of the selected teachers' training colleges, where I taught the English Language course to second year student teachers. At the time of this study the student teachers in my cohort were in the Teaching Practice (TP) phase of their curriculum. The study participants were the first-year group of students. Although I did not teach first, and third year students, I understood that there was likely to be a problem of a power imbalance between the participants and I. In order to allay the students' mistrust or fear, I explained (particularly in College 1), that despite my position as one of the lecturers in the college, their participation in this study was not going to prejudice them in any way, nor was it going to be used for assessment purposes. The participants were informed that they were free to say anything, without fear of any repercussions. I also explained that when reporting the data, pseudonyms would be assigned to the participants, colleges would be identified by numbers and that the data would only be shared with my supervisors and not with anybody else.

As illustrated in Figure 4.1 data generation was carried out between June 2018 and July 2019.

**Figure 4.1: Data generation itinerary**

Source: Researcher (2019)



A detailed explanation why member checking, interview two and the continuum drawings and discussions were carried out in only two instead of all four selected colleges (reflected in Figure 4.1) is provided in later sections.

#### *4.7.7.1 Data generation tables*

**Table 4.2: Recruitment of participants: questionnaire**

Source: Researcher (2019)

Questionnaires	Number of Participants
College One	40
College Two	36



College Three	38
College Four	42
Total 4	156

The students were grouped into small tutorial groups, so I would request to meet with each group as they had their free period. Student groups were bigger in the public colleges as compared to the private colleges.

**Table 4.3: Data generation methods**

Source: Researcher (2019)

<b>Data Generation Methods</b>	<b>Vocationally Interested Participants Per College</b>	<b>Vocationally Disinterested Participants Per College</b>	<b>Total Per College</b>	<b>Total Participants for the Colleges</b>
Focus Group Discussions	5	5	10	40
Individual Interview 1	3	3	6	24
Individual Interview 2	3	3	6	12
Continuum Drawings and Discussions	5	5	10	20

Table 4.3 shows the number of participants who took part in the focus group discussions, individual face-to-face interviews and continuum drawings and discussions.

#### *4.7.7.2 Data generation*

As reflected in Tables 4.2 and 4.3, data were generated through a questionnaire, focus group discussions, individual face-to-face interviews and continuum drawings and discussions.

#### *4.7.7.3 Data generation using a questionnaire*

A questionnaire is any written document that provides participants with a sequence of questions or statements to which they are to respond, either by writing out their answers or choosing from an already existing list of variables or given answers (McLeod 2018). In other words, a questionnaire is a research instrument containing a chain of questions for the purpose of assembling information and data from people (Abdi et al. 2017). In this study, the short questionnaire was only used to enable identification of vocationally interested and vocationally disinterested pre-service teachers (See Appendix 1). Hence, the questionnaire helped establish the pre-service teachers' profiles and the reasons why they joined the teaching profession (Pather *et al.* 2017). Question one sought to elicit biographical information and question two sought information on the push/pull factors that led them into teaching and their activities after high school before entering teacher education. This information assisted me screen and purposively sample participants for the study.

I followed my itinerary detailed in Figure 4.1 when visiting each college. As detailed, on 19-20 September 2018 I was at College Four, which was one of the government's secondary teacher training colleges 300 km away from my home town. After asking the participants to read the letter of information and sign consent forms, I administered the questionnaire to the 42 conveniently sampled participants. I had inserted codes onto each questionnaire for easy identification of the sample, and kept a record of them for tracking purposes. Those codes became the participants' pseudonyms and they were requested to keep the codes for the next exercise. It took participants less than 20 minutes to complete the questionnaires.

#### *4.7.8 Focus group discussions*

While there are views that dissuade researchers from beginning the process of data generation with focus group discussions followed by interviews, as shared views may sway participants' thinking, I considered how focus group discussions promoted spontaneity and confidence in participants and opted to use this approach (Carey and Asbey 2012; Krueger and Casey 2014; Feters *et al.* 2016; Davis 2019). In addition, the spontaneity and confidence was likely to be carried through to the individual face-to-face interviews and continuum drawings and discussions. In this study, the aspect of group comfort stimulated dynamic discussions among

the participants of the focus group discussions, as they were engaged and active. I was thus able to obtain rich and more detailed data.

In addition, while some data suggests that focus group discussion participants may not be used for interviews in the same study, there is also lots of research (for example Davis et al 2019 ; Flynn, Albrecht, and Scott 2018; Krueger and Cassey 2014; Kumer 2020; Nyumba et al. 2018) which indicates that the same participants can be used in individual interviews to enable following up on the points and issues that they would have raised during the group discussions and also help confirm internal consistency of their views and stories.

Nyumba et al. (2018) define a focus group interview as a group discussion on a particular topic, organised for research purposes. According to Kumer (2019), focus groups work well because group members influence each other with their comments, and may form opinions after considering the views of others. Tapping into this interpersonal dialogue can help identify common experiences and shared concerns. In the focus group discussions in my study the members tended to be more open, even competitive when sharing their experiences. The dynamics within the group interactions thus enriched the quality and quantity of the data generated. Surveyed literature (Moser and Korstejens 2017; Stewart 2018) indicates that focus group discussions are useful in generating a rich understanding of participants' experiences and beliefs. In the current study the focus group discussions were meant to give the participants a platform to share their transformative learning experiences. In essence, the focus group discussions offered an opportunity to explore the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers, as these participants shared their information freely.

This also gave me an opportunity for in-field analysis to identify patterns emerging in the transformative learning experiences in the different colleges. The focus group discussion questions centred around the push/pull factors that resulted in the participants entering teaching; how they felt about it when they entered college; and how they were feeling at the time of the discussion (See Appendix 6). How they felt when they entered college was meant to provide information on their feelings and/or emotions. How they felt at the time of the discussion was meant to elicit data that pointed to any transformative experiences. The pre-service teachers shared their transformative learning experiences, and collaboratively reflected on and challenged

each other's views comfortably, without fear of any repercussion. Surveyed literature (Carey and Asbey 2012) indicates that the group functions as a promoter of synergy and spontaneity by encouraging the participants to comment, explain, disagree and share their views. Thus, the transformative learning experiences that were shared and the opinions that were voiced during the focus group discussions might not have surfaced if the researcher had started the process with individual interviews.

The different colleges enrolled new intakes at the beginning of any or all of the three terms (in Zimbabwe, a term is 4 months long): January/February, May/June, and September/October. Some colleges enrolled students once a year, while others enrolled students two or three times a year. As such, different colleges had different enrolment patterns. College Two recruited students biannually and had its enrolment in May/June, which then became the first term for the first-year students that participated in this study. For the other three colleges sampled, the May/June intake was missed because of elections (explained under challenges), so I worked with their August/September first year intakes instead.

The first focus group discussions and individual face-to-face interviews were conducted at the commencement of the teacher training programme, in the first month of the first term of the students' first year at college. This was intended to capture any joy, dilemmas or other emotions Harvey (2015) that these first-year students might have been experiencing or had experienced, while these experiences were still fresh in their minds. Again, this enabled capturing these experiences before the student teachers had been subjected to too many interventions in the colleges. Interventions were usually in the form of programmes that assisted the first-year student teachers to adjust to their new environments.

I started by reminding the participants about the purpose of the study, the structure of the group discussion, and that all answers were correct. I also assured them of the confidentiality of whatever was to be discussed. I emphasised that their participation would not jeopardise them in any way. Thereafter, I asked them to complete another consent form.

I held one focus group discussion per college, with ten participants each (5 vocationally interested and 5 vocationally disinterested pre-service teachers). The focus group discussion venues varied for each college. The venues were the computer laboratory (College One), the health and life skills room (College Two), the home economics lecture room (College Three),

and the humanities lecture room (College Four). When selecting and/or accepting venues I considered privacy and seclusion (free from distraction), and allowed for ample time for the discussions. Surveyed literature (Quinney, Dwyer and Chapman 2016) indicates that factors that contribute to nurturing trust in a participant include providing a safe private space so that the participant feels comfortable and confident when speaking about very personal aspects of their life. All these venues were conducive to the exercise as they were devoid of any distractions.

In the case of College One, the focus group discussion was held in the computer laboratory with a heterogeneous group of four male students and six female students from diverse backgrounds, varied teaching experiences and varied reasons for joining the teaching profession. In the other colleges, groups were all heterogeneous and again gender tilted more towards female students, following the general gender imbalance in teachers' colleges at the time. Literature surveyed (Stewart and Shamdasani 2015) indicates that heterogeneous groups are effective due to differences in skills, perspectives and knowledge. The focus group discussions took approximately two and half hours each. I used a focus group interview schedule (See Appendix 6) as it allowed "for in-depth probing while permitting the interviewer to keep the interview within the parameters traced out by the aim of the study" (Berg 2007: 39). As such it enabled me to drive the conversations, making sure I covered all the required angles while at the same time probing for more rich data.

Having requested permission to audio record the discussions, both in the letter of information and before the start of the sessions, I recorded the discussions to accurately capture the participants' responses for the purposes of archiving the interactions for close scrutiny later. This enabled me to focus on the interviews and the respondents; only needing to take sparse notes rather than focus on comprehensive note taking (Mukeredzi 2009). I also provided a backup in case the audio recorder became problematic on the day of the group interviews, as informed by Creswell (2009), who indicates that the digital recorder has its own misgivings. In this case the audio recorder could not account for external stimuli and proceedings such as frowning or paper shuffling. To mitigate this challenge, I captured these in my researcher diary. Another hitch I faced was that I could not minimise the audio recorder's intrusivity, as is recommended by Creswell *et al.* (2013), otherwise audibility would be an issue. With the participants' permission, the device was placed on a table near them.

I started the interviews by asking simple questions and then moved on to more thought-provoking ones. I made every effort to bracket my own opinions or suggest answers and remained open, encouraging them to engage by probing to get rich data. I practised good listening skills: not talking when they were speaking; showing them that I was listening from my facial expressions and verbal sounds (“Mmm hmm, nodding my head); and being able to repeat what they said word-for-word, starting with phrases such as, “What you’re saying is...” This created an atmosphere conducive for the participants to engage with the process and with the researcher, which encouraged them to keep talking and offer more data.

The issue of extroverts and introverts emerged, as it had during the pilot study. Some participants were comfortable always giving their opinion, while others, particularly vocationally disinterested ones, were not. I tried to ensure that all voices were heard by asking them directly for their inputs and urging them along by maintaining a close eye contact with them.

Researchers (Krueger and Casey 2015; Nyumba *et al.* 2018; Kumer 2019) indicate that although focus group discussions are most often used in qualitative research, participants are sometimes reluctant to discuss sensitive topics. In the case of my study, the vocationally disinterested participants might have found the focus group discussions an uncomfortable setting in which to discuss why they had joined the teaching profession. Although I employed a lot probing to get them to talk, I was also aware that complementary data generation methods such as the individual face-to-face interviews and continuum drawings and discussions would elicit data that might have remained ‘hidden’ during the FGDs. Triangulation of the data with two or more methods in a complementary manner offered an opportunity to draw conclusions from the FGDs.

Before winding up the discussions, I went through the main points so that participants could verify what was said during the interviews. Thereafter I thanked the interviewees and informed them that I would select six participants to participate in individual face-to-face interviews.

I purposively selected six (three vocationally interested and three vocationally disinterested) participants from each of the ten who had participated in the focus group discussions, using my notes and the codes that they had used as pseudonyms in the focus group meetings. Informed by surveyed literature (Ennis and Chen 2012), I was aware that as interviewees were an interactive source of data, their verbal fluency, clarity, explicatory and analytical abilities were central to the possibility of generating in-depth information. I thus considered the participants who had been

open, knowledgeable and engaging in the focus group discussions. I called out their numbers and requested their participation in the individual interviews; and all were willing.

I then thanked the remaining four participants for their time and for sharing their knowledge, and informed them that they could contact me using the details on the letter of information if they had additional information. Although I had discussed in detail how they would participate in the study at the start of the focus group discussions, I also reminded them at this point that I would meet them again in their third term of study for continuum drawings and discussions.

In order to give the six participants time to replay and reflect on their focus group discussions, I requested to meet with them for their individual face-to-face interviews the following day, again during their free periods.

After each focus group discussion, I listened to the audio recordings and reflected on the data, jotting down my reflections. I read through the brief notes made during the discussions and expanded on them, picking up on issues and cues to be followed up on during the individual face-to-face interviews. Emerging patterns were also identified in the data. Following this, I would then start transcribing the data; listening to the audio recordings over and over again and cross-checking with my notes and reflections.

#### ***4.7.9 Individual face-to-face interviews***

Informed by Seidman (2013), who recommends more than a single interview to generate richer data, I planned to conduct two series of in-depth, semi-structured interviews with each of the twenty-four participants - the first-year students. Oltmann (2016) describes interviewing as a tool for social research as it facilitates obtaining ‘direct’ explanations for human actions through a comprehensive speech interaction. Furthermore, Cohen, Manion and Morrison (2011: 409) say the interview is “a flexible tool for data collection, enabling multi-sensory channels to be used: verbal, non-verbal, spoken and heard”. Through this direct interaction, interviews foster a strong relationship between the researcher and the researched, such that the participant may feel more comfortable deeply describing difficult or emotionally laden experiences to someone with whom he or she has had prior contact and established some level of trust (Adler and Adler 2002).

While focus group discussions facilitated interaction among participants, the individual face-to-face interviews involved two participants creating a more trusting relationship.

During the individual face-to-face interviews, I was also able to probe more to obtain an in-depth understanding of the pre-service teachers' transformative learning experiences, which might not have emerged in the focus group discussions. I could read the participant's paralinguistic features; frowning, fumbling, nodding, etc. and probed on those aspects. Enis and Chen (2012) indicate that the individual face-to-face interview differs from the focus group discussion as it focuses primarily on the participant's emic, or insider perspective. The individual face-to-face interviews thus created room for sharing what Oltmann (2016) defines as the 'hidden information' that might have been left out during the focus group discussions. Again, these individual interviews facilitated eliciting data gathered from reflection on the focus group discussions and based on the participants' emotions, feelings and experiences. These first interviews (Interview One) took approximately one and a half hours each and were also audio-recorded to capture the pre-service teachers' responses verbatim. A semi-structured interview guide was used (Appendix 7).

As explained above, Interview One occurred during the first month, subsequent to the focus group discussions.

These student teachers had started their programme in May/June and in August/September 2018 respectively; I thus held the second individual face-to-face interviews with the same participants during the third term of their first year in March (College Two, the Private Primary College) and in July (College One, the Public Secondary Technical College) 2019. I made use of the two weeks that student teachers were in colleges for the TP seminars, as these students were already out on school experience. The time-lapse enabled confirmation or disconfirmation of the internal consistency of their stories and also a check on the common patterns in the themes that emerged in the first interviews. Mukeredzi (2009) highlights that the separate interviews locate each interview within some relevant context and at the same time minimise prolonged interview sessions. The second interview intended to capture the transformative learning experiences of the participants so far, from the time they joined college. This was also vital for establishing whether or not participants' attitudes and views towards teaching had shifted.

Unfortunately, the second interview was only conducted at two of the four colleges, following a directive from the MHTESD. The nature of the 2-5-2 model of teacher education (8 months in college; 20 months on teaching practice and 8 months in college), described in Chapter One



should have meant that the trainee teachers were accessible. However, a directive issued by the MHTESTD as a result of the economic downturn in Zimbabwe, instructed the colleges to stop in-campus TP seminars and instead prepare materials and run these seminars in the TP districts, to help the students cut down on their travelling expenses. This new structure and locations for the TP seminars thus made it impossible for me to access the participants from College Three (Private Primary) and College Four (Public Secondary) to conduct the second interview with them.

Given the time lapse since Interview One had taken place, I reminded the participants of the study and the structure of their participation before commencing with Interview Two. I used the semi-structured interview guide (Appendix 7) again for the interviews. Interview Two also took approximately one and half hours and both were again audio-recorded to capture pre-service teachers' responses verbatim. I adopted an open and emotionally neutral body language in order to allow the participants to contemplate their responses, talk more, and elaborate on and clarify issues while I nodded and smiled, looking interested. This gave participants confidence to share their experiences. I also listened attentively without interrupting, and made facial expressions and verbal sounds (M-mmm), periodically asking questions that promoted discovery and insight. Questioning gently challenged their old assumptions, but in a constructive way and without causing unnecessary intrusion, in order to generate richer data. This also allowed participants to recount their experiences as fully as they could. Further, given that an intrusion would disturb the flow of the interviews, the interview venues were secluded and free of any disturbances. Engaging participants by listening to their life stories, recording their experiences, their moments of crisis, their frailties, and their intimacies minimised the researcher's intrusivity (Lune and Berg 2017). Just like in the focus group discussions, some participants in the individual face-to-face interviews also required probing and deeper following up on issues to elicit more detail.

Despite the effectiveness of individual face-to-face interviews, Cohen, Manion and Morrison (2013) highlight weaknesses with this type of data generation method. Interviews are considered an intrusion into respondents' private lives with regard to the time allotted for the interviews and the level of sensitivity of the questions asked. In the case of this study, I minimised researcher intrusion by consulting with the participants to ascertain the times they were free to participate in the interviews. I made use of their free periods for the interviews and met with them on

weekends for the continuum drawings and discussions. I was cautious not to disturb the lecture times and programmed events in the college. Asking the participants to complete consent forms was another way of getting confirmation that they were willing to participate in the interview.

#### ***4.7.10 Continuum drawings and discussions***

Conventionally, drawings represent a hand-drawn sketch that provides a visible form to a thought, concept or idea (Theron *et al.* 2011). This method of active participatory engagement can help shed deeper insight into how participants understand a phenomenon. Justifying drawing as a research tool, Weber (2008:44) observed, “images can be used to capture the ineffable... Some things just need to be shown, not merely stated. Artistic images can help us access those elusive hard-to-put-into-words aspects of knowledge that might otherwise remain hidden or ignored”. Concomitantly, in this study the continuum drawings depicted the internal realities of the participants; what they probably were not able to put into words without the prompt of the drawing. Further, drawings are able to represent the relationship between visual elements in a way that is also impossible to express through writing or speech (Gauntlett 2007). By adding elements which might not have been accessible through focus group discussions and individual face-to-face interviews, drawings were a powerful adjunct to the word-based means.

The continuum drawings and discussions were held at the two colleges towards the end of their third term, in their first year on the programme. I assumed that having spent about 11 months on the programme, they were likely to have experienced some transformative learning (May 2018 to March 2019 in the case of College Two, the Private Primary) and September to July for College One (the Secondary Technical).

These meetings were also vital for member checking. At the end of the continuum drawing discussions I requested that the participants member check the transcriptions by verifying what they had said in the first interview in the two colleges (Colleges One and Two). This gave participants an opportunity to read and confirm or modify the transcribed data.

After the TP seminars on a Friday in each college respectively, I invited the ten participants who had participated in the focus group discussions and briefly reminded them of the study which explored the transformative learning experiences of the vocationally interested and the vocationally disinterested pre-service teachers. I then explained that they were going to draw

their transformative learning journeys, showing how they had travelled throughout the year from the time they had joined college in May and September 2018 respectively, through the time she had met with them for the focus group discussions and individual face-to-face interviews, until the current meeting, indicating particular landmarks that occurred on the way. I then gave them A3 paper and asked them to go and draw their journeys.

They discussed the time to meet, and at College One all were unanimous about Saturday at 10am, while at College Two they preferred Saturday at 7pm after supper. Giving the participants free time to draw catered for creativity and reflection on the transformative learning experiences that had occurred so far. Drawing on literature surveyed by (Theron *et al.* 2011) which indicated that it was of paramount importance to inform the participants that the activity was not an assessment of their artistic skills I explained to the participants that there were no poor or good images and that she would not be assessing their drawing ability. Instead the key issue of the activity was for them to illustrate their experiences, and this seemingly allayed fears as some had expressed that they were poor at drawing. Thus, I asked the participants to feel free to draw whatever they thought represented their experiences of their transformative learning journeys, even if it was just lines.

Participants shared their interpretations of their drawings the following day. Literature Kirkham *et al.* (2015) acknowledges that seeking a participant's interpretation of their own drawing is invaluable as their visual product is highly subjective and can be easily misunderstood from an outsider's perspective. Hence, participants talked about their own drawings and wrote notes illustrating the landmarks in their journeys. This participatory exercise made the participants collaborators, in-charge of their artefacts and their interpretations, which was vital given that the visual evidence was a subjective product of their own perceptions and lived realities (Gauntlett 2007). The participants knew the meanings that were embedded in their continuum drawings. Thus, they were able to interpret the landmarks in their transformative learning journeys by recapturing how they had felt when they first started teacher training, the joys or the dilemmas they had faced at the time, any joys they had experienced later, and then how they had finally gotten settled into the programme.

Banks (2001) indicates that a researcher may be intrinsically, and perhaps unwittingly, drawn to certain interpretations and conclusions that are a product of their own enculturation and their

own socio-culturally-shaped experiences and perceptions. In order to counteract the challenge of mis- and over-interpretation, I asked the participants to make their own interpretations of the continuum journeys reflected in the drawings and write some notes at the different points of those journeys – drawings, after which the discussion took off while I audio-recorded and jotted down notes.

After the discussion, I requested and collected the continuum drawings for scrutiny and reflection.

#### ***4.7.11 Challenges encountered in data generation***

Like any other research of this magnitude, challenges were encountered. During data generation I experienced some challenges related to logistical issues, gaining access to participants, financial constraints, and problems with making follow-up second interviews with the two colleges.

With regard to logistical issues, Mukeredzi (2012) defines such challenges in qualitative fieldwork as generally related to gaining access, unanticipated problems, limited communication, etc. Her study was hampered by logistical issues due to the political climate in Zimbabwe at the time in 2008. In this study, the general elections that were held in July 2018, followed by a school and college vacation, stalled the data generation process. Despite the fact that I had been cleared by the DUT Institutional Research and Ethics Committee (IREC) to start data generation from 19 June 2018, it was only possible to do that in three colleges in September after I had managed to generate data at College Two towards the end of June, as reflected in Figure 4.1. This was because during the election period the education institutions were used as polling venues. Immediately following the elections, all education institutions closed for the August vacation and only reopened in September. Consequently, I had no option but to wait until early September. When word about the elections started circulating, consultations with politicians in my area did not yield any information regarding the proposed dates, so I had stuck to the itinerary that I had developed and sent out to the colleges. The political climate preceding elections made it necessary for the researcher to make consultations because these were the only people who would give accurate information about election dates to enable appropriate modification of my itinerary.

Secondly, gaining access to participants in College Three was a big challenge. The college had scheduled me to arrive on 16 September, and I had arrived at the college well before the start of the working day. The Vice Principal announced my arrival to the Principal, who then told her that the proposed participants, the first-year students, were not accessible. This was in spite of a copy of the e-mail that she (the Principal) had written as proof of having invited me to come on that particular day. I was informed that the first-year students had not been registered for their course yet, and as such their participation in the research was not possible. I was advised to come back after their registration the following week.

Losing the whole week made me feel desperate and threw me off balance with my data generation schedule. On reflection, I needed to have reminded the principal about my visit a day or two before, as then I would have been informed about the delay before embarking on the trip. Upon further reflection, I realised that the Principal's sentiments on the 16<sup>th</sup> were professional and correct, given that before registration these students did not belong to this particular college and as such, would not have been representative of the college. When I returned to College Three on the twenty-third of September, a Head of Department (HOD) was instructed to assist me in accessing the participants and data generation went ahead smoothly.

The third challenge related to financial resources. I was financially distraught challenged to get to colleges that were about 300 kilometers away from my home town. With the way that the Zimbabwean economic situation was going, there was no money in the banks. This was confirmed in a news report by Lonsdorf (2018), who said:

*Zimbabwe faced a major cash shortage revealing a symptom of the country's larger and longer economic crisis. People had to queue long hours at banks, only to withdraw \$20. If they could not access it that day, they would queue up until the following day.*

This was further compounded by the fact that public transport had become unreliable and fares were unpredictable, going up by enormous amounts every day (Lonsdorf 2018). With the support of my family, however, I was able to gather the required data in these distant teachers' colleges.

Finally, making the follow-up second interviews with two colleges became impossible because of the nature of the 2-5-2 Model of Teacher Education described in Chapter One, and subsequent

changes made by these colleges regarding the location of the TP seminars following a MHTESTD directive. This directive meant that the student teachers did not return to the colleges for their TP seminar series as they were initially supposed to have done, so were no longer easily accessible in a single location. I only became aware of this information as I began preparing for the trips. I therefore only ended up conducting the second interviews and the continuum drawings and discussions in two of the four teachers' colleges. Fortunately, the data generated during Interview Two and the continuum drawings and discussions from the two colleges adequately complemented the initial data generated through the FGDs and the individual interviews to address the research questions.

#### **4.8 Data analysis**

Although there were many qualitative data analysis computer software packages available on the market, I decided to conduct a manual data analysis following transcription, to better immerse myself in the data and gain a deeper understanding of it. Data analysis, according to Mukeredzi (2009: 360), refers to “searching for patterns and ideas that help to explain the existence of those patterns”. Practically it involves systematically examining and arranging field notes, interview scripts and all the materials gathered in the field, and organising and synthesising them into manageable units.

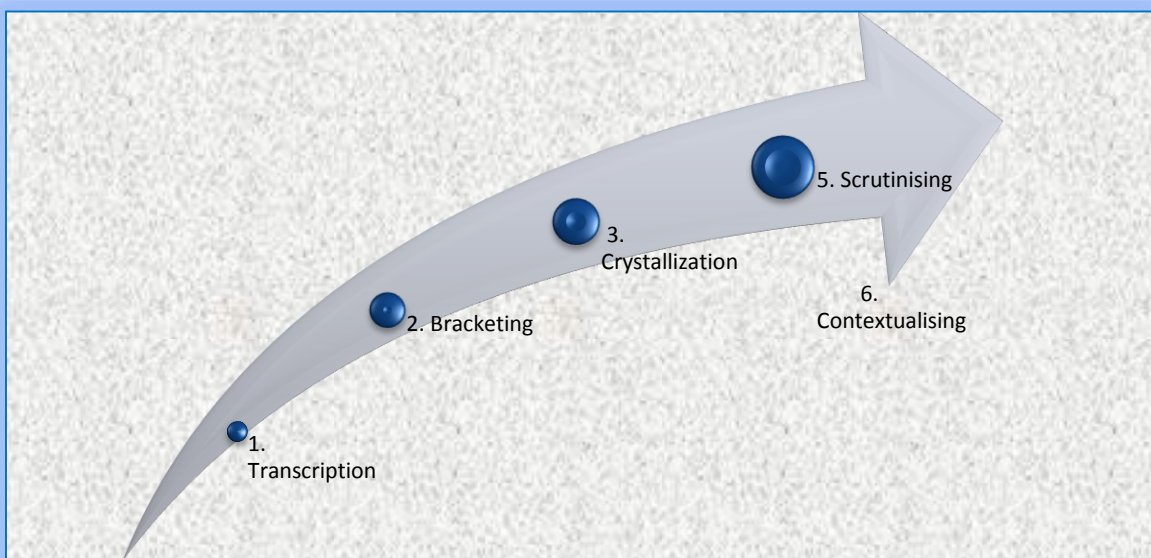
I analysed the data in two stages: performing an in-field data analysis and then another analysis post data generation. To begin with, the in-field data analysis which commenced the very day I started generating data and continued until the end of the data generation period, offered me pointers to follow up on from one interview or focus group to another. Again, the in-field data analysis placed me in better stead to identify patterns that were emerging from the data, while helping me to reflect upon what was occurring in the field by asking questions such as: what the participants did, how they did it, why they did it, when they did it, and with whom. These reflective questions assisted me to record my thoughts, feelings, impressions, insights and observations of what happened during the field work. Mortari (2015) indicates that reflections are important for connecting incidents occurring during the post data-generation phase.

The second stage, the post data generation analysis Mukeredzi (2009), constituted the main data analysis phase that was undertaken upon completion of capturing all data to enable a full picture

to emerge. I engaged with the data manually, reading transcripts over and over again, and listening to audio tapes several times so that I could transform the data into meaningful findings. I captured all the data from the audio recorder and manual scripts onto the computer, while systematically filing college by college data for easy identification and preliminary analysis and comparisons. While I pooled the data across the colleges together during the process of sorting and organising the data according to the research questions, I kept the data from the different colleges separate under each question. I marked the data in such a way that I could easily identify the data from a particular college. I identified each college using codes: Colleges 1, 2, 3 and 4. Thorne (2000) points out that a researcher's capacity to think deeply is a pre-requisite in data analysis; as such I was guided by the reflective questions pointed out above and engaged in deep thought during the analysis process.

Following this, I began the main post-data generation phase after all the data had been generated and transcribed. Literature (Braun and Clarke 2006) outlines six interrelated stages involving organising information and identifying patterns, developing ideas and drawing conclusions: 1) Transcription; 2) Bracketing; 3.) Crystallization; 4) Descriptive wording; 5) Scrutinising; and 6) Contextualising. It is these stages that I followed closely during the post data generation stage that are illustrated in Figure 4.2.

**Figure 4.2: Stages of post data generation analysis** Adapted from Braun and Clarke (2006)



First, I transcribed data verbatim from the audio recordings into typed prose. According to Austin (2015), generating themes in an orderly fashion out of the chaos of transcripts or field notes can be a daunting task, particularly since it may involve many pages of raw data. Dörnyei (2007) also indicates that a one-hour interview may take approximately six or seven hours to transcribe, and involve around 50 pages of transcript; this was the case with my transcriptions. This process was a very engaging exercise where I immersed myself into the data, thereby familiarising myself with it. In addition, reading through all data provided me with a general sense of meaning, and reflecting on its meaning in relation to the research questions called for high concentration. I had to understand what the participants were saying and not what I expected to hear (Cohen, Manion and Morrison 2018). This improved the integrity of my study as I was able to understand the emerging themes.

Second, I engaged in bracketing, reduction and listening. I prepared and sorted the data according to the research questions. That is, I went through the data carefully, checking and looking for the elements that answered the research questions within each college and then compared these elements within, between and across the four colleges while noting any variations. This stage called on the researcher to set aside her own perceptions, biases, meanings or interpretations. Throughout the process, I kept my research aim and key questions clearly in focus. I read carefully read all the data to obtain the gist of it and reflected on its meaning in relation to the focus of the study (Cohen, Manion and Morrison 2018). I also listened to the audio records over and over again, to get a sense of the whole. In trying to understand what the participants were saying, I wrote down my initial impressions, guided by such questions as: ‘What is the text telling me? What stands out? How do I feel after reading the text? What messages does the text leave me with? All these questions assisted me to get a sense of the text.

Third, I moved on to crystallization and condensation. Using open coding, a process by which the raw data transcripts from the interviews, focus group discussions and the continuum drawing discussions were gradually converted into usable data through the identification of themes, concepts, or ideas that had some connection with each other, I allocated categories of meaning. That is, the crystallization of what the pre-service teachers said, using their exact words Braun and (Clarke 2006). It involved delineating categories through open coding, which Flick (2006) referred to as crystallization and condensation of what the participants had said, using the



participants' literal words. Coding involved organising the material gathered into segments of text before bringing meaning to the information (Creswell 2014). This involved taking the text data, segmenting the sentences into categories and then labelling those categories with a term used often in the actual language of the participants.

I did this transcript by transcript and question by question, for all four colleges. I only considered the essential, which I recorded in the right-hand margin, and left out the substance. I was guided by the question, 'what is this about?' (Creswell 2014). This necessitated having a much wider margin on the right-hand side of the page. After working through all transcripts for Interview One, Interview Two, the FGDs and the continuum drawings and discussions, I listed all the ideas (underlying meanings) and clustered the similar topics together into major topics. I then referred back to my data, abbreviating the topics as codes, and wrote the code next to a segment in the text. The crystallization process is shown in the Table 4.4.

**Table 4.4: Crystallization of data.** Source: Researcher (2019)

<b>Data</b>	<b>Codes</b>	<b>Categories</b>	<b>Themes</b>
<i>Interviewer:</i> Tell me about your experiences in the college. <i>Interviewee:</i> I faced a problem of language barrier. I speak Tonga and my fellow students speak Shona. At times they do not understand me. The new environment was strange. It was different from my Tonga environment. <i>Interviewer:</i> Which methods do you value while learning on the course? <i>Interviewee:</i> I value group work and sharing ideas with others.	Faced a problem of language barrier Tonga vs Shona New environment Group work Sharing ideas with others	<i>Problem of interaction</i> <i>New environment</i>  <i>Learning</i>	<b>Communication</b>  <b>Culture shock</b>  <b>Learning strategies</b>

Table 4.4 exemplifies how I crystallised the data

Fourth: At this stage I started producing descriptive wording and reduced the list of codes by grouping related words. In this hermeneutic cycle, I went back to the data to check for any omissions. The iterative process was also engaging because I wanted to check that I had picked up every detail. After grouping categories of general meaning, I reduced them to categories of relevant meaning, that is, relevant to the key question: ‘What are the transformative learning experiences of the vocationally interested and vocationally disinterested pre-teachers in selected teacher training colleges in Zimbabwe?’ I engaged my supervisors, who went through the data set to verify the categories of relevant meaning and to identify any errors or omissions. Cohen, Manion and Morrison (2018) acknowledge the significance of engaging a research expert in verifying themes. In my case, my supervisors were the research experts who confirmed my themes and identified some errors.

Fifth: At this stage I scrutinised the categories of relevant meaning in order to determine the central themes peculiar to these categories, which expressed the essence of the category or cluster. Literature surveyed (Roberst, Dowel and Nie 2019) notes that the researcher needs to modify themes and summarise them with subsequent data. Consequently, I modified and summarised the themes, together with those from the second interview data. This provided a holistic examination, so as to modify and add any other themes as necessary. The examination enabled identification of the general and unique themes across all the data sources (focus group discussions, individual face-to-face interviews and the continuum drawings and discussions).

Sixth: This final stage of data analysis involved the contextualisation of themes and a summary (Elliot 2018). I repositioned the themes according to the overall contexts from which they emerged, to see the relationships. I then modified the themes and came up with a holistic picture of the appropriate themes from the raw data. Following this, I summarised the data from all the data sources: the FGDs, individual face-to-face interviews and the continuum drawings and discussions, capturing the transformative learning experiences of the pre-service teachers. Methodological triangulation was done and similar themes emerged from the transformative learning experiences of the pre-service teachers. The data were originally pooled together during sorting and organising, and the pooling was done according to the research questions as the

responses were broadly similar. However, during this writing up stage, any variations noted in the different colleges were highlighted.

Once the final themes were established, I started the process of writing up the narrative. I used the quotes within the narrative to authenticate the findings, and I concluded by describing the world as seen by the participants (Cohen, Manion and Morrison 2018). This final stage required providing a thick and rich description of the transformative learning experiences of the pre-service teachers, by capturing the data in their language and letting them speak for themselves (Austin and Sutton 2015).

#### **4.9 Trustworthiness of the study**

In qualitative research discourse, one refers to the notion of trustworthiness as opposed to validity and reliability (Lincoln and Guba 2013). Hence, to enhance the rigour in this qualitative study I had to ensure trustworthiness by addressing its four aspects: credibility, transferability, dependability and confirmability.

**Credibility** refers to the degree to which a study represents the meanings of the research participants (Lincoln and Guba 2013). In this study, credibility was enhanced by a combination of multiple data generation methods, which provided richer and more meaningful data sets than any of the methods alone (Moser 2018). I used questionnaires, focus group discussions, individual face-to-face interviews and continuum drawings and discussions to strengthen the study and control method boundedness and bias (Yin 2014). The prolonged fieldwork provided me with an in-depth understanding of the phenomenon under exploration and enhanced the credibility of the narrated accounts (Creswell 2014). Credibility was also enhanced by the use of the audio recorder which captured accurate data. In addition, I also used field notes to verify the data and by engaging in reflexivity throughout the study, I promoted credibility and tried to minimise bias. Above all, I maintained the relationship between my study's components: the research topic, the methods and the critical questions. The need to maintain a 'golden thread' between these components kept me focused on the study and thus enhanced its credibility. Lincoln and Guba (2013) consider member checking as the most critical technique for establishing credibility. I did member checking with the participants from two of the colleges

where second interviews were conducted, to member check the transcriptions of the first interviews as well as some sections of the findings.

**Transferability** refers to the degree to which the findings are applicable or useful to theory, practice, to other contexts or future research (Lincoln and Guba 2013). This means that the results of the research can be transferred to other similar contexts with other participants (Korstjens and Moser 2017). In this study, the researcher documented a rich and extensive set of details concerning the methodology, and devoted a separate chapter (Chapter Five) to detailing the different research sites in the research report. These thick descriptions will help other researchers to compare or transfer aspects of the findings of this study to similar contexts. This is confirmed by Mukeredzi (2015) when she says that clear, detailed and thick in-depth descriptions of the data and the research context address issues of comparability and translatability to enable the reader to decide whether findings may be transferrable.

**Dependability** is the extent to which different researchers will generate the same or similar ideas and derive similar phenomena if the study is repeated in a similar setting (Lincoln and Guba 2013). Dependability includes the aspect of consistency. This aspect is related to auditability, which refers to the degree to which research procedures are documented, allowing someone outside the study to follow and critique the research process (Forero *et al.* 2018). An audit trail was maintained by providing a detailed account of the research process. Auditability was also enhanced by consulting, discussing and presenting different sections of the study to my peers and study supervisors. Peer debriefing was a critical aspect in the study as it enhanced the generation of new ideas and identified shortfalls and pitfalls of the methodology and other aspects of the study. During cohort sessions in Zimbabwe and also in South Africa, my colleagues went over my work and passed comments or offered additional information where I had overlooked some important information. This strategy involving understanding beyond the researcher and investing in other people enhanced the trustworthiness of my study. Other than member checking of the raw transcriptions, the 12 participants in the study also read through some sections of the findings of the study during the follow-up second interviews.

A pilot study was used to try out the research instruments and to make any necessary modifications, and this also contributed to the dependability of the study. Piloting is carried out prior to the main data generation phase to enable the identification of problems with the research

instruments, ensuring question clarity to enable eliciting the appropriate data and confirming time requirements (Cohen, Manion and Morrison 2018).

**Confirmability** is concerned with establishing that data and interpretations of the findings are not figments of the inquirer's imagination, and are instead clearly derived from the data gathered in the study Forero *et al.* (2018). Member checking is one of the strategies that enhance confirmability; participants are given an opportunity to confirm whether or not the transcripts have captured their responses. In my study the participants were asked to do member checking. The use of methodological triangulation, where I used a multi-modal approach to data generation, also enhanced the confirmability of the data. I built rapport and trust with the participants by continuously engaging with them and thus increased the confirmability further. The study was also carried out with careful consideration of the ethical issues involved, as discussed below.

#### **4.10 Ethical considerations**

Ethics are generally considered as dealing with beliefs about what is right and wrong, proper or improper, and good or bad (Allen 2015). It is the responsibility of a researcher to respect the inherent dignity, worth and uniqueness of each individual participant. Hence to be ethical in research is to conform to accepted professional research practice Creswell (2013), in other words to do good and avoid harm. There are three principles of ethical consideration that are usually prescribed in research. These are: beneficence, respect for human dignity and the principle of justice.

First, beneficence involves the researcher seeking to minimise harm and maximise benefits for participants (Anabo, Elexpuru-Albizuri and Villardon-Galledo 2019). The specific beneficence-related considerations embraced autonomy, privacy and confidentiality.

In order to address autonomy, I obtained informed consent from the research participants. Participants all signed consent forms after had explained the purpose of the study as well as any possible dangers and benefits of their participation, and made my credentials known to them before they made any commitment (Denzin and Lincoln 2018). It was up to the participants to weigh the risks and benefits associated with participating in the research and it was up to them to decide whether or not to take part. All participants expressed keenness to participate by signing

the consent letters. Consent to audio recording was also obtained, and it was explained that the recordings would be destroyed five years after completion of the study. Until then they would be kept locked away by my supervisor. Participants were also informed that the research report would be kept in the university library, and copies would be given to those who requested them. Pseudonyms would be used when reporting the findings.

Further, confidentiality is a central principle of ethical considerations (Allen 2015). The two vehicles for subverting it are anonymity and confidentiality (Creswell 2013). In my study which was qualitative in nature, participants were assured that the information obtained from them would remain confidential. Anonymity of the participants and the research sites was subverted through the use of pseudonyms instead of real names. Related literature (Surmiak 2018) indicates that privacy is a basic human need. Without privacy, it is not possible to develop or maintain a sense of self or personhood. Mukeredzi (2009) notes that keeping material ‘confidential’ implies that no one else sees it, save the researcher and supervisor, and confidentiality also includes participants’ right to privacy. This was the case in this study.

The second principle of the ethical considerations was about the protection of human dignity or non-maleficence. Protection from harm encompasses any physical, emotional and social infliction of pain a study may bring about (Surmiak 2018). With regard to my study, I explained to the participants that I would as advised by Saunders, Kitzinger and Kitzinger (2015), pose no physical harm or mental discomfort to them. I explained that although I was a lecturer at one of the colleges, they could be assured that they would not be prejudiced in any way by taking part in the study.

The third principle revolved around justice. Literature (Anabo, Elexpuru-Albizuri and Villardon-Galleo 2019) says that research often involves overlapping applications of the three principles, wherein elements of justice are subsumed in the others. Justice is based on the idea that researching people requires treating them as people so that they reveal their lives to the researcher freely. This was applicable in my study because the participants were free to participate in the focus group discussions, individual face-to-face interviews as well as in the continuum drawings and discussions, and were also free to withdraw at any time. Their ideas were appreciated, even those which had little bearing to the study. Thus, the participants felt

valued and respected. Having discussed the ethical considerations, the limitations of the study follow.

#### **4.11 Limitations of the study**

First, the major limitation of the study was its methodological orientation. Having located the study in the interpretive paradigm and qualitative approach, where non-random sampling designs (convenience and purposive) were used, this may have inadvertently left out some information-rich participants. As such, the subjective philosophical orientation of the study inhibited generalisability. The findings are thus limited to the four selected colleges studied only and may not be transferred to all the teachers' training colleges in Zimbabwe. Creswell (2018) indicates that it is acceptable for findings to be limited to specific groups, communities and/or circumstances. I also provided thick descriptions in presenting and analysing the data, as thick descriptions of the research contexts would enable readers to decide if the findings could be replicated to other contexts. Again, the study explored entry level students at the start and end of their first year at college. Extending the period to more than a year would probably have yielded more transformative learning experiences. However, comprehensive probing was done during the focus group discussions, individual face-to-face interviews, continuum drawings and the continuum discussions.

Further, this qualitative study lent itself to subjectivity and this therefore might have promoted bias. While the sampling designs employed convenience and purposive sampling and may thus have left out some information-rich participants, the use of multiple data generation methods enhanced the data triangulation and minimised bias. Additionally, the use of peer debriefing also helped curtail bias (Noble and Smith 2015). I adopted a multiple site case study by working in four selected colleges, and the opportunities for insights in this multiple-site case study may have become opportunities for subjectivity or even prejudice. However, the multi-modal approach to data generation counteracted this as it minimised subjectivity. Further, given the qualitative nature of the study, pre-conceptions of the researcher may also have determined which behaviours were to be taken cognisance of and which ones were to be ignored, and this could have interfered with the interpretation of the data. However, close liaison with supervisors, peer

debriefing, open-mindedness and reflexivity were adopted to minimise any pre-judgements and minimise the impact of any biases on the findings.

The researcher was a lecturer at one of the selected teacher training colleges studied in Zimbabwe and therefore the results might have been influenced by her perceptions and prejudices. However, I made every effort to bracket my own notions and pre-conceived ideas and to remain open-minded, so as to get accurate information and clarification, which aligned with what Varpio, Martimianakis and Mylopoulos (2015) prescribed. Constant reference to Mezirow's Transformative Learning Theory (1991) which guided the study and close reference to the research questions also assisted me to maintain focus on my study and minimise bias. My study additionally involved trustworthiness of the data through member-checking to ensure that the identified themes resonated with the participants' experiences, which also minimised bias. Finally, as advised by Patton (2015), sharing emerging themes with experts enhances the data analysis process. I consulted my supervisor constantly and shared the emerging themes of the study with her. This again helped to minimise bias.

The two participants who reported that they did not experience any transformative learning linked to existing literature. Taylor (2007) asserts that transformative learning is a complex process because it restructures a person's way of being in the world. The exploration of their transformative learning experiences took approximately a year. These two participants probably just needed more time to question their prior experiences or interpretations of the world around them and their personal values and/or beliefs. Mezirow (1991) asserts that not all learning is a transformative learning experience. In the case of the current study, even after questioning, reflecting on and discussing their experiences, these two student teachers did not undergo any significant change because of a deeply seated need to hold on to what they were used to. They thus probably chose not to change their previously held assumptions, understandings and world views and decided to maintain the status quo (Taylor and Laros 2014). For some student teachers transformative learning takes place gradually or cumulatively, while for others it may be sudden or epochal (Mezirow 2009). In this study, it could be that there was a need for integrating circumstances over a long period of time for the two participants to realise transformative learning. Arguably though, research does have it that some individuals do not experience transformative learning at all.



Another limitation was that the researcher conducted the research on her own rather than using research assistants. This was done for anonymity and confidentiality reasons. The researcher ensured that data was anonymised by using pseudonyms instead of real names of the participants and colleges were identified by numbers. The researcher used first year student teachers in order to trace their transformative learning journeys from the beginning of their teacher training up to the end of the year and also to establish whether there had been any shifts in their attitudes and views towards teaching.

#### **4.12 Conclusion**

The chapter has described the methodology followed in this study. The interpretive research paradigm, the qualitative approach, and the multi-site case study research design were discussed, in line with the philosophical aspects of the study. The discussion also encompassed other methodological aspects of the study involving the study population, the sample and sampling techniques, the recruitment of participants, piloting, data generation, data analysis, trustworthiness, ethical considerations and the limitations of the study. The study sought to explore the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers in Zimbabwe. The multi-modal approach adopted in this study for data generation enhanced the quality and the amount of data gathered, as well as the rigour of the data through methodical triangulation. Further, the in-field and post collection data generation approaches adopted enriched the data analysis process.

This methodology chapter has provided the details of how the data were generated, and answered the questions of ‘what, when, why, how and with whom’. The next chapter, Chapter Five, discusses the research sites/contexts.

## **CHAPTER 5**

### **THE RESEARCH SETTINGS**

#### **5.1 Introduction**

The aim of the study was to explore the transformative learning experiences of the vocationally interested and disinterested pre-service teachers in selected teacher training colleges in Zimbabwe. In the previous chapter on the methodology, the specific methods and techniques adopted to generate the data were discussed. The discussion started with the philosophical orientation in which the study was located, then moved on to the multiple-site case study design, the qualitative approach and the methods adopted for data generation. The data was generated to answer the research questions set out at the beginning of the study, to understand the transformative learning experiences of the pre-service teachers in the selected teachers' training colleges. This chapter describes the research settings. Such a description is important for providing a clear understanding of the context from which the data was generated. Having a separate chapter for research setting which includes participant profiles instead of placing that information in the methodology chapter as is usually the case was driven by two considerations. First, the methodology chapter was already long with 40 pages, so adding another 25 pages was going the chapter far too long. Two, placing the research setting and profiles as a separate chapter enabled me enough space to provide sufficient detail about the settings and the participants drawn therefrom.

The chapter begins with a brief overview of teacher education in Zimbabwe. Second, a description of each institution is presented, featuring its enrolment procedure, infrastructure and student support. Third, is a description of the biographical details of the research participants. The biographical data was vital to establish the number of years which would suggest that participants may have been looking for other avenues not teaching. This was then followed by a discussion on the reasons why these pre-service teachers joined the teaching profession. Finally, a conclusion ties up the chapter.

## **5.2 A brief overview of teacher education in Zimbabwe**

At the time of the study, teacher education in Zimbabwe was located in the Ministry of Higher and Tertiary Education Science and Technology Development (MHTESD). While teacher training colleges offered diploma certificates, the universities' teaching programmes offered a Graduate Certificate in Education (Grad CE), a Post Graduate Diploma or Certificate in Education (PGDE), a Bachelor of Education degree (BED), and one or two offered a Diploma in Education. As highlighted in Chapter One, teacher education in the colleges occurred in 17 teacher's training colleges: 13 primary, 3 secondary teacher training and 1 secondary technical teacher training colleges. All colleges were associates of the University of Zimbabwe's Department of Teacher Education (UZ DTE). This meant that the University of Zimbabwe ensured the development and maintenance of appropriate academic and professional standards by monitoring, supervising and assessing the quality of the programmes offered in the colleges (Mavhuto 2015). It was from the pool of primary teachers' training colleges and the four secondary teachers' colleges that the four colleges used in this study were purposively sampled.

Pre-service teachers in all primary school teachers' training colleges studied all subjects offered in the primary school curriculum. The student teachers were also offered two specialisations to choose one from: Early Childhood Development (also known as the Infants or Foundation Phase) or a Junior Course (Shava 2015). Early Childhood Development education involved the initial stages of organised instruction, designed primarily to introduce very young children to a school-type environment and to develop their cognitive, physical, social and emotional skills. Early Childhood Development referred to Grade R to Grade 3, and the Junior Course referred to Grade 4 to Grade 7. Secondary school teachers' colleges were divided into two categories: the generic academic teachers' colleges and technical teachers' colleges. Students in academic colleges majored in at least two curriculum subjects, while technical colleges required that a student teacher specialise in one technical and one academic subject (Nziramasanga Commission 1999).

The following section will shed more light on the primary and secondary teachers' training colleges that were explored in the study.

### 5.3 College governance

The Zimbabwe Amendment of Education Act [Chapter 25:04 ] (1987) classified college and school governance into two broad categories: government and non-government (Chikoko 2006; Zvobgo 2007). Of the four selected teachers' training colleges highlighted above and also discussed in Chapter One and in Chapter Four; two were government, while two were non-government. Government colleges were state-owned and run while non-government colleges were owned and run by missionaries identified as responsible authorities (Mukeredzi 2016).

With regards to enrolment, at the time of the study, each college enrolled an average of 600 students per intake. Generally, the halls of residence and the lecture venues had a carrying capacity of 500 students. The colleges were seen as autonomous Machingura (2006); Samkange (2013) and fee payment at government institutions was determined by the MHTESTD, in consultation with the Ministry of Finance. From time to time the Minister of the MHTESTD fixed the fees payable for instruction and accommodation at the government institutions (Zimbabwe Manpower, Planning and Development Act 24 of 1994). At the time of the study, fees at government colleges were pegged at \$545-00 per term (a term was 4 months in Zimbabwe). The responsible authorities in the church-owned colleges decided on their own fee payment structure covering tuition, residences and amenities. The responsible authority of the college oversaw the welfare of the college, ensuring that the fees paid were sufficient for the institutional needs and requirements. The fees charged by responsible authorities at the time of the study were approximately \$2000 per term. However, these fees had to comply with rules stipulated by the MHTESTD. The responsible authorities sought permission from the Ministry to charge the amount for fees that they saw as feasible.

College entry requirements were stipulated by the MHTESTD, and at the time of the study the pre-requisite for admission to a teacher training college was a total of five Ordinary (O) Level passes. Mandatory subjects were English Language, Mathematics and Science, and then applicants could have any two other O Level subjects passed.

## 5.4 Colleges

Four colleges were used in this study, as detailed in Chapter Four, and to ensure anonymity and confidentiality the colleges were identified by codes: College One, College Two, College Three and College Four. These codes were used in Chapter Four and maintained throughout data generation, data presentation and the analysis of the findings. Codes S1 to S10 were used to identify students at each college, with S1 to S5 representing vocationally interested participants and S6 to S10 the vocationally disinterested participants.

Data on the research sites were generated through informal discussions with either Vice Principals or Heads of Department (HOD) who were assigned to assist the researcher with data generation on her maiden visits to the colleges. The researcher's knowledge of these teachers' colleges and her observations during external assessment visits as a lecturer to one of the teachers' training colleges, as well as during the data generation visits, was a source of information. However, the bulk of the data were generated from the research participants during the interviews, focus group discussions and continuum drawings and discussions. The findings from these discussions and observations are detailed below. The descriptions of each site are considered necessary for assessing their possibilities for transformative learning support for these vocationally interested and vocationally disinterested pre-service teachers.

### 5.4.1 *College one*

College One was founded in 1982 as the only technical teachers' training college in Zimbabwe. It maintained an enrolment capacity of over 4000 student teachers across all year groups. Approximately 1200 of those were first year student teachers. It had an establishment of 231 staff: 128 academic staff and 103 professional staff at the time of data generation. Based on these figures, the lecturer to student ratio was approximately 1:32.

The inaugural intake was launched at a temporary venue in the area. The college then moved closer to the city to its permanent home on the outskirts of an upmarket residential suburb, approximately five to six kilometres from the city centre.

While the inaugural intake was not the focus of this study, similarly the pre-service teachers moved from a then familiar environment to a new college which became their new environment,

so they were also likely to have experienced dilemmas and the disorientations causing context shock. Literature on transformative learning (Mezirow 2012) indicates that a change of location is a disorienting dilemma. Thus, the pre-service teachers had to acclimatise themselves to the new environment while at the same time adjusting and adapting there (Akinade 2005). The movement of the college from one location to another therefore promoted transformative learning. The Vice Principal explaining the history of the college said:

*It was at the ZIMCORD conference that the then Minister of Education, Comrade Dzingai Mutumbuka, was offered \$6 million to build new secondary schools in rural areas by the American representative. Instead of accepting the money for that purpose he proposed that the money be donated to build a college for training teachers in the much-neglected area of technical subjects. The Americans approved and thus this college, which was to cost more than double its original estimated amount, was born.*

It was after construction of the new site that the college moved. Since its inauguration the college has developed secondary school teachers for teaching both academic and technical subjects. Technical subjects include metal work, motor mechanics and home economics. Before 1992, each student would choose one academic subject and one technical subject to specialise in. Later the programme was modified into two separate programmes: the technical/vocational programme and the two-year academic programme. The programmes at this college followed a different model from those followed in other teachers' colleges. The two-year model was intended for the Post 'A' Level student teachers who would train in technical and academic fields for two years. In the two-year model, student teachers spent eight months in college learning theory, eight months on TP and eight months in college for academic work and final examinations. Similarly, for the three-year model from which this study's participants were drawn for data generation, student teachers were in college for twelve months (one year) doing theory, out of college for twelve months (one year) on TP and then back in college for a final twelve months to consolidate their TP and theory in preparation for examinations.

A needs analysis that was done (Magaya 2017) discovered a need for strengthening the secondary agriculture teachers. This led to the introduction of a three-year Diploma in Agriculture Education (Secondary). In 2018, further modifications were made to the technical programme to offer a three-year Diploma in Education in Technical and Vocational Subjects

within the three-year model. To be eligible for the Diploma in Education Technical and Vocational Subjects, prospective students had to pass (with Grade C or better) practically oriented subjects such as Agriculture, Wood Work, Metal Work, Building and Home Economics, as well as the co-subjects of English, Mathematics and Science at 'O' Level. The naming and content of the subjects was revisited in order to match emerging trends in technological advancement and the changes in subjects offered at secondary school level (Fry, Ketteridge and Marshal 2009). The Diploma in Education with a specialisation in Art and Design was also taken on board as a three-year programme. The college therefore offered the following courses at the time of this study:

A post 'O' Level (Grade 11) Three-year Diploma in Education (Secondary) to train secondary school teachers. This model was for those candidates recruited with Ordinary Level passes in English Language, Mathematics and Science, and any other two 'Ordinary' level subjects, one of which had to be a technical subject. The student teacher would train in the academic field.

A post 'A' Level (Grade 13) Two Year Diploma in Education (Secondary) -this model was for those candidates recruited with 'A' Level passes to train as academic secondary school teachers over a two-year period. The student teachers in this academic programme would be required to choose a technical area of specialisation and one academic subject.

In the current study the researcher targeted the post 'O' Level (Grade 11) student teachers on the three-year model, since this group was on a similar model to the other groups in the other three teachers' colleges under study who had similar entry requirements, although these student teachers focused on technical subjects.

The core values of College One were embedded in their vision and mission which were about professionalism, accountability, integrity, teamwork, innovation, *Unhu/ubuntu*, creativity, multicultural tolerance and entrepreneurship. The entrepreneurial skills linked with transformative learning, where student teachers were inspired to be critical thinkers and solution seekers who contributed to the national economic development. Again, the teacher competences embraced in the College's core values enhanced transformative learning with the gaining of knowledge and skills. According to Mukeredzi (2018), a good teacher is morally upright, tolerant, a team player, trustworthy, resourceful, creative, responsible, accountable, sympathetic,

empathetic and entrepreneurial. Transformative learning could thus be realised when the pre-service teachers embraced such values during training.

There were four major departments in College One: Education, Professional and Contemporary Studies, Humanities and Natural Sciences. These are discussed below.

First, in the Education Department, student teachers studied compulsory courses of Psychology, Sociology and the Philosophy of Education. These courses exposed the pre-service teachers to the foundational and theoretical courses of teaching, including fundamental knowledge of learning theories for application in the classroom.

Second, in the Professional and Contemporary Studies Department, the pre-service teachers were exposed to lectures in areas such as Educational Media and Technology, Classroom Management, Research, and Classroom Communication. The student teachers also studied National Strategic Studies and Health and Life Skills Education, so as to expose them to the country's history and empower them with critical thinking skills.

Third, in the Humanities Department, the courses aimed at training student teachers to be initiating, action-oriented people. They studied Commercial Subjects, Physical Education and Sport, and Geography and Environmental Studies. One of the goals of transformative learning was to integrate all learning into action, and the students in this college were empowered to be agents of social change.

Fourth, the Natural Sciences Department offered modules in Science and Mathematics aimed at producing knowledgeable and competent teachers who would teach and apply scientific and mathematical principles for sustainable socio-economic transformation and national development.

Against this backdrop, supporting student teachers in these departments and exposing them to gaining new knowledge and skills promoted their transformative learning. The acquisition of new knowledge and skills aligned to Phase Seven of Mezirow's Transformative Learning Theory (2012). Furthermore, critical thinking fostered across the different modules was aligned to Phase Three of Mezirow's Transformative Learning Theory Mezirow (2012), which called for critical thinking skills as student teachers took responsibility for and directed their learning. According to Barth et al. (2007) indicates the students in this college were engaged in meaningful learning



and they did so in a self-regulated and self-directed manner, thus promoting transformative learning.

College One was conveniently located and as alluded to above, the only technical teachers' college in the country. The majority of the staff lived off campus and commuted to work every day because of the limited on-campus accommodation. However, the Principal, Vice Principal, Dean of Students and a few members of the staff were resident on campus, which created a friendly and secure atmosphere for the student teachers. On-campus staff accommodation offered a form of buttress to the pre-service teachers' transformative learning as on-the-spot guidance and support was readily available when needed, and this also ensured more student teachers' involvement in the college activities (Turley and Wodtke 2010).

There was also an institutional clinic that catered for student teachers and staff. This student support service enhanced transformative learning as students could easily access health care without losing too much study time.

The college had an excellent infrastructure, with well-equipped practical subject workshops and laboratories, all which supported students' transformative learning. Adequate provision of physical infrastructure and resources influences student achievement and consequently transformative learning (Amsterdam 2013). All these resources were significant forms of support for promoting transformative learning.

College One was supportive of pre-service teachers' transformative learning in a number of ways. The curriculum was broad and encompassed both academic and technical subjects. The college environment was conducive to this type of learning as student support included health care and on-the-spot assistance. There was adequate infrastructure and learning resources, as well as qualified staff. The next section discusses College Two.

#### ***5.4.2 College two***

As alluded to earlier, College Two was a private primary teachers' training college which was run by the Catholic Diocese. The total enrolment was 2980 students. Approximately 1200 first and 580 third year students were on campus and 1200 were out on TP at the time of the study. The college had a staff compliment of 53 lecturers and 90 professional staff. The student to

lecturer ratio was 1:56. The Vice Principal lamented about being under staffed, pointing out that lecturer positions should have numbered 80, except the government had frozen posts.

Understaffing acted against student teachers' transformative learning as staff carried heavy loads and were apparently not be able to offer much individual student attention. The lecturer to student ratio was high in comparison to that of College One, which only had a ratio of 1:32.

Compared to College One, College Two was a smaller college with less student enrolments as well as a lower staff compliment. The enrolment of new students was bi-annual: approximately 600 students per intake. This meant that they enrolled their intakes in January/February and in May/June or August/September.

All 53 lecturers held a minimum of a Masters' Degree and among them, three were reading for doctoral degrees. Lee (2018) highlights that highly qualified lecturers are likely to expand student teachers' desire to learn and succeed, thus promoting transformative learning. In the same vein professional development was a step in the right direction for the lecturers, since this had implications for classroom practice (Mukeredzi 2016). A professionally competent lecturer positively influences student teachers' transformative learning, given that a lecturer with strong pedagogical content knowledge understands how students construct knowledge and acquire skills, develop habits of the mind and develop positive dispositions towards learning (Koehler 2011). Consequently, student teachers' transformative learning will be enhanced.

While College Two was smaller than College One in terms of enrolment and staff compliment, this was a big mission centre which had other units apart from the teacher training sector, as will be explained later. The college offered ECD and a Junior Course at diploma level. The teacher education programme started in 1963 at a different site which was later turned into a Catholic high school, 50 kilometres away in the same province. In the same year the college moved to the current site, which had been established in 1951 by a Reverend Priest of the Bethlehem Missionary Society (SMB) and was used for evangelisation. In 1982 the college became an associate college of the University of Zimbabwe.

Whereas College One was located in an upmarket residential suburb in the capital city of Zimbabwe, College Two, the Catholic Church run institution, was located approximately 30 kilometres to the South of the nearest city. The strip road leading to this college which had been tarred was at the time of this research badly potholed and rugged, reflecting the nature of nearly

all the roads in Zimbabwe. The road was serviced by popularly known ‘*mushikashika*’ – small cars which ferried passengers to and from town. Like most public transport, a disturbing feature was that the ‘*mushikashikas*’ only left the college or town when they were full, and this was the only form of public transport on this road.

About 15 lecturers commuted to college on a daily basis, which might have created challenges as they probably left college earlier and/or arrived later than the stipulated start time due to the transport challenges explained above. On the poor state of roads, the Vice Principal commented that attempts had been made by the Rural District Development Fund to resuscitate the road but no progress had been noted. “*Each time, reports said that money for the road repair had been looted*” he said.

The college was located in a rural setting on a farm, surrounded by villages. Some participants in this study who were non-resident on campus resided in these villages. The college was electrified, but used borehole water. Darling-Hammond *et al.* (2013); and Santiago Ortiz-Correa, Resende Fihlo and Dinar (2015) state that safe water enhances the cognitive development of students, thereby improving their memory, leading to better achievement and consequently promoting transformative learning. However, the borehole water at this college was reported as hard water due to its high mineral content, and was believed to be harmful when consumed. Contrary to this though, the local health technician was said to have always explained that: “*Hard water is medicinal since it provides the much-needed calcium and magnesium dietary needs*” Sengupta (2013). At the entrance to the college premises stood a big church, with an overbearing cross at its pinnacle. The church was very conspicuous and metaphorically this told the mission and motto of the college. The pre-service teachers were expected to be of sound moral behaviour, disciplined and religious. Resonating with Mezirow’s Transformative Learning Theory, the trainee teachers were expected to embrace both the physical and spiritual characteristics of the college and the study programme (Rarieya 2005; Dirkx 2012; Taylor and Snyder 2012). This environment thus promoted transformative learning. Despite the difference in religious stance with College One, this college’s vision was almost the same. It was focused on producing competent, committed, patriotic and professional teachers. College Two’s mission statement added a religious dimension; that the student teachers were to emulate Jesus Christ in their teaching career. Literature surveyed (Charaniya 2012; Dirkx

2012) acknowledges that transformative learning can begin when learners' cultural and spiritual identities are challenged by disorienting dilemmas. Learning at a Catholic college was likely to have critically challenged non-Catholic student teachers' previous beliefs and attitudes about their religious orientations. The student teachers had to decide whether or not to make a paradigm shift or to maintain their habitual ways. Piercy (2013) indicates that the diversity of perspectives among adult learners within a given context serves to provide differing opinions that enrich the learning experience for everyone. Transformative learning was thus likely to start occurring at this point if students changed their perspectives.

The college motto embedded in the mission statement in Latin, read, '*Ars Scientia et Ministerium*', meaning 'skills, knowledge and service'. The college was one of the arms of Catholic evangelisation. The vision of the college was to be the preferred producer of quality Early Childhood Development (ECD) and General Course Teachers through best practices in the provision, utilisation and management of human and material resources (College Two Handbook 2016). This vision complimented the national vision which aimed at producing quality teachers who were internationally recognised. College One and College Two thus shared almost the same vision.

College Two's curriculum differed in some aspects from those of College One. The difference emanated from the type of teachers trained: College Two trained primary school teachers, while College One trained technical secondary school teachers. However, like in College One, College Two had two core-subjects studied by every student. First was Professional Studies, where the student teachers learnt the 'what' and 'how' of the profession, including professional ethics. Second, was the Theory and Practice of Education which exposed student teachers to professional foundation courses, for example educational psychology where student teachers would be exposed to different theories of learning vital for their classroom practice. The third area was the Academic Study, where student teachers selected an area of specialisation, either the Junior or ECD Course.

Just as in College One, the student teachers in College Two acquired knowledge and skills. This is Stage Seven of Mezirow's Transformative Learning Theory, which consequently promoted their transformative learning. In addition, the college curriculum offered new subjects: Professional Studies, and Theory and Practice of Education and Humanities. The expansion of

knowledge through the acquisition of new knowledge enhanced the pre-service teachers' transformative learning (Mezirow 2012). The curriculum in College Two also promoted innovative, initiating and critical thinkers who would organise and plan their lives. This resonates with Mezirow's Phase Three, which is about critical thinking and assessment of assumptions, which is at the core of transformative learning (Mezirow 2012).

The implication drawn from this was that the curricula in these colleges, which trained student teachers in a variety of disciplines which were also applicable in real life situations, promoted transformative learning. Surveyed literature by (Roach, Tilley and Mitchell 2018) highlights the importance of providing students with challenging real-world learning experiences. Student teachers' engagement in what was of relevance, of value and was authentic promoted their transformative learning.

Besides College Two and the mission itself, the other units on the campus comprised of a high school for Forms One to Four (Grade 8 to 11), a primary school and a clinic. Unlike at College One where the college clinic only served the students and staff, at College Two the clinic served both the college and its surrounding rural community. Haworth and Jones (2019) point out that healthy minds learn better and achieve greater success. As such, the student teachers' health was likely to have enhanced their transformative learning as medical care was always close at hand. In spite of their various functions though, the core business of these mission units was to evangelise. The Vice Principal also commented:

*The goal of a Catholic education is to place Christ in all that we do, and then we are enabled to understand that the world which we live in is geared for the promotion of human dignity and the common good. Students are encouraged to recognise Christ in themselves and others, hence the motto, Ars Scientia et Ministerium-skills, knowledge and service reflecting the life of Christ.*

The college was considered as the 'big brother' to the high school, primary school and clinic and therefore subsidised different functions carried out at the mission. The family spirit inculcated in each unit was evident, even in the college, where a calm business-like atmosphere prevailed which was likely to have contributed to the student teacher's transformative learning. The students were courteous and hospitable, which communicated the family spirit that was exercised at this college. The intentions were that after training, the teachers would meet the 21<sup>st</sup> century

employer's expectations, that of transcending teaching competencies by possessing additional soft skills such as empathy and compassion (Ciobanu 2017). As stated by Hodges and Burchell (2003:19), "employers want 'well-rounded' graduates with a broad range of competencies".

The major difference noted between College Two and College One related to religious practices, which included church services like Mass. All student teachers, Catholic and non-Catholic, were expected to attend Mass daily at 6:30 am as this was regarded as vital for promoting social and Catholic cohesion. The gentle pressure to attend daily Mass for non-Catholics or non-religious student teachers was likely to have presented a disorienting dilemma, which echoed Mezirow's Phase One of the Transformative Learning Theory (Mezirow 2012). The way students are treated in school can trigger a social identity threat. In this case, religious conflict as a type of disorienting dilemma was likely to have either triggered or impeded transformative learning. However, the values that were likely to have been inculcated among the student teachers right from the beginning of their training probably encouraged spiritual development, which is an important catalyst of transformative learning (Dirkx 2012).

In terms of infrastructure, College Two had a small library which was apparently an uncomfortable venue for studying, especially during the hot season. The library was built in 1957 when the college was still enrolling small numbers of students, and no infrastructural expansions or renovations had been carried out, notwithstanding the massification in the education system which had drastically swelled the number of enrolments over the years. This was likely to have affected transformative learning experiences due to the limited reading space. Oliveira (2018) indicates that as a physical place, the library plays an important role in today's social and educational patterns of learning, teaching and research, thus influencing the academic achievement of learners, and in this case promoting their transformative learning. In contrast, College One had spacious reading venues and this was linked to surveyed literature (Webster 2010: 33) which highlights that the library is a "key provider of learning space on campus". Again, unlike in College One where almost every student teacher had access to computers in spacious computer labs, College Two had approximately 50 computers to service nearly 1200 pre-service teachers on campus. Efforts were, however, made to encourage pre-service teachers to bring their own laptops for research purposes, hence transformative learning was promoted.

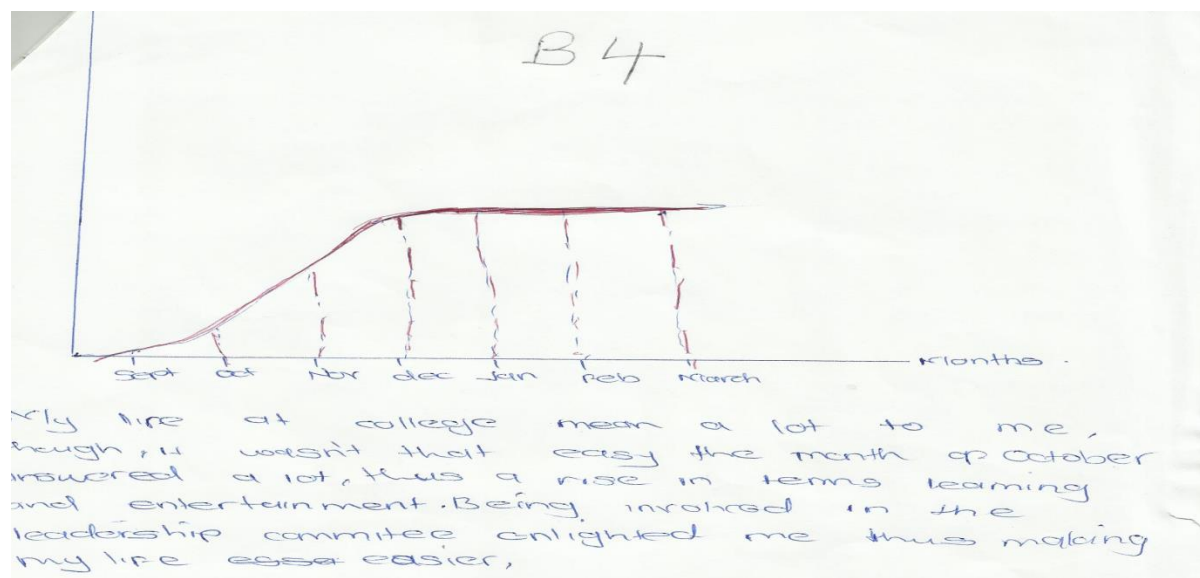
Like College One, College Two had adequate numbers of competent and qualified library staff who provided a pool of support for student teachers' transformative learning.

In addition, there were two lecture halls but due to the large numbers enrolled biannually, the lecture spaces were no longer adequate. Each of the two enrolments numbered approximately 600, making a total of approximately 1200 first year student teachers each year. The core-modules, Professional Studies and Professional Foundations, were delivered as mass lectures to accommodate the large number of students per intake, which meant that groups of approximately 600 student teachers per intake had to be accommodated in small lecture venues. The problem was that these venues could only comfortably accommodate about 500 students at a time.

Complaining about the heat during lectures, Participant S5 said: *"There is no adequate space here. During this heat, we are squashed like rats in a hole!"* At the time of data generation, the on-campus student population (first year and third year students) was about 1780 (1200 first years and 580 third years) and as such the lecture halls were far too small, as each of the two groups had approximately 600 students. Alternative arrangements thus needed to be made, either by expansion of the venues or by dividing the student teachers into smaller groups. The locating of that many students into inadequate spaces meant that the venues were severely overcrowded, which negatively affected the students' transformative learning. The researcher asked the Vice Principal whether there were plans to build bigger lecture theatres, and his answer was not definite. This indicated that any expansion was probably in the distant future, after completion of the college dining hall and ECD centre which were already under construction.

The college also prided itself on the state-of-the art hostel that had just been officially opened by His Lordship, the Bishop of the Catholic Diocese. Student accommodation included this new double storey female hostel with a holding capacity of 500 students. On-campus accommodation of student teachers enhanced transformative learning as they could discuss assignments there, even after lecture times. However, a male hostel which accommodated 300 students was virtually empty as there were fewer male students. While enrolments were heavily tilted towards females, teaching seemed to have lost its lustre with the majority of male folk who had become uninterested in primary school teaching, preferring instead to venture into neighbouring countries for work.

The college also offered a supportive environment in terms of extra-curricular activities: sporting activities, ICT services; HIV/AIDS support services, counselling services, study tours and participation in outreach programmes. All these offered the pre-service teachers forms of support which further fostered their transformative learning. Participant S2, on her continuum drawing, wrote:



In addition, student structures like the Student Representative Council bridged the gap between the college administration and staff and between students, as well as other activities and clubs also enhanced the students' transformative learning at this college. The supportive arms of the college were necessary for the pre-service teachers' academic and professional growth and transformation. Further, an Econet Booster at the college offered easy access to the internet so the pre-service teachers could research and communicate with the wider world as they could easily access Wi-Fi and other ICT processes without experiencing network problems. All of this promoted their transformative learning. According to Mezirow (2000), transformative learning is rooted in the way individuals (in this case the pre-service teachers) communicate.

Communication was thus a necessary component of these students' transformative learning and it promoted higher order thinking. All of these supportive aspects within the college learning environment enhanced transformative learning (Arnold 2018).

College Two promoted transformative learning through the provision of teaching curricula which met the needs of the 21st century. The student teachers at this college seemingly experienced



holistic transformative learning embracing the body, mind and the spirit. The forms of support available to them were: lecturers, religious services, a health clinic, clean water, adequate accommodation, counselling services, and out of classroom activities, all which seemingly facilitated their transformative learning. However, the library and lecture halls were too small to comfortably accommodate such large numbers, and this seemingly inhibited the pre-service teachers' transformative learning to some degree.

#### ***5.4.3 College three***

College Three was in some ways similar to College Two, given that it was also run by a responsible authority. At the time of data generation, 1110 first year and 500 third year students were on campus. A further 1300 second year students were on TP, making a total enrolment of 2910 student teachers. Given that there were 80 lecturers, this meant that the lecturer to student ratio was 1:36. As Fry, Ketteridge and Marshall (2008) put it; this reasonable ratio made it possible for the lecturers to focus more on the needs of individual student teachers thereby promoting their transformative learning.

This private college owned by the Reformed Church in Zimbabwe (RCZ) also had an enduring history of evangelism. It was approximately 25 kilometres North East of the closest city. Its proximity to the Great Zimbabwe Monuments made it easily accessible through well maintained roads. There was a good tarred road and the institution and the college had good facilities in terms of water and electricity. At the time of data generation, the ambience of the college was inviting, however, management was not very keen to open up about the institution's data, unlike Colleges One and Two where the researcher obtained data without effort. The researcher elicited bits and pieces of data from the Vice Principal in addition to the data which she generated from the participants.

Within the mission station was a big hospital which housed the national eye-unit and a referral centre, and these made the place very popular. In addition, there was a national primary school for the deaf, a pre-school, a primary school, and a big high school. Like College One, staff houses were spread around the mission, and the Principal's house was very close to the college. Despite its proximity to the city, most of the staff members resided at the institution. This communicated the availability of accommodation and perhaps a liveable environment. These

staff offered a supportive learning environment and on-the-spot assistance to student teachers in case they needed it outside of working hours, as all staff were available.

The mission, vision and values of the institution were almost similar to those of the other colleges, since they were derived from the MHTESTD's mission statement. The teacher attributes were encompassed in the values, such as: *unhu/ubuntu*/integrity, Christianity, professionalism, patriotism and innovation. Mezirow's Transformative Learning Theory Mezirow (2012) emphasises the goal of learning as the production of creative and critical thinkers. This was captured in the vision of the college, with its student teachers hoping that by the end of the training programme they would have transformed. Literature surveyed (Guthrie 2004) indicates that pre-service teachers are always engaged in transformative learning, where they challenge and critically evaluate their values and beliefs, to become conscious of their biases and to acquire ethical reasoning. This was the vision of College Three - that its student teachers be 'innovative and competent' - and these aspects facilitated transformative learning. Students enrolling in this teachers' college also had to have a minimum 'O' Level education, just as in the other teachers' training colleges in Zimbabwe, and as alluded to above and in Chapter One. However, as reflected in the students' profiles at the end of this chapter, most of the students also had additional qualifications, particularly those who had completed their 'O' levels many years before.

One of the HODs commented that in spite of their academic qualifications, an estimated 300 of the 600 students were admitted on the strength of their exemplary participation in Dutch Reformed religious activities in their respective parishes. The HOD who was assigned by the Vice Principal to assist the researcher indicated that the student teachers' religious participation was among the aspects examined during selection interviews. The HOD further stated that out of the 80 lecturers, 60 were church members with a reputable track record in church ministry. He went on to say: *"In fact, as a requirement for admission prospective students are expected to be model evangelists"*. The curriculum of the college was the same as that of College Two which trained primary school teachers, either at the Junior or Early Childhood Development level. Like College Two, this college also stressed spirituality, which promoted transformative learning.

Resource provision was generally adequate. The library was well stocked and computerised, but the space appeared limited because of the large number of students enrolled and using the

facility; also witnessed in College Two above. The student enrolment at College Three was bi-annual, just as in all the colleges under study. As in the case of College Two above, College Three had limited mass teaching spaces due to the large enrolments without commensurate infrastructural expansion. The lecture rooms in the academic/main study area were, however, more adequate in this facility than the previous one, and the use of chalk boards during the lectures was long forgotten because they now used white boards. Sporting facilities were well provided for and there was a sporting arena which had been commissioned a week before the researcher's data generation visit. Relating all this to Mezirow's Transformative Learning Theory, infrastructural support was critical for promoting transformative learning. In terms of sporting facilities, Colleges One and Three apparently surpassed College Two. Surveyed literature by (Barret, Zhang and Barret 2015) indicates that students' performance is enhanced in schools with better physical learning environments. Adequate physical learning environments were evident at College Three.

From the discussion above, College Three provided teaching and learning support similar to that offered by Colleges One and Two, but was outstanding in its provision of staff accommodation. The student teachers' learning, a good road network, and the inclusion of the hospital and the schools were aspects of the college that were likely to have enhanced student teachers' transformative learning. The learning support tended to be negated to some degree, however, by the limited space in the library and in the mass lecture venues. Student teachers were said to practise inclusive education by taking some classes across the road in the school for the deaf. Like College Two, spirituality was at the centre of the student teachers' transformative learning on this campus. Sporting activities also contributed to an environment conducive to transformative learning.

#### ***5.4.4 College four***

The last, but not least, of the research sites was College Four, which was another state run and owned institution located in the Eastern Highlands, only a few steps from the main road to the Eastern Border City. The student population was about 2845, with 1750 on campus and 1095 out on TP. There were 90 lecturers and that meant that the lecturer-student ratio was 1:31 thus contributing a better learning environment which promoted transformative learning experiences for the student teachers. Being apparently one of the oldest, largest, and most comprehensive

non-graduate secondary school teacher training institutions in Zimbabwe, College Four was perennially ranked among the nation's best. It opened its doors in 1956 for teacher education and started teaching the Primary Teachers Lower (PTL) course. This was a two-year in-service course for the PTL teachers who had done an external Junior Certificate, which meant that they had gone as far as Form Two. Those who completed this course were promoted to the Primary Teachers Higher (PTH) certificate. This saw the PTH course running parallel with the PTL course from 1957 to 1963. This was meant to improve teacher quality (Tarusikirwa 2016). In 1963 the Headmasters' course was introduced to develop their leadership skills, and five years down the line the T2 Teacher Training Model was also introduced. In 1972 the T2 and T4 courses were introduced at College Four. While T2 was meant to train secondary school teachers, T4 was a special programme for training female teachers to augment the shortage of female teachers in the lower grades in primary schools. The T4 programme lasted for only two years.

Before independence in 1980, secondary education was divided into F1 and F2 schools (Bergmann 2003). F1 was the generic secondary school system meant for a few academically gifted children, while the F2 was a practically oriented education system for the majority of learners who were deemed incapable of managing in the academic F1 system. Against this background College Four trained both F1 and F2 secondary school teachers, before the segregatory F2 system was phased out in 1975.

The F2 curriculum was segregatory by gender. This meant that certain subjects were segregated by gender; with females taught Needlework, Domestic Science and practicals, as opposed to Road Engineering, Tree Planting, Agriculture and Manual Training subjects for men (Tarusikirwa 2016). In 1980 the college was conferred associateship status with the University of Zimbabwe DTE.

Primary teacher training was phased out in 1991 when the course was transferred to a newly established college, also in the same city. At the time of this study, College Four produced secondary school teachers through two programmes running concurrently: a two-year programme for Advanced Level (Grade 13) graduates, where student teachers were on TP for one year and in campus for one year. The conventional three-year programme was pursued by 'O' Level certificate graduates, where student teachers spent one year in college studying theory,

one year out on TP, and then the final year back in college. The college had one of the biggest libraries in comparison to the other three colleges studied, and was stocked with more than 30 000 books. In 2005 the college introduced compulsory Computer Studies to equip all of the student teachers with basic computer literacy. According to Contomanolis *et al.* (2015), today's students have very sophisticated expectations of the way in which technology facilitates their campus experience. The use of technology promoted transformative learning in this college by expanding the student teachers' knowledge base and keeping them engaged.

In comparison to the other three colleges discussed above, College Four was the leader in terms of a spacious, well equipped computer laboratory. Their lecture theatre was big enough to accommodate approximately 1250 first year students comfortably during the core module courses: Theory of Education and Professional Studies mass lectures. The lecturers were housed in beautiful and well-furnished offices. The specialisation lecture rooms had adequate teaching and learning space. All these forms of support around teaching and learning resource provision by the college community promoted transformative learning.

In terms of discipline, the students were required to adhere to the rules and regulations of the college. Their general conduct, appearance and deportment were to be exemplary of the teaching profession. The objective of these rules, regulations and code of conduct was not to restrict the personal liberties of students, but to ensure the existence of an enabling environment for the convenience of all to meet the requirements of the education system, and this also promoted transformative learning. Students were thus called upon to display adult understanding and behaviour. Literature (Darling-Hammond *et al.* 2020) indicates that a growth mindset enables students to engage more productively in academic pursuits and to persevere in the face of challenges. Hence, the college apparently offered an all-encompassing transformative learning environment that used educative and restorative approaches to support the student teachers' behaviour, nurturing them into professionals.

Further, lecture attendance was compulsory and lack of punctuality for and absenteeism from any college activity was enforced by administering a fine of \$10, just like in the other colleges. These penalties were a way of persuading the student teachers to focus on learning, thus ensuring transformative learning. Assessment was in the form of assignments, tests and projects, and failure to submit any piece of work attracted a mark of zero. This ensured that the students

assumed responsibility for their own learning. Participant S4 said: *“The issue about assessment is a serious issue. Failure to submit or plagiarise written work attracts a zero, and one may be called to the Academic Board to present reasons for breaching college rules on academic issues”*. The majority of the student teachers commented that they were very serious when it came to submitting course work and writing examinations. The student teachers were apparently thus geared for success in their programmes, and this attitude was commensurate with transformative learning.

The college’s operations were guided by its shared vision, mission, goals and values, which covered the development of globally competitive secondary school teachers who will be change agents to drive the growth of the economy of Zimbabwe. The selected teacher training colleges shared almost the same values of patriotism, creativity, integrity, entrepreneurship, professionalism, innovativeness, industry and inclusiveness. Creativity and innovativeness are core components of transformative learning.

The student teachers’ halls of residence were supportive of their transformative learning as they were spacious enough for students to relax or hold discussions in the recreational rooms within the resident halls. This resonated with Darling-Hammond *et al.* (2020), who indicate that physically and psychologically safe environments enhance transformative learning. The college also enrolled non-resident students who resided in the nearby suburbs. At one time the college trained Namibian and Mozambican nationals as secondary school teachers; hence fulfilling the aspects of international and multicultural tolerance entrenched in its core values. Similar to other colleges, there was also an institutional clinic that serviced student teachers and the college community.

The forms of support, which included the adequate teaching and learning resources in this college, were fertile ground for transformative learning.

As seen in the discussion above, College Four promoted and supported pre-service teachers’ transformative learning with the provision of a spacious and well-stocked library, a well-equipped computer laboratory, spacious and well-lit lecture rooms, qualified staff, and adequate halls of residence. The aspect of discipline was emphasised by enforcing lecture attendance and adherence to assignment submission dates, thus promoting transformative learning.

In conclusion, this section of the chapter has discussed the four selected institutions under study, featuring their governance, enrolment, infrastructure and student support aspects that promoted transformative learning. The four colleges shared almost the same vision of promoting globally competitive teachers, which was in sync with the vision of the country. In order to achieve the vision, the colleges put in place a number of supportive systems that promoted transformative learning. Among them were the structure of their curricula, suitably qualified staff, in- and out-of classroom learning activities, physical support such as libraries, lecture halls, halls of residence, clinics and support in the use of technology. The four colleges emphasised discipline, punctuality, lecture attendance, dress code and assessments, all of which enhanced transformative learning.

Conspicuous were the similarities noted between the Secondary Technical Teachers' College One and the Generic Secondary Teachers' College Four. These two public institutions were conveniently located, and surrounded by good road networks. The availability of both learning and teaching resources was fertile ground for transformative learning. Both colleges' physical infrastructures in terms of libraries, lecture halls, halls of residence and health facilities were spacious and supportive of the pre-service teachers' transformative learning.

Comparatively, there were also similarities between the two privately owned Colleges Two and Three. The unique characteristic was that both emphasised adherence to their religious denominations. Evangelisation came first in whatever was done there, and during their first days of training the pre-service teachers found this to be a dilemma. These two colleges had not improved the capacity of their lecture theatres and libraries, despite their enormous expansion in enrolment patterns. While College Three was located in a peri-urban area, its environment typically depicted a rurality such as that of College Two, which was rurally based. The two colleges were surrounded by villages. In terms of student teachers' accommodation and counselling services, College Two was adequately and better provisioned than College Three. However, College Three was better resourced in terms of inclusive education, staff accommodation and extra-curricular provisions.

On the whole, the public colleges (One and Four) were better positioned to enhance transformative learning when compared to the private church-owned colleges in terms of teaching and learning provisions such as lecture halls, libraries and computers. In terms of fees,

the public colleges which obtained government subsidies charged lower fees than the private colleges, which relied solely on student teachers' fees. These fees had direct implications on the running of the institutions. On a positive note, Colleges Two and Three nurtured the spiritual growth of student teachers, thus promoting their transformative learning.

Having discussed the research settings from where data were generated, the next section presents the participants' biographical data.

### 5.5 Participants' biographical data

The participants in this study were first year student teachers in the four selected teacher training colleges. In order to generate the initial data, these first-year students were interviewed at the commencement of their training to establish the nature of their transformative learning experiences as they transitioned from high school into college. Towards the end of their first year, further data were generated from the same group of participants to capture their transformative learning experiences throughout the year and also to establish whether there had been any shifts in their attitudes and views towards teaching. The biographical details of the participants in relation to gender, age range, highest academic qualification, number of years after obtaining their 'O' Level education and work experience are reflected in Tables 5.1 to 5.4, by college.

**Table 5.1: College one**

Source: Researcher (2019)

No	Gender	Age Range	Highest Academic Qualification	Years after 'O' Level	Work Experience (Years)	Vocationally (Voc) Interested/ Disinterested
1	Female	31-35	'O' Level	13	8	Voc Interested
2	Male	Over 35	'A' Level	17	10	Voc interested
3	Female	26-30	'A' Level	6	5	Voc Interested
4	Male	Over 35	'O' Level	22	9	Voc Interested
5	Female	Over 35	'O' Level	20	12	Voc Interested
6	Female	Over 35	'O' Level	20	7	Voc Disinterested
7	Male	Over 35	'O' Level	25	15	Voc Disinterested
8	Female	Over 35	'A' Level	22	10	Voc Disinterested



9	Female	31-35	‘O’ Level	17	6	Voc Disinterested
10	Male	Over 35	‘A’ Level	17	8	Voc Disinterested

In Table 5.1 six participants who formed the majority were women. In terms of age, the majority of the participants (9) were mature men and women above 30 years of age. Only one female was between twenty-six and thirty years of age. In terms of qualifications, six (4 female students and 2 male students) participants had an ‘O’ Level education, while two male students and two female students had achieved an ‘A’ Level education. One male vocationally disinterested participant had twenty-five years post his ‘O’ Level attainment before enrolment in the college, the longest period of all the participants. A female vocationally interested participant had the least number of years (6) since completing her ‘O’ Level education. Having taken 25 years before enrolling in the college implied that the vocationally disinterested student had pursued other profession/s before settling on teaching. The average number of years taken before joining the teaching profession was 17 years. The vocationally disinterested participants were all above 30 years of age and had spent a mean of 20 years before joining teacher education, probably trying to find something else or something better to do. One female vocationally interested participant was below the age of 30. The average number of years of work experience was nine years. On the whole, the female participants outnumbered the men.

**Table 5.2: College two**

Source: Researcher (2019)

No	Gender	Age Range	Highest Academic Qualification	Years after ‘O’ Level	Work Experience (Years)	Vocationally Interested/ Disinterested
1	Female	31-35	‘O’ Level	13	7	Voc Interested
2	Female	31-35	‘O’ Level	13	6	Voc Interested
3	Female	Over 35	‘A’ Level	17	10	Voc Interested
4	Male	Over 35	‘A’ level	20	10	Voc Interested
5	Male	Over 35	‘O’ Level	21	14	Voc Interested
6	Female	31-35	‘A’ Level	13	9	Voc Disinterested
7	Female	Over 35	‘O’ Level	22	18	Voc Disinterested
8	Male	Over 35	‘O’ Level	22	15	Voc Disinterested

9	Female	Over 35	‘O’ Level	22	15	Voc Disinterested
10	Female	Over 35	‘A’ Level	17	6	Voc Disinterested

A striking feature at College Two was that all ten participants were above the age of thirty-one, while College One had at least one participant between twenty-six to thirty years of age. There were more female than male participants in this college as well. Four female students had ‘O’ Level qualifications and three had ‘A’ Level qualifications, while two male students had an ‘O’ Level qualification and one had an ‘A’ Level qualification. Similar to College One, the vocationally disinterested participants were all above thirty years of age and had more work experience than the vocationally interested, which could imply that they had initially decided to try teaching as a career. Five participants had completed their ‘O’ Level studies more than twenty years earlier and the average number of years after ‘O’ Level attainment was eighteen years. The vocationally interested category had more participants with ‘O’ Level qualifications. This could be due to the fact that they knew what they wanted as a career so did not bother about an ‘A’ level qualification, and simply waited to enter teacher education. It could also be that their ‘O’ Level results were not good enough for them to be considered for an ‘A’ Level education. One male vocationally disinterested participant worked for eighteen years before joining teaching. However, two female participants in this category had worked for only six years, giving an average work experience of eleven years.

**Table 5.3: College three**

Source: Researcher (2019)

No	Gender	Age Range	Highest Academic Qualification	Years after ‘O’ Level	Work Experience (Years)	Vocationally Interested/Disinterested
1	Female	26-30	‘O’ Level	12	6	Voc Interested
2	Female	31-35	‘O’ Level	17	7	Voc Interested
3	Male	31-35	‘O’ Level	17	8	Voc Interested
4	Male	Over 35	‘A’ Level	26	12	Voc Interested
5	Female	Over 35	‘A’ Level	24	15	Voc Interested
6	Male	Over 35	‘O’ Level	20	14	Voc Disinterested
7	Male	31-35	‘A’ Level	17	7	Voc Disinterested

8	Female	26-30	‘A’ Level	12	6	Voc Disinterested
9	Female	31-35	‘O’ Level	17	6	Voc Disinterested
10	Female	Over 35	‘O’ Level	17	12	Voc Disinterested

The data in College Three showed that the majority of the participants were mature - above thirty-one years of age - which was more or less similar to College One. College One had only one participant aged between twenty-six and thirty years, but this college had two who were between twenty-six and thirty years of age. Most of those who were above 30 years of age generally had 5 ‘O’ Level achievements from more than 1 sitting. Six participants had an ‘O’ Level qualification and two vocationally interested and two vocationally disinterested participants had ‘A’ Level qualifications. Similarly, six were female students and four were male students. Two participants had gone through their ‘O’ Level exams twenty-six years previously. The vocationally interested and vocationally disinterested participants had taken almost 17 years to join the teaching profession after completing their ‘O’ Level exams. One vocationally interested female participant had work experience of fifteen years before joining the teaching profession, while the average number of years of work experience was nine.

**Table 5.4: College four**

Source: Researcher (2019)

No	Gender	Age Range	Highest Academic Qualification	Years after ‘O’ level	Work Experience (Years)	Vocationally Interested/ Disinterested
1	Male	Over 35	‘A’ Level	26	10	Voc Interested
2	Male	26-30	‘A’ Level	12	6	Voc Interested
3	Male	Over 35	‘O’ Level	26	13	Voc Interested
4	Female	26-30	‘O’ Level	12	6	Voc Interested
5	Female	Over 35	‘A’ Level	17	15	Voc Interested
6	Female	31-35	‘A’ Level	13	8	Voc Disinterested
7	Female	31-35	‘A’ Level	13	7	Voc Disinterested
8	Male	Over 35	‘A’ Level	20	15	Voc Disinterested
9	Female	Over 35	‘A’ Level	20	14	Voc Disinterested
10	Female	Over 35	‘A’ Level	17	12	Voc Disinterested

The participants in College Four were six female students and four male students. The majority of them were above 31 years of age, with 2 in the 26-30 age range. Eight participants had 'A' Level qualifications and the remaining two had 'O' Level qualifications. Of the eight, five vocationally disinterested participants had 'A' Level qualifications. As entry into teacher education in Zimbabwe at the time required 'O' Level passes, progression to the 'A' Level by the vocationally disinterested participants further implied that these students had no initial intention of going into teaching. Two vocationally interested participants had the highest number of years (26) after completing their 'O' Level exams. What was surprising was that they had waited so long to join the profession, considering their passion for teaching, and it was not clear why they waited that long. From the data, all the participants had taken more than ten years after completing their 'O' Level exams before enrolling in teacher training, with seventeen years as the average number of years taken to do so. In terms of work experience, two participants had worked for fifteen years before joining the teaching profession, while two participants had only waited for six years (the least number of years) to do so. The average number of years of work experience was ten.

In the discussion of the participants' biographical data above, their ages were seen to be quite similar, with the majority falling within the 30 years or more category across all 4 colleges, and a mean age of 33. Gender, as highlighted in Chapter Four, was tilted towards female students in all colleges, with the highest number in College Two which had seven women and three men. Twenty participants in the four colleges were 'O' Level holders and a similar number was seen for those who went through the 'A' Level of education. The bulk of the 'A' Level holders were in College Four, where eight out of ten participants had 'A' Level qualifications. Furthermore, 11 vocationally disinterested participants had gone through 'A' Level studies, while 9 vocationally interested participants had 'A' Level qualifications. Consequently, nine vocationally disinterested participants had 'O' Level qualifications and eleven vocationally interested participants joined teaching with 'O' Level qualifications. Data across the colleges showed that the participants took an average of 15 years after completing their 'O' Level studies to join the teaching profession. Similarly, the participants spent an average of ten years working before joining teacher education.

### ***5.5.1 Period awaiting training***

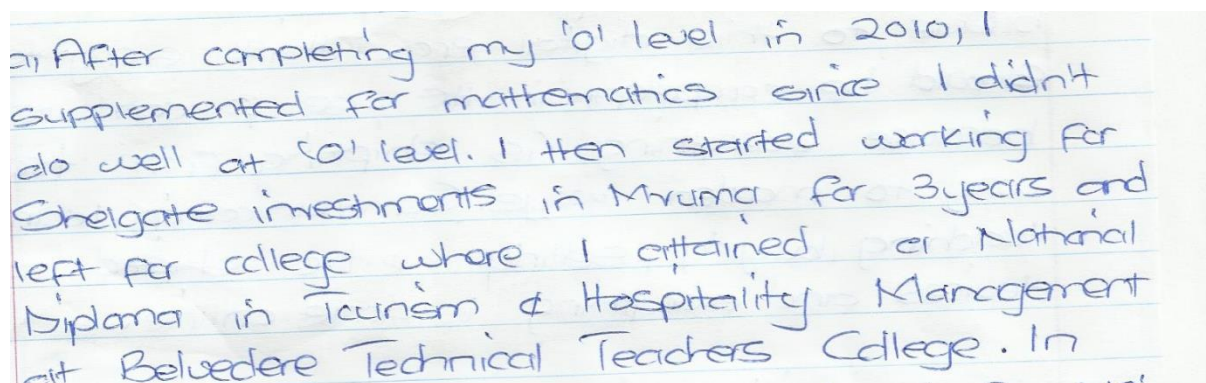
It emerged that these pre-service teachers were engaged in a variety of activities before they enrolled in college for teacher training.

The period awaiting training in this study was the time when the pre-service teachers were waiting to gain entry into teacher education. Findings showed that the participants had spent an average of more than ten years being involved in different activities. While some supplemented their failed 'O' Level examinations during this time, others joined the world of work, and a few became cross border traders. The specific reasons are discussed below.

### ***5.5.2 Supplementing failed 'O' Level examinations***

In order to gain entry into teacher education, the Ministry required that candidates pass five 'O' Level subjects that included three core subjects - English, Mathematics and Science - and any two other subjects. The 12 participants who did not initially have full 'O' Level certificates used the period after the 'O' Level of study to supplement their failed examinations. The Zimbabwean 'O' Level is equivalent to Grade 11, where candidates write national examinations which determine whether or not they proceed to the 'A' Level (Grade 12 and 13).

This was explained by vocationally interested participant S2 at College Two during a Continuum Drawing discussion, when she said that:



a) After completing my 'O' level in 2010, I supplemented for mathematics since I didn't do well at 'O' level. I then started working for Shelgate investments in Mruma for 3 years and left for college where I attained a National Diploma in Tourism & Hospitality Management at Belvedere Technical Teachers College. In

Similarly, a vocationally interested participant S2 at College One had this to say during their individual interview:

*I finished 'O' Level in 2009 and got four subjects. I had to do Mathematics, but that was after I finished my A Level. I got three points, doing Geo, English Lit and Shona; two points in Shona and one point in English Literature.*

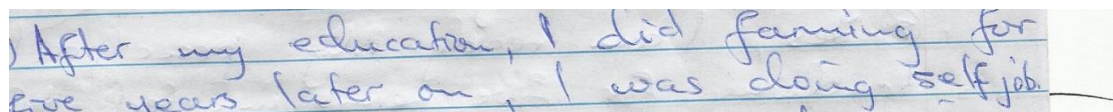
A vocationally interested participant, S3 at College Three, had a similar tale during an FGD: *"Because I did not have Mathematics... so I wrote my Mathematics and I passed. After that I decided to apply for teaching in 2016 and I got a place".* Similarly, another vocationally interested participant, S2 at College Two, had this to say during their individual interview: *"I completed my Ordinary Level in 2012. I managed to come up with two subjects. And then later on, I supplemented other three subjects to make them five".*

The responses above revealed that many students struggled to pass Mathematics. Mathematics gave the participants the leeway to proceed with further education, or they had to venture into the job market. Both the vocationally interested and the vocationally disinterested pre-service teachers had to supplement their initial Mathematics marks to obtain a complete certificate. Thus, the period awaiting training was advantageous to both groups. Their failing Mathematics was a dilemma which resulted in disorientation, which probably caused anger and anxiety. This disorienting dilemma that they faced before joining college gave them the confidence to face similar experiences and to adjust to the new college environment.

### ***5.5.3 Joined the world of work***

Other than supplementing failed subjects, ten participants who had five 'O' Level subjects joined the world of work in a variety of fields such as hairdressing, as exemplified by a vocationally interested participant, S 3 at College Two, during an FGD, when she said: *"My sister opened a salon for me. So, I was running a salon for about five years".* Another vocationally interested participant, S1 at College One, echoed the same sentiments during her individual interview when she said: *"I worked in the community as a community development worker".* The vocationally disinterested participant, S8 at College Three, commented: *"I started my own business. I was doing cell phone business, selling cell phones and cell phone accessories"* during their FGD.

During a continuum drawing discussion a vocationally disinterested participant S7, also at College One, had this say:



After my education, I did farming for five years later on, I was doing self job.

[SIC]

The economic downturn in the country had forced many people to resort to entrepreneurship. Related literature (Starace *et al.* 2017) indicates that during economic downturns the job market shrinks, with a high attrition rate and low chances for re-employment. The unemployment level had pushed these student teachers into looking for some sort of employment. This was evidenced by the following vocationally disinterested participant, S6 at College Three, who explained during their individual interview: *“I applied for temporary teaching at a private college, then I went to the place where I taught for about two to three months. I then quit and joined Econet as a brand ambassador”*.

The comment by participant S6 above portrayed their desperation in terms of looking for employment, and they took anything that came their way. Before joining the teacher training programme, the participants had worked as hair dressers, community development workers, vendors and temporary teachers. This working experience seemingly laid the foundation for their transformative learning after they joined the teacher training course. Spending more than ten years after completing their ‘O’ Level studies without anything meaningful to do provided an opportunity for self-reflection and self-questioning. In addition, the work experiences, which had a mean of ten years, were apparently also pre-cursors for transformative learning as the participants drew on their experiences gained to enhance their transformative learning. According to Mezirow’s Transformative Learning Theory, after self-examination and critical assessment of themselves, which are stages two and three of the Transformative Learning Theory, the student teachers had to find a way forward and move on (Stage 6) after carefully weighing their options.

#### **5.5.4 Cross border traders**

Some pre-service teachers were involved in cross border trading. This involved going to and from one country to another, for the purposes of buying and selling goods. It also emerged that eight of these student teachers sold their wares in countries such as South Africa and Zambia. This was experienced by both vocationally interested and disinterested pre-service teachers. For

example, the vocationally disinterested participant, S6 at College Four, explained during an FGD: *“In between 2002 and 2017, I have been in and out of the country. I have been living in and out of South Africa and in Zambia, where I would sell some wares”*. Similarly, the vocationally interested participant, S3 at College Two, during their individual interview, shared: *“I would cross the South African border illegally to buy and sell my wares in the form of artefacts, jerseys, cushion covers and mats”*.

It appears that the participants gained entrepreneurial skills, which they later brought to their teaching careers. These experiences most likely added to and enriched their transformative learning. Hassi (2016) reveals that entrepreneurship education has been found to enhance the intention to launch a business, as well as contribute to economic growth and job creation. These student teachers might have gained some training related to industriousness, creativity and innovativeness, qualities which were also vital for teaching and likely enhanced their transformative learning.

#### **5.5.5 Marriage**

Realisation while already at college that learning was a priority and not marriage influenced married pre-service teachers' transformative learning.

Four pre-service teachers also reported that they got married soon after completing their 'O' Level education. For example, the vocationally interested participant, S1 at College Two, revealed during the FGD: *“I got married in 2004, soon after completing my 'O' Level”*. Another vocationally interested participant, S3 at College Four, also said: *“I got married to my teacher soon after completing Form Four”*. The responses revealed that these participants married at a very young age, just after completing their 'O' Level studies, because the average age of 'O' Level pupils in Zimbabwe was 18.

This could have prevented them from going further with their education. Ikamari (2005) demonstrates that the effect of education on the timing of marriage relates very well to the development of value orientation and aspirations. Priority was given to personal fulfilment and not career development. After self-examination and critical assessment of their assumptions, the participants could have decided to join teaching. Having faced the dilemma of marrying at a young age, self-examination and deciding to venture into teaching could have given the pre-



service teachers the urge to work hard at college, therefore enhancing their transformative learning.

#### ***5.5.6 Failure to further education***

Four participants could not proceed with their education due to financial limitations. Another vocationally disinterested participant, S9 at College Two, had the following to say during the FGD: *“After I completed my ‘O’ Levels, I didn’t have the money to further my studies. I applied for Bachelor of Accounting at Chinhoyi University. I got the place. However, I could not proceed with my education because my funds were not enough”*.

The comments from the vocationally disinterested pre-service teacher showed that they could not proceed with education because of a lack of funds. As such, the teaching career came in as a handy alternative. Related literature (Mtika and Gates 2011) indicates that in Malawi, teacher education is often used to gain access to further education and is seen as a ladder or bridge to further career development.

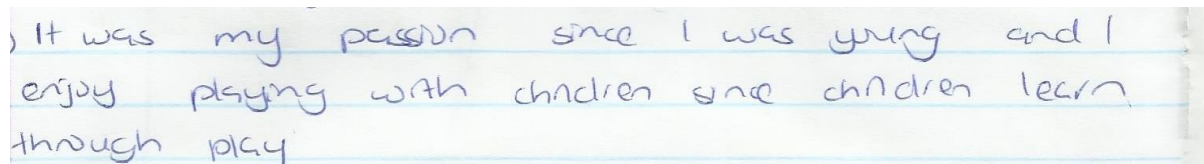
The findings above revealed that some participants engaged in a variety of activities, such as studying in other programmes, supplementing their failed ‘O’ Level examinations, working and getting married, before enrolling in the teacher training colleges. Those who could not proceed further with their studies for various reasons, for example a failure to raise the school fees required, were seemingly pushed into teaching as a last resort. The next section discusses the pre-service teachers’ motivations for joining the teaching career.

#### ***5.5.7 Reasons for joining the teaching profession***

The following section analyses the reasons why the student teachers in this study joined the teaching profession. There was an intricate relationship between the period awaiting training and their motivations for adopting teaching as a career. Serin (2017) indicates that non-passionate teachers affect their students’ success and achievement since there is a link between teacher commitment and student achievement. Hence, teacher motivation was crucial for transformative learning in this study.

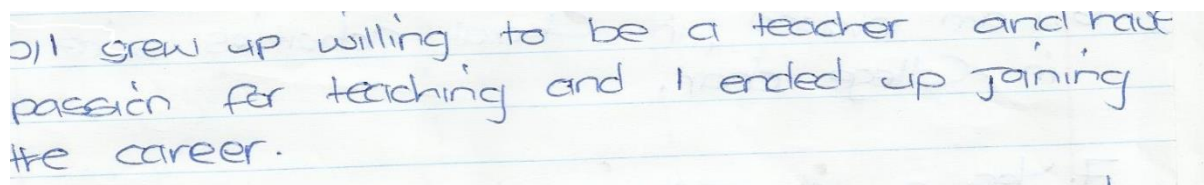
#### 5.5.7.1 Passion

Twenty participants who were vocationally interested in teaching commented on the passion they had for the teaching profession. Related literature by (Serin 2017) defines passion as guiding and a motivating element that emanates from emotional power. This intrinsic drive towards teaching was exemplified by the vocationally interested participant, S3 at College Two, who stated during a continuum drawing discussion that:



It was my passion since I was young and I enjoy playing with children and children learn through play

Another vocationally interested participant, S3 at College Four, said during an FGD: *“Teaching was my dream job since childhood”*. In addition to this, the vocationally interested pre-service teacher, S4 at College One, echoed similar sentiments during the continuum drawing when he said:



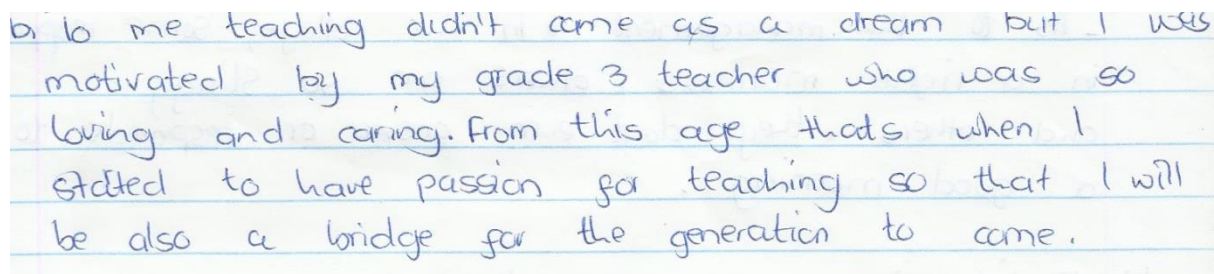
I grew up willing to be a teacher and have passion for teaching and I ended up joining the career.

From the above comments, passion for teaching was a significant factor that pulled/pushed the participants into teaching. As alluded to earlier on, literature by (Serin 2017) comments that passionate teachers can make a difference in students' lives and achievements. Passion is at the heart of transformative learning because it facilitates critical thinking and embraces the values of empathy or compassion Wolhuter *et al.* (2012). Concomitantly, passionate teachers are often committed to their students because they see students as an important part of their job.

The findings across all of the selected colleges revealed that the vocationally interested pre-service teachers had an intrinsic motivation towards the teaching profession. Surveyed literature (Gore *et al.* 2015) points out that intrinsic motivation is key in influencing transformative learning, and motivation and passion are often viewed as two sides of the same coin.

### 5.5.7.2 Family influence

Six participants joined the teaching profession because of family influence/pressure. For example, the vocationally interested participant, S4 at College Two, said during a continuum drawing discussion:

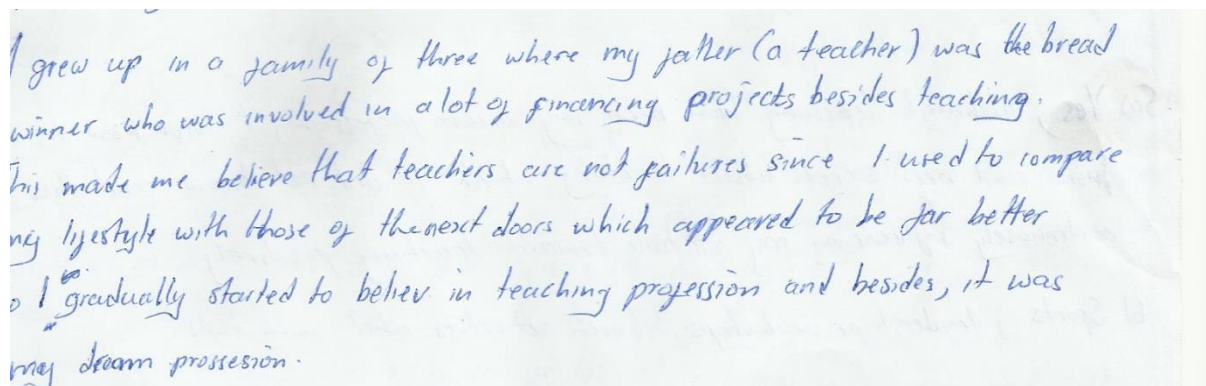


As to me teaching didn't come as a dream but I was motivated by my grade 3 teacher who was so loving and caring. From this age that's when I started to have passion for teaching so that I will be also a bridge for the generation to come.

Another vocationally interested participant, S6 at College Three, had this to say during an FGD: *"I have two sisters who did this teaching course, and were my role models whom I looked up to. I liked how they dressed. I felt the urge to be like them so I decided to join teaching"*.

Similarly, the vocationally interested participant, S2 at College Four, commented during their individual interview: *"I was influenced by my uncle to be a teacher"*.

Further, the vocationally interested participant, S1 at College One, echoed similar sentiments during a continuum drawing discussion when he said:



I grew up in a family of three where my father (a teacher) was the bread winner who was involved in a lot of financing projects besides teaching. This made me believe that teachers are not failures since I used to compare my lifestyle with those of the next doors which appeared to be far better so I gradually started to believe in teaching profession and besides, it was my dream profession.

From the comments, the passion for teaching started for some when they were very young. Family members who also acted as role models were the push and pull factors influencing their move into the teaching profession. The vocationally interested pre-service teachers seemingly developed an interest in teaching and joined the profession after having been influenced by significant others: either their parents or close relatives. Role models are strong pull factors for

student teachers. Surveyed literature (Mkumbo 2012) indicates that student teachers like the teaching profession as they witness their role models serving their communities. Transformative learning was thus likely to be enhanced as student teachers worked hard to succeed and be like their role models.

#### *5.5.7.3 Serving the nation*

Six vocationally interested participants gave their reason for joining teaching as the opportunity to serve the nation. For example, the vocationally interested pre-service teacher, S2 at College Two, stated during their individual interview: *“What I expect is just to pursue and develop my education in the teaching field, and continue to save my country and my community”*. Another vocationally interested participant, S6 at College Four, said: *“I expect to change some people’s lives and some children’s lives”* during an FGD. From these comments it was evident that altruistic motives pulled/pushed these particular participants into joining the teaching profession. Literature by (Friedman 2016) reveals that a desire to work with children, impart knowledge, and a wish to serve society are some of the humane reasons that pull/push some pre-service teachers into teaching. The comments from these student teachers confirmed what Fischer and Hanze (2020) indicated; that altruistic motivation encompasses exhibiting an interest in others by showing them support and sympathy, and the active protection of the interests of those in need of help. Sympathy and support are necessary aspects for transformative learning.

The themes that emerged from the period prior to the participants’ teacher training, which covered what they did before starting training, and their reasons for joining the teaching profession promoted their transformative learning because they had to change their mindsets and work hard to succeed in their new fields. The participants were likely to have faced many dilemmas when leaving what they were doing and settling into a teaching career; a process which probably catalysed their transformative learning. Their reasons for joining the teaching profession most likely also instilled the need for hard work so that these pre-service teachers could achieve success. Given the diverse pre-service teachers’ backgrounds and reasons for joining the teaching profession, this study was also likely to establish whether the vocationally interested and vocationally disinterested participants had similar transformative learning experiences.

#### 5.5.7.4 To obtain a professional qualification

In this study, obtaining a qualification was about attaining the level of study required by the relevant job market or school/institution in order to earn a living or to further one's education. In responding to the question of why the pre-service teachers had joined the teaching profession, one of the vocationally disinterested participants, S 9 at College Three, had this to say during their individual interview:

*I wanted a diploma. After training, I will be employed because I will have the required certificate. I have realised that all that I was doing was nothing if I did not have a professional qualification.*

This participant emphasised the importance of having a certificate in order to get employment after completing their training. From this comment, it was apparent that a teaching certificate was a prerequisite to getting a job. Again, while this was a person who indicated that they were vocationally disinterested in teaching, their comment was not about teaching itself but rather about getting a qualification. Surveyed literature (Kusumawardhani 2017) indicates that one way to increase teacher learning and teacher quality is through teacher certification programmes to ensure that teachers have sufficient competencies required for teaching. Thus, notwithstanding the aim portrayed by this participant, S9, a qualification would only be obtained through learning and their transformative learning was likely to be enhanced by the acquisition of knowledge.

#### 5.5.7.5 Economic situation

As alluded to in Chapter One, when Zimbabwe started experiencing its economic meltdown industries closed and jobs were lost, and the teaching profession remained the only window of hope. It was in light of this that 20 vocationally disinterested pre-service teachers expressed similar sentiments. For example, a vocationally disinterested participant, S7 at College One, commented during their individual interview: *“Because of the economic situation my business was not boosting. I had no profits. People were also going to South Africa to buy their own accessories so the sales were decreasing and I decided to apply for teaching”*. A vocationally disinterested participant, S6 at College Three, said during their FGD: *“Coincidentally, when I*

*was called to come for training here, my contract had been terminated because of lack of material".* Another vocationally disinterested pre-service teacher, S9 at College Four, further commented during their individual interview: *"Although this was not the profession that I wanted, I just wanted to get into government"*.

These comments reflected by the vocationally disinterested participants showed that they had joined the teaching profession, not because they wanted to, but because they wanted employment. These experiences were dilemmas and these student teachers had to challenge their existing beliefs about teaching. This self-reflection and self-assessment was vital for their transformative learning.

#### *5.5.7.6 Financial benefits*

Twenty vocationally disinterested participants expected to earn good salaries and support their families. This was reflected by the following example, when a vocationally disinterested pre-service teacher, S10 at College Two, commented during an FGD:

*Teaching is an added advantage because it has got stable income. Other companies are not paying well. Being a teacher is an added advantage because you will be a government worker. You will be earning a stable income.*

Similar feelings were shared by the vocationally disinterested pre-service teacher, S7 at College Three, during his FGD when he said: *"My finances will be stable working in government, it has lots of benefits. When I retire I will continue to be paid, so I decided I just have to go for teaching"*. Another vocationally disinterested participant, S6 at College Four, said during their individual interview: *"If you want to go into business... I think the teaching profession will allow you to pursue other areas looking for a means of survival"*.

The comments from the vocationally disinterested participants demonstrated the extrinsic value attached to teaching. Moses *et al.* (2017) indicate that these types of students are referred to as committed compromisers who expect that it will be easy to find a job and that they will have flexible working hours, job security and a steady career path. Due to these motives, such student teachers were likely to work hard to achieve their ulterior goals, thus realising transformative learning.

#### 5.5.7.7 A stepping stone and a last resort

Twenty vocationally disinterested participants also highlighted that they had sought a teaching career as a last resort. They viewed teaching as a stepping stone in their ambitions. For example, the vocationally disinterested participant, S9 at College One, had this to say during an FGD:

*But in actual fact, I wanted to be an engineer because producing things practically is a bit different from doing it in theoretical terms. Putting those things in real terms it might be different. Government is now the only employer. Teaching was not my passion.*

Another vocationally disinterested participant, S8 at College Four, concurred during their individual interview: *“I became a teacher because I had no option. I had passion in nursing... had applied various times, but to no avail”*. Similarly, the vocationally disinterested pre-service teacher, S6 at College Two, explained during their individual interview:

*I tried to register with ehh... UNISA in South Africa. I wanted to do Transport and Logistics, but then something happened and I had to come back home. That's when I realised that eish, back home there is nothing to do. The only thing that you can do now is becoming a teacher.*

From the comments above, it was evident that these participants had only joined teaching as a last resort, as they had failed to get into the fields they wanted. These vocationally disinterested pre-service teachers joined teaching because other options had not worked out well. Related literature (Moses *et al.* 2017) indicates that like the compromisers alluded to earlier on, student-teachers of this type entered teacher education reluctantly. They wanted to do something other than teaching. A study by (Pop and Turner 2009) indicates that because of contexts related to low economic development, people may be forced to accept a trade-off between their interests and the job market. This could also be attributed to the Zimbabwean situation, where some student teachers had no option but to join the ‘only’ surviving industry, which was the teaching profession. Through self-examination and critical assessment of their assumptions, which are Mezirow’s second and third principles, these participants may have realised transformative learning. Facing the crisis-like situation of failing to get into the fields that they were passionate

about, these student teachers may have experienced transformative learning and changed their attitude towards teaching.

#### 5.5.7.8 Job security

The other emerging theme that the participants identified was the permanent nature of a teaching career. Twenty vocationally disinterested participants compared teaching with other professions which offered contract jobs. For example, the vocationally disinterested pre-service teacher, S8 at College One, commented during the FGD: *“I think teaching is something that is permanent, unlike in the construction industry - they give short term contracts”*. Furthermore, the vocationally disinterested participant, S7 at College Two, said during their individual interview: *“Being a government employee is an added advantage because I will be earning a stable income”*. Similar sentiments were echoed by the vocationally disinterested pre-service teacher, S10 at College Three, who commented: *“I have been doing casual jobs like shop attending and cross border trading, but the reason why I joined the teaching profession is because through all these years I have not even been in any occupation with a stable source of income”*. From the comments, vocationally disinterested pre-service teachers joined the teaching profession for its job security and stability. Literature surveyed (Mukaihata 2018; Meens and Bakx 2019) indicates that extrinsic motives like job security and stability are considered to be important motives for joining teaching, as was the case in Zimbabwe where the economic climate was unfavourable. Consequently, there was an increase in the number of young people choosing to become teachers because they recognised it as a stable occupation. Several studies also found that the security of employment associated with teaching played an important role in the decision of choosing teaching as a career (Watt and Richardson 2008; Nyamwange 2016; Wambu, Hutchison and Pietrantoni 2017; Akosah-Twumasi *et al.* 2018; Toropova, Myrberg and Johansson 2020). As mentioned earlier, a change of attitude towards teaching propelled transformative learning. Student teachers would have gone through critical reflection and realised that teaching was good after all.

## 5.6 Conclusion

The discussion of the colleges in this section revealed the similarities and differences in their contexts. The similarities revolved around the vision of the colleges, as they all wanted to



produce competent and effective teachers who could meet the needs of the nation. However, to achieve the vision the colleges operated in different teaching/ learning environments, with some adequately resourced while others were inadequately resourced. The two public colleges were adequately resourced and conveniently located. What was evident was that the two private colleges were constrained in terms of teaching space, library resources and computers. These shortages were likely to impact negatively on pre-service teachers' transformative learning.

From the discussion of the participants' biographical data, the student teachers across the four colleges joined the teaching profession in their 30s, and a mean age was 33. For the vocationally interested participants, they may have been supplementing failed subjects. On the other hand, the vocationally disinterested student teachers were probably looking for something worthwhile to do. Gender was tilted towards female students in all colleges, probably because the thrust in education was aimed at women's empowerment. Alternatively, it could have been because males shunned teaching as it was no longer as lucrative as it used to be. Eleven vocationally disinterested and nine vocationally interested participants were 'A' Level holders. The participants may have wanted to further their education but due to various circumstances been unable to do so. Data across the colleges showed that the vocationally interested and vocationally disinterested participants had taken an average of 15 years after completing their 'O' Level exams before enrolling in the teacher training colleges. During that period the participants had spent an average of ten years in a work environment before joining teacher education. The experiences in their different work environments could enhance their transformative learning.

The period after completion of their 'O' Level education was lengthy, taking an average of 15 years. The vocationally disinterested participants had a longer time period before enrolling in teacher training colleges than did the vocationally interested. This was probably because of a lack of passion for the teaching profession, and they had probably hoped to get something better. The vocationally interested and disinterested participants engaged in different activities during this 15-year period, such as studying in other programmes, supplementing their failed 'O' Level examinations or taking temporary jobs. The disorienting dilemmas that they faced in their various engagements prior to joining teaching could be sources of self-reflection and critical assessment, which could promote transformative learning.

Furthermore, both the vocationally interested and vocationally disinterested pre-service teachers joined teaching for a variety of reasons. For the vocationally interested participants, the intrinsic and altruistic values of teaching such as passion, family influence and serving the nation were considered. Passion enhanced their transformative learning as these pre-service teachers were in a programme that they felt a calling for. On the other hand, the vocationally disinterested participants joined teaching as a last resort and considered the extrinsic values of teaching such as obtaining a certificate, the financial benefits, securing employment, job security and social mobility. Joining teaching for these reasons was likely to trigger disorienting dilemmas for these vocationally disinterested participants, which would then call for self-examination and a critical assessment of assumptions, leading to their transformative learning.

Having discussed in sufficient detail the research setting, the next chapter presents and analyses the data that addresses the first research question on the nature of transformative learning experiences.

## CHAPTER 6

### DATA PRESENTATION AND ANALYSIS

*Nature of transformative learning experiences of vocationally interested and disinterested pre-service teachers in selected teacher training colleges in Zimbabwe.*

#### 6.1 Introduction

The previous chapter described the research sites in which the study was conducted. This chapter presents and analyses the research findings around the nature of the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in the four selected teacher training colleges in Zimbabwe. This research was located in the interpretive paradigm, and adopted a multiple-site case study design using a qualitative approach. Data were generated using 156 completed questionnaires, which were a springboard to the purposively sampled participants for the 4 focus group discussions, 36 individual face-to-face interviews and 20 continuum drawings and discussions. The analysis of the data is accomplished in two phases: inductive in-field analysis to identify patterns and an end-of-data-generation deductive analysis to determine the themes of relevant meaning.

In the discussion, the findings are integrated across all participants and data sources. I adopted this approach because the responses are quite similar. However, where disparities are noted, these are highlighted. In discussing and presenting findings, I employed Mezirow's Transformative Learning Theory to help explain the findings, juxtaposing and making comparisons of the transformative learning experiences of the vocationally interested and disinterested pre-service teachers in the four different colleges. I also drew on related literature to see how my findings relate to existing research.

This study centred on one key question: What were the transformative learning experiences of vocationally interested and disinterested pre-service teachers in selected teacher training colleges in Zimbabwe? To address this key question, three research questions had to be addressed:

1. What was the nature of the transformative learning that the vocationally interested and vocationally disinterested pre-service teachers in the selected colleges experienced?

2. How did the vocationally interested and vocationally disinterested pre-service teachers in the selected colleges understand their transformative learning?
3. What forms of support were offered by the college communities to enhance the pre-service teachers' transformative learning?

In this study, research question one constitutes a chapter, while research questions two and three make up another chapter. In this particular chapter, the first of the two data presentation and analysis chapters, the first research question is addressed: *What is the nature of the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers?* The data generated to answer this question were generated through focus group discussions, individual face-to-face interviews and continuum drawings and discussions.

The decision to separate chapters was driven by a need to present manageable-length chapters. Presenting data analysis in one chapter meant a tedious and lengthy chapter of more than 100 pages.

The chapter is organised under two themes, and these themes and their sub-themes are discussed and summarised. The two major themes that emerged regarding the nature of the transformative learning experiences related to emotional and learning experiences. The first section therefore discusses the transformative learning related to their emotional experiences. This will be followed by a discussion on the transformative learning that occurred as a result of the pre-service teachers' learning experiences. A conclusion which draws together the key findings related to the nature of the transformative learning ties up the chapter.

In discussing and presenting the findings, the colleges are identified by codes to preserve their anonymity: College One, College Two, College Three and College Four. The data sources are identified by acronyms: FGD (focus group discussion), Ind. Int. (individual interview) and CD (continuum drawings). Students are code-named S1-10 for the focus group discussions; S1-6 for the individual interviews; and as S1-10 for the continuum drawings.

The following section addresses the pre-service teachers' transformative learning through their emotional experiences at the commencement of their teacher training. Some of the vocationally interested pre-service teachers reported that they felt excited, happy and proud to enter teacher education. Contrarily their peers, the vocationally disinterested participants, reported that they

were disoriented and consequently developed fear, confusion, shame and shock at the commencement of their teacher training. This section on the participants' emotional experiences is organised into two parts: the findings drawn from the vocationally interested participants and the responses from the vocationally disinterested participants.

In this study, emotional experiences refer to the kind of poignant feelings that the participants felt when they started teacher training, as well as their feelings during the course of their teacher development programme. Surveyed literature (Merriam and Caffarella 1999; Reeve 2001) indicates that emotions create purpose and shape the context of any learning experiences. In short, emotions are critical in the construction of meaning and knowledge of the 'self' by pre-service teachers. Mezirow (1997), in his theory, indicates that emotions play a crucial role as they bring about a critical reflection of assumptions and this results in a change in how individuals construct their world view. Emotions, from sourced literature (Dirkx 2006) are deeply embedded in transformative learning as it is through such feelings that critical reflection essentially occurs, questioning and inviting an exploration of alternative ways of being in the world. It was through navigation of these disorienting dilemmas - the emotions - that individuals (the pre-service teachers) emerged transformed.

The sub-themes around the emotional experiences highlighted by some of the vocationally interested participants, which included excitement, happiness and pride, are discussed in turn below.

## **6.2 Transformative learning experiences related to affirmative feelings**

### ***6.2.1 Excitement***

A feeling of excitement is usually a feeling of joy and happiness, and some vocationally interested participants reported having felt excitement at the commencement of their teacher training. For example, one vocationally interested pre-service teacher, S1 at College 4, in an FGD commented: *"I feel excited and happy because another door has been opened"*. This vocationally interested participant symbolically used the image of a 'door that had opened' to portray the opportunity that had arisen for her to get into teacher education. The participant related the open door to a door to the future. Dirkx (2000) and Cranton (2006) indicate that

emotions and affect play a significant role in transformative learning. Mezirow (2000: 58) informs that individuals must have the precondition of emotional intelligence in order to be “emotionally able to change”. In this light, this participant displayed emotional intelligence as she had modified her beliefs, values and assumptions about teaching and reframed her world view about teacher education as a lifeline. Thus, this vocationally interested participant S1 was apparently ready for a perspective transformation.

Similar sentiments were raised by another vocationally interested pre-service teacher, S5 in College Three. During their Ind. Int. they intimated: *“As for me, I was very happy because I always wanted to be a teacher”*. Another vocationally interested participant, S3 at College Two, said during their FGD: *“I cried, but these were tears of joy because this has been my passion”*. In addition, a vocationally interested participant, S4 at College Two, expressed her happiness during a CD and discussion when she said: *“I always wanted to be a teacher and I have passion for teaching”*. The responses suggested a call to the teaching profession and as Serin (2017) points out, passion is a significant factor as it inspires and motivates the learners. It contributes to creativity; thus, passionate or intrinsically motivated teachers have more thinking skills and can produce new ideas. As alluded to in the introductory chapter, the vocationally interested pre-service teachers who had joined the teaching profession of their own volition Roness and Smith (2010); Kim and Cho (2014) were interested in teaching and were thus more likely to achieve their set goals. Trainee teachers were thus likely to be very creative, given their intrinsic motivation to teach, and they probably possessed profound thinking skills during the teacher education programme, which were likely to be taken forward when they joined the teaching profession. Surveyed literature (Taylor and Cranton 2013; Altun 2017; Serin 2017) indicates that intrinsic motivation is a key pillar to transformative learning. Thus, passionate or vocationally interested pre-service teachers may train and become efficient teachers. Creativity and knowledge acquisition are critical components of transformative learning because they promote transformative change in the student King (2005), in this case in the pre-service teacher.

The word ‘cried’ evoked a strong emotion of happiness and this was justified when the pre-service teacher, participant S3, said that teaching had always been his passion, and that getting into the college was like ‘a dream come true’. The intricate relationship between passion and

pre-service teacher training was supported by Hansen (1995), when he said such student teachers would often be excited about:

- Knowing what they did not know before;
- Learning what they could not do before;
- Obtaining attitudes which they did not have before; and
- Believing what they did not believe before.

These aspects raised by Hansene above were likely to be a source of the explored pre-service teacher's excitement. Such aspects often exist when there is congruence between career/vocational interest and the job. Surveyed literature (Holland 1997) suggests that a career - interest relationship, when there is congruence between the career /vocational interest and the environment where the individual works, results in an individual persistently working hard to achieve their set goals. The student teachers in this study probably worked enthusiastically and learned excitedly, discovering what they could not before, and this positive attitude towards the teaching profession created better teachers who believed in themselves. During teacher training, such pre-service teachers were likely to experience transformative learning. High intrinsic motivation or vocational interest propels commitment to working and the achievement of set goals Savickas (1999); Krapp (2003); Morris (2006); Van Iddekinge, Putka and Campbell (2011). Some of these pre-service teachers seemingly began to imagine and see themselves in new roles. Mezirow (1997) points out that transformative learning occurs when individuals change their frames of reference, consciously making plans that bring about new ways of defining their world. They probably began envisioning their roles as classroom practitioners.

From the feelings of happiness and excitement experienced by the vocationally interested participants expressed above, these pre-service teachers were seemingly on the right route to transformation. This happiness most likely impacted positively on their transformative learning. Research (Altun 2017) has it that emotional attachment to the profession enabled the vocationally interested participants to reflect on their goals and beliefs about teaching. Further, Roe's Personality Theory of Career Choice Roe and Lunneberg (1990) attest that career motivation and interests are influential to high performance and success. Other vocationally interested pre-service teachers talked about experiencing feelings related to a sense of pride.

### 6.2.2 Pride

Pride may be understood as a sense of self-satisfaction or self-importance emanating from some feeling of achievement. In the case of these vocationally interested participants, this may have been because they had always wanted to be teachers and getting into teacher education was an achievement which warranted pride, given the long waiting periods and the stiff competition to enter teacher training. This was exemplified by a vocationally interested participant, S1 at College One, during an Ind. Int. who said: *“I feel like a soldier who has won some battle. So many people came competing for vacancies. So, I think I have won. I am proud of the victory”*. The same sentiments were shared by a vocationally interested participant, S3 at College Two, during a CD session and discussion when she said: *“As for me, am proud of myself. Not everyone gets such kind of opportunity to train as a teacher”*.

An interesting observation was made in the responses given by some vocationally interested pre-service teachers. Firstly, pride stemmed from having earned the chance to train as teachers. Secondly, in Zimbabwe, it had become very difficult to gain entry into the teaching profession since it was one of the few surviving ‘industries’. Thirdly, the economic meltdown had caused high unemployment rates. As a result, getting a place in an institution of higher learning to engage in teacher development was a unique achievement.

Furthermore, it was at the time a norm in Zimbabwe that teacher training colleges invited astronomic numbers of applicants for interviews, yet they only had facilities for about 600 pre-service teachers on campus. A case in point was the Sengu (pseudonym) Teachers’ College issue which was reported in the press. The report is captured below:

#### ***Sengu Teachers’ College accused of ‘taxing’ jobseekers***

*A student support body has denounced Sengu Teachers’ College for charging aspiring teachers an interview fee of \$10 each, saying this was equivalent to taxing jobseekers. Authorities conducted interviews for this year’s intake on May 22<sup>nd</sup> and 23<sup>rd</sup>, with at least 8,000 hopefuls vying for 600 vacancies, according to a Newsday report.*

*On these figures the Chikomba-based institution (pseudonym) earned \$80,000 from the process. Nomalanga Moyo, June 2, (2014)*



Against such a background, being among the 600 applicants selected evoked feelings of pride. The vocationally interested participant had surely won the battle against all of the other applicants. In terms of age, the colleges enrolled candidates from the age of 18, which in Zimbabwe was the legal age of majority (Legal Age of Majority Act, 1982) and the participants would have completed their 'O' Level (Equivalent of Grade 11) studies which were a pre-requisite to furthering their education, joining professional training or entering employment. One could discern the pride this participant had because she had beaten a lot of candidates, young and old, by entering teacher education at the age of 26. There was no age limit for entry into teacher education in Zimbabwe, except for those who were nearing the retirement age of 55. This was confirmed by this quotation: *"It has been observed that custom and practice in Zimbabwe has been to link retirement age to pensionable age of 55 years for early retirement, 60 years for hard jobs like mining and 65 years for softer jobs and many factory workers"* (Zimbabwe, The Labour Act 2019: Chapter 28:01). Teaching was one of the soft jobs and it meant that anyone below the retirement age of 65 could train as a teacher.

From the comments above the vocationally interested participants were proud of the opportunity to enter the teaching profession. Pride in such situations could propel hard work (Reeves and Lowenhaupt 2016) and had a positive effect on transformative learning. In this context, pride was a virtue which revealed how passionate the pre-service teachers were toward teaching. Denham and Burton (2003:103) wrote, *"Emotions are regulators of behaviour within us and our interactions with others... good teaching is charged with positive emotion"*. This implies that passion as an emotion was critical in the participants' teacher training programme and as Hargreaves (2006) indicated, pride created pleasure, creativity and joy. Concomitantly, the Socio Cognitive Career Theory Lent et al. (2003) asserts that self-efficacy, outcome expectations and personal goals are important variables that motivate an individual to work and achieve their goals. In this instance, the vocationally interested pre-service teachers S1 and S3 were confident that after successfully entering teacher education, they were going to work and succeed in their training.

This positive attitude was enough to enhance their transformative learning. From the discussion above, the data gathered from the FGDs, Ind. Ints. and the CDs and discussions suggested that the vocationally interested pre-service teachers may have realised transformative learning due to

their positive emotions experienced, as these emotions often give rise to critical reflection and consequently transformation. Literature surveyed (Morgan, Isaac and Sansone 2001; Loo *et al.* 2005) indicates that vocational interest influences performance positively and this results in good teacher quality, which in turn produces a successful learner. Having entered the teacher education programme with unexamined assumptions, beliefs and values apart from their initial passion Carrington and Saggars (2008), the pre-service teachers were likely to have critically assessed their assumptions upon commencement of the programme. Principle Six of Mezirow's (2003) Transformative Learning Theory is about the assessment of one's assumptions, and this assessment is likely to trigger transformative learning.

### **6.3 Transformative learning experiences related to disorienting dilemmas**

Contrary to the affirmative feelings of excitement, happiness, joy and pride that the vocationally interested participants experienced, the vocationally disinterested participants highlighted downbeat, pessimistic feelings such as fear, shame, being overwhelmed, confusion, frustration and shock that developed at the start of the programme. Literature surveyed (Tschannen-Moran, Woolfolk and Hoy 1998; Swanson 2012; Moses *et al.* 2017) indicates that incongruence between career/vocational interest and the work environment may be detrimental to an individual's performance and goal achievement. In this case, the vocationally disinterested pre-service teachers may have lacked the zeal to work hard to achieve the goal of becoming effective teachers. Their lack of motivation could rub off on their learners, resulting in poor quality learning processes. According to transformative learning theorists, these negative feelings described by the vocationally disinterested pre-service teachers portrayed disorienting dilemmas Mezirow (2012). Literature on transformative learning (Cranton 2006: 102) affirms that "adult learners can experience transformative learning through other life changes including factors such as immigration, emotional issues, changing jobs and change of location", all of which are disorienting dilemmas.

In this case, when the pre-service teachers changed from their familiar environment by coming to college which then became their new environment, they probably experienced negative pessimistic feelings or disorientations like context shock. They faced disruptions in their old ways of living. Boyd and Myers (1988) refer to this state of disruptive disorientations as

grieving. In their new environment, the student teachers probably felt like they had been plunged into chaos (Green and Malkki 2017). They were shocked, fearful, lonely, detached, isolated, frustrated, angry, embarrassed and homesick. In this case, their dilemmas emanated from context/cultural shock because of their change of location. The participants also experienced cultural shock because of their immersion in new cultures, engaging in new activities and meeting new faces.

Some of the vocationally disinterested pre-service teachers who had been working in different fields prior to starting their training had been retrenched due to the economic challenges in the country. Thus, joining teaching was an additional dilemma which created further disorientations. This was exemplified by vocationally disinterested participant S6, at College Two who during an FGD said, *"I was an electrician before I came to college"*. Another vocationally disinterested participant, S10 at College Four, reported during an Ind. Int., *"I was a motor mechanic"*. Similar sentiments were shared by a vocationally disinterested pre-service teacher S7 at College Three when she said during a CD and discussion, *"I was working in a salon"*. These experiences were probably painful and unsettling for the vocationally disinterested teachers who had to start on a new programme and career path. The disorienting dilemmas were, however, also a source for transformative learning. Cranton (1994); Taylor (1998) and Taylor and Elias (2012) comment that disorienting dilemmas can have either a minimal or a devastating effect on individuals' transformative learning. Literature further indicates that making a paradigm shift is unsettling and painful because one has to use a lot of mental energy to break the existing orientations and reconstruct a new world view (Mezirow 2012; Illeris 2014; Lysychkina, Hildenbrand and Reidmatinez 2016). In this case, while some vocationally disinterested pre-service teachers might have made a shift of consciousness through critical reflection, others might have found it too challenging and instead maintained the status quo. Disorienting dilemmas form Principle Two of Mezirow's (1991) theory. The next section discusses these vocationally disinterested participants' transformative disorienting dilemmas.

### **6.3.1 Fear**

Some of the vocationally disinterested pre-service teachers experienced fear at the commencement of the programme, following which they were likely to have critically examined and reflected on the situation, and on their previous assumptions and beliefs, consequently

experiencing transformative learning. A feeling of fear refers to a state of anxiety, fright, worry or nervousness, and some of the vocationally disinterested pre-service teachers reported that their fear was triggered by different situations. For example, the vocationally disinterested participant S8 at College Four had this to say during an FGD:

*When I started teacher training I was afraid. This fear was caused by the lecturers who would come to us during orientation saying, 'if you fail, you will fail and go', so I have to pass the exams and the assignments. However, for my first assignment, I was blank. I didn't even know what to write or where to get the information from.*

This vocationally disinterested participant's experiences were filled with anxiety. Mukeredzi (2019) says anxiety is not bad, as often it is a normal reaction to certain situations informing us that something needs our attention. In this case, anxiety enhanced action as it propelled a personal drive to learn – in other words, transformative learning.

Similarly, another vocationally disinterested participant S6 at College Two explained during an Ind. Int.:

*I was terrified, kind of being afraid. During orientation like, lecturers come and say you can join our academic study but it is not easy. Come do Mathematics, they say it's exciting but rest assured that it's not easy. So am terrified and am afraid. Still I have not chosen any subject.*

The dilemma faced by the vocationally disinterested pre-service teacher S6 during the orientation programme related to choosing his specialisations because of the threatening environment. The orientation period was the time during which guidance was offered to the first-year pre-service teachers on how they could adjust to academic and social life on the campus. Transformative learning was probably realised when the pre-service teachers made changes, challenged their assumptions and adjusted to their new lives at college. Challenging their prior assumptions resulted in the construction of better versions of themselves (Cranton 2006; Malkki 2014).

These trainees came from diverse backgrounds and were expected to choose their main area of academic study from an array of subjects in the curriculum. This in itself was disconcerting but they were also simultaneously confronted with an unfamiliar environment (Choppo 2016). As highlighted earlier on, some had been working but others had come straight from high school.

This transition to college life was transformative because the pre-service teachers had to acclimatise themselves to the new environment, while at the same time adjusting and adapting to being there (Akinade 2005). In the case above, vocationally disinterested pre-service teacher S8 was thrown off balance by the Mathematics lecturer's frightening remark of 'fail and go', implying that in the event that he failed assignments and examinations, he would have to leave the college. Such threatening remarks could impede transformative learning.

In addition, assignments and examinations were tools of assessment that had a bearing on the pre-service teachers' transformative learning experiences. Mukeredzi and Nyachowe (2018) emphasise the value of assessment as it either motivates or propels the individuals to work harder. As a transformative learning tool, assessment called for self-examination Mezirow (2012) by both the pre-service teacher and the lecturer on their performance so that they could take appropriate remedial action (Mukeredzi and Nyachowe 2018). Furthermore, subject specialisation influenced transformative learning. Given that there is a correlation between interest and persistence in academic contexts Serin (2017), the student teachers' choice of subject specialisations may have energised them to work hard and achieve success. The vocationally disinterested participant S6 was scared to choose his subject of specialisation (main area of academic study). Fear was a disorientation Mezirow (1991) which could have unsettled participant S6, resulting in retarding his transformative learning. Instead of creating a friendly and secure environment for the participants, the lecturers threatened them with withdrawal from the course following failure, which might have demotivated the students in their academic pursuits Agbakwuru (2009) and might even have led to some students dropping out.

From the comments, some participants were afraid of failure and being withdrawn from the course, due to their lack of knowledge and skill and their inability to complete the assignments. Others became frightened when lecturers addressed the choice of subject specialisations during orientation. The disorienting dilemmas of fear and anxiety could have prompted withdrawal and impeded the progress of effective transformative learning (Mezirow 2000). However, Mezirow's Principle Three about the critical evaluation of assumptions could have made the student teachers experience a paradigm shift – experience some transformation and adapt to the new environment. Clark (2008) comments that disorienting dilemmas are related to a sense of loss of balance or normalcy complicated by a problem that seemingly has an unsatisfactory

solution. Nonetheless, through critical evaluation, this sense of imbalance could be reconstructed through transformative learning. The pre-service teachers could have weighed their fears against other alternatives during the training programme. The emotional experiences undergone by the vocationally disinterested participant regarding his fear of failure of examinations and assignments were triggered by an unfriendly orientation programme.

Drawing on Mezirow's (2000) Transformative Learning Theory, experiences may have been unstable and threatening to the student teachers, hence there was a need to create a stable environment where they were free to explore and express their ideas freely. In the selected colleges, the first-year pre-service teachers were often exposed to a period where they were expected to familiarise themselves with the new college environment. This was the time when the lecturers usually marketed their subjects so that the pre-service teachers could select the subject specialisation which they would teach, depending on the programme they opted to pursue in college - either Early Childhood Development (Grades R to 3) or the General Course (Grades 4 to 7) as alluded to in Chapter Five. From the comments above, the lecturers were intimidating and inhospitable to the new students and that created an unsettling environment for these participants which could have inhibited their transformative learning.

Instead, Principle Six of Mezirow's (1991) theory indicates that the pre-service teachers, having critically assessed their assumptions, could decide to move on despite the disorientations of fear. The moving on would be transformative and in this case the student teachers would have allayed their fears and progressed with their training.

The other disorienting dilemma emerged from a fear of the unknown. The disorienting dilemmas in this section began as a crisis that could not be solved by applying previous problem-solving strategies (Yeboah 2014). Self-examination and a critical assessment of their assumptions were thus significant for these pre-service teachers' transformative learning. Principles Two and Three of Mezirow's (1991) Transformative Learning Theory applied here. Self-examination helped the pre-service teachers to move away from the status quo, thus they were able to examine their pre-conceived ideas about teaching and move forward. Hogan, Malkki and Finnegan (2016) indicate that transformative learning allows one to critically assess oneself and transcend self-evident assumptions governing one's thinking, feeling, and acting that have been internalised through socialisation and education.

Parrot and Schulkin (1993) buttress the role of emotions in transformative learning as emotions set the agenda, given that learners have to think about future plans, prepare for actions and even prepare to adapt to other lines of thought. This fulfils Mezirow's Principle Six which is based on the planning of a course of action to be taken. Thus, these pre-service teachers underwent transformative learning and got ready for their new roles, relationships and actions of being teachers. Related literature (Daloiz 1986; Dirkx 1998) indicates that meaning making is a significant aspect that motivates adults to engage in planning for a subsequent course of action. Thus, subsequent to the critical examination of their assumptions, the pre-service teachers were ready to move on, exploring new courses of action as their world was no longer the same. Some of the vocationally disinterested participants also developed feelings of shame, and the feeling of shame is discussed next.

### **6.3.2 Shame**

The feeling of shame affects and propels transformative learning. Shame is generally understood as referring to a painful or embarrassing emotion responding to a sense of failure to attain desired goals. Some vocationally disinterested participants reported feelings of shame, as intimated by participant S7 at College Two during her Ind. Int., when she said: *"I am ashamed. I wanted to study at university. Unfortunately, I failed advanced level. Most of my colleagues are at university"*. Participant S9 from the same college also reported during the CD and discussion: *"I am ashamed. I just tell them that Masvingo is OK. I can't tell them that am at College Two doing teaching programme. That was not my passion"*.

The comments above revealed the uneasiness and disorienting dilemmas experienced during the transformative journey, which came about as a result of the participants taking up a profession that they had no passion for. According to Mezirow (1999), such dilemmas will not be resolved simply by the acquisition of information, the enhancement of problem-solving skills, or the expansion of competences. Rather, they require the movement from an unexamined thought process to a more examined and critically reflective process. Research (Illeris 2003) confirms that lack of motivation for engaging in activities hinders transformative learning. The vocationally disinterested participant S7, who was ashamed of the teaching profession, was not passionate or intrinsically motivated about teaching and instead wanted to go to university. Literature surveyed (Mukeredzi 2018; Schelfhout *et al.* 2019) indicates that lack of passion in

teachers gives rise to demotivation, leading to demotivated students and eventually to poor student achievements. In such cases, teacher commitment is low, hence there is a drop in professional and academic standards (Morgan, Isaac and Sansone 2001; Chireshe and Shumba 2011). This ‘I am -here- but not here’ attitude may be detrimental to transformative learning and may eventually affect the overall teacher quality. Levin (2002: 2) talks about the expected dispositions of teachers. He says:

*...Dispositions toward teaching are the inner views, the values, and propensities that support people becoming strong and effective teachers. Compassion toward others, curiosity, and attention to detail could be examples of such dispositions.*

In other words, lack of the expected dispositions in pre-service teachers could impede their transformative learning. Dispositions here were the personal attributes of the pre-service teachers, which either guided them to be positive about the teaching profession or to disregard the idea of teaching as a profession (Tschannen-Moran, Woolfolk and Hoy 1998). The mismatch between career and interest could lead to lack of motivation to achieve desired goals, in this case to complete the teacher training programme (Morgan, Isaac and Sansone 2001). The vocationally disinterested or extrinsically motivated pre-service teachers had feelings of failure and shame, which emanated from their lack of interest in the teaching profession. These feelings could result in poor efficacy and achievement by these student teachers, as noted in the literature by Swanson (2012). The other disorienting dilemma that emerged was a feeling of being overwhelmed.

### **6.3.3 Being overwhelmed**

This study defines being overwhelmed as an emotional state where one is inundated or swamped with too much work. Some vocationally disinterested pre-service teachers stated that they felt overwhelmed by the amount of work at the inception of their teaching programme. A vocationally disinterested participant, S8 at College Two, lamented during their CD and discussion: *“It’s difficult for me to cope with work. I miss home. Staying eight in a room! Bathing in cold water! Every day Mass! Ahh! (laughs) It’s difficult and I hope I will catch up. It’s very difficult”*. Similarly, another vocationally disinterested pre-service teacher, S7 at College One,



reported during their Ind. Int.: *“School as you know is always pressurising. Sometimes school has pressure that you feel like quitting. But you have to keep focused”*.

From the responses of the vocationally disinterested participants it was noted that they were overwhelmed by their new environments, which linked up with the changes of location highlighted above, and they were failing to cope with the huge amounts of work required by their programmes. They were nostalgic about home, where they were free to do whatever they wanted. At these colleges they had to cope with living in crowded hostels. Nostalgic feelings come about when one changes location or is in a new environment where one experiences a new type of life. Boyd and Myers (1989) describe such critical phases of disorienting dilemmas as bringing about grieving. The participants realised that their old practices were no longer relevant and they had to cope with so many new issues and practices, hence their feelings of nostalgia and grief. Cranton (2006) confirms that moving and job change or job loss stimulates transformative learning. Some pre-service teachers felt like quitting. The disorientations were also in the form cold water baths, daily mass attendance, and pressure from the many assignments and tests that they were given, all of which contributed to their dilemmas. In the Catholic run institution that the particular participant attended, the attendance at daily liturgical services was a must. The rules and regulations were enunciated in the Zimbabwe Catholic Bishops Conference Document as follows:

*The staff and students in Catholic schools/colleges/universities shall participate in daily prayers, regularly scheduled liturgies and other devotions ... religious devotions including but not limited to the Rosary, Stations of the Cross and Benediction should be provided. No staff member or student will be exempted from participation in religious observances which are deemed part of the school programme (ZCBC Education Commission 2016).*

Given this requirement expressed in the quote, some vocationally disinterested pre-service teachers felt pressured to attend liturgical services that they were not familiar with. Coming from different denominations, being required and having to attend Catholic masses daily was a dilemma. As a result, transformative learning could have stalled, unless they then reflected and critically self-assessed and self-examined their previous assumptions and attitudes towards such practices.

### 6.3.4 Confusion

Some vocationally disinterested participants experienced and identified confusion or a state of uncertainty as a trigger for transformative learning. The participants were bewildered and they seemed unsure of what they wanted. *“Now that am here there is this awkward and boring, I don’t know... environment”*, lamented vocationally disinterested participant S9 at College Three during an FGD. Another vocationally disinterested pre-service teacher, S10 at College One, echoed similar sentiments during their Ind. Int.: *“Aaa, I felt that I was not in my field. Even when I went to College X, it was just the same... Let me go through this phase, it will come to pass”*. In addition, another vocationally disinterested participant, S6 at College Four, confirmed this confusion during their Ind. Int.: *“Even my lecturers, at first when I arrived at the college, I felt a great distance from them”*. One more participant, vocationally disinterested pre-service teacher S7 at College Two, moaned during their CD and discussion: *“As for us, we do not know the lecturers yet. It’s a bit of hassle to look for the lecturer. Here we don’t know where to look for lecturers”*.

The comments from the pre-service teachers revealed different forms of disorienting dilemmas. As alluded to earlier on, these dilemmas were precursors of their transformative learning. Hoggan, Malkki and Finnegan (2017) and Raikou (2018) concur that disorienting dilemmas are an effective catalyst for transformative learning to occur. In this case again, the new environment was unsettling. Some vocationally disinterested participants were in a state of despair. They were dispassionate about teaching and they had to face unfriendly lecturers. They also wandered around the college trying to locate the lecture halls. The confusion was further exacerbated by not knowing the lecturers who took them for different subjects. This confusion could lead to their withdrawal and loneliness, both unhealthy for transformative learning. Surveyed research (Elseby 2009) indicates that there is a need to displace unproductive thoughts and actions that interfere with learners’ lives in order to enhance their transformative learning. In this case, the feeling of confusion had to be worked on in order for these student teachers to become functional and self-directed. Taking a cue from Choppo (2016), orientation programmes should facilitate transformative learning by influencing “students’ mind-sets, feelings, and preconceptions about an institution” (Modipane 2011: 1592-1607). In this situation, transformative learning was likely to be facilitated by critical thinking and planning which course of action to take, which

incorporated Principles Two and Three of the Transformative Learning Theory (Mezirow 1991). Whereas vocationally disinterested participant S9 at College Three was completely devastated, participant S10 at College One was somewhat positive, evidenced by their desire to stay positive and focused on learning. This suggested transformative learning. Linked to confusion is frustration, which will be discussed next.

### **6.3.5 Frustration**

Transformative learning was also facilitated by the feeling of frustration. Frustration generally refers to emotions that could be described as some annoyance, exasperation or infuriation, possibly emanating from failure to achieve one's goals or desires. Agbakwuru (2009) affirms that frustration is a precursor to transformative learning. Akinade (2005) reports that individuals who fail to adjust to their new college environment during orientation may experience feelings of worry, fear and frustration. Such feelings could also negatively impact transformative learning. However, after going through critical self-assessment and recognising the source of their discontent (of worry, fear and frustration), the pre-service teachers could explore options for their new roles and move on. The individuals, in this case the pre-service teachers, would critically reflect and restructure their world view (Mezirow 1991; Taylor 2007). Consequently, they would become open to looking at alternative points of view, and then plan a new course of action; thus, enacting Principle Six of Mezirow's (1991) Transformative Learning Theory.

Generally, these vocationally disinterested pre-service teachers had joined the teaching profession as a last resort, as discussed in Chapters One and Two. Their feelings of frustration were therefore not surprising. This was exemplified by a quotation from vocationally disinterested Participant S7 at College One during an FGD, when they explained:

*I am frustrated by the experiences. I am still new to the environment. I feel homesick. I have left a three-month old baby at home. The lecturers always call us to do work, even during weekends. I can't be with my baby and family. I do not enjoy this teaching.*

In the quotation above, the vocationally disinterested participant expressed how she was affected by context shock, and this was inimical to her transformative learning. Hassel and Ridoul (2018) comment that a new environment where students are responsible for their own learning poses the biggest challenge for them. In order to promote transformative learning, there was a need to

create a safe environment for the pre-service teachers, so as to minimise their frustration. Surveyed literature (Boler 1999; Nsiah 2014; Kasl and Yorks 2016; Pavlakis 2017; William, McKnight and Phillip 2017; Giotopolous and Pavlakis 2018) highlighted the crucial relationship between critical assessment of assumptions and emotional support. This particular participant, S7, had different roles as a mother and a student and as such she could not concentrate solely on her work. Research by (Moghadam *et al.* 2017) opines that combining motherhood and studying without compromising the activities of either one is a great dilemma for a pre-service teacher. The unpleasant emotional stresses caused by the role conflict of being a student on one hand and a mother on the other could affect transformative learning. This was confirmed by Hjeltne *et al.* (2015) when they said that the feelings of stress in academic situations caused psychological problems in students and could negatively impact their wellbeing and personal learning. The disorienting dilemma exemplified Principle One of Mezirow's (1991) Transformative Learning Theory and was highlighted in S7's experiences of frustration. These participants needed to critically assess their situation and plan a way forward, and emotional support was mandatory for such students to achieve transformative learning.

Another vocationally disinterested participant, S8 at College Three, said during their Ind. Int.: *"Sometimes it's annoying and I feel like going. But because I want the title I would rather sacrifice because I am a student at their college"*. This pre-service teacher seemingly demonstrated his critical thinking skills, which was an indicator of transformative learning. Although he did not have a passion for teaching, he decided to embrace and continue with the training. The word 'sacrifice' showed commitment after serious consideration. As indicated earlier on, Elsey (2009) discourages negative and unproductive thoughts as they hinder transformative learning. Making a decision can be stressful, and this makes decision making a critical component in transformative learning.

Linked to this, another vocationally disinterested pre-service teacher, S6 at College Four, said during their CD and discussion: *"Yeah, it's not something that is interesting at all, especially even the ethic things... wearing a tie every time, as well from 07:15 to 4:00. I think it's like you will be in prison"*. Similar sentiments were echoed by a vocationally disinterested pre-service teacher S10 at College Two during an FGD when he said: *"I still do not like teaching. I want to be a nurse"*. This pre-service teacher's emotional symptom of dislike for teaching could be a

sign of their resistance to change. He probably found no reason to change after questioning his values, beliefs and attitudes (Mezirow 1991). In this instance, transformative learning may not have occurred. This was a confirmation of what Mezirow (2000) concluded. Mezirow asserted that during the transformative learning process, there was a tendency of sliding back into old beliefs because of familiarity with them. This process then inhibited transformative learning.

The transformative learning experiences of vocationally disinterested participant S6 were realised by him changing his old habits to the new ones (Pop 2008). In the response above, the participant was distressed by the new requirements that he had at the start of the teacher training programme. For transformation to occur, the pre-service teacher had to critically examine his previous assumptions - Mezirow's (1991) Principle Three of the Transformative Learning Theory. The dress code was a requirement so he had to abide by the rules of the college, although he felt gagged by being in such attire. This to him was disorientation from his habitual routine. The Zimbabwean Public Service dress code clearly spells out that:

*...For men: 'Dress must include collar and tie. There is no objection to wearing of tailored safari suits, with alternative dress being suits or sports jackets or blazers. On formal occasions to which members are invited as representatives of their ministries, suits with collar and tie will be worn. Exceptions are only at the discretion of heads of ministries or departments. Normal standards of dress may be departed from when public servants are working in rural areas when duties require different considerations. It is However, advisable for men to keep jackets in their offices in case they are called to meetings and other formal occasions unexpectedly. Those with medical conditions requiring them to put on open shoes will have to present medical certificates before they can be allowed into buildings. In the case of men, open sandals should only be worn for medical reasons and it is necessary for the respective head of departments to request for the medical certificates of the affected members' the circular read, adding that no tennis shoes or sneakers are allowed (Public Service Standards of Dress 2006).*

Transformative learning experiences were promoted by following the rules and regulations of the teaching profession. The dilemma faced by the participant who felt like he was in prison because of the kind of dress code was apparently a trigger for transformative learning. Taylor (1998), Mezirow (2000) and Cranton (2000) argue that a triggering event leads to an awareness

of inconsistency amongst our thoughts, feelings and actions, or a realisation that previous views and approaches do not seem adequate any longer. In this instance, through his realisation transformative learning seemingly occurred.

In order to enhance transformative learning, the pre-service teachers were taught teaching strategies and professional ethics. This being the case, professional dress was a must for the pre-service teachers. In line with transformative learning, they had to undergo personal changes through the process of self-examination and critical assessment of assumptions (Mezirow 2009). It was through the process of critical self-reflection that perspective change could occur. Hence, transformative learning was apparently achieved.

The transformative learning experiences of the vocationally disinterested pre-service teachers were mainly influenced by the dilemmas that they faced. Merriam (2004) contends that transformative learning is about change; dramatic, fundamental change in the way one sees oneself and the world one lives in. This suggests that although the frustrations could weigh the vocationally disinterested pre-service teachers down, they needed to continually reconstruct their minds in order to experience transformative learning. It was through reflection and encouragement that these vocationally disinterested participants realised transformative learning. Cranton (2000) adds that the life experiences of the individual are very important in transformative learning. This is given that they form the basis for reflection.

#### **6.3.6 Shock**

Shock is an upsetting, disappointing and disconcerting experience which is often caused by unexpected events, in this context the vocationally disinterested pre-service teachers' lives. Within this transformative journey, participants also experienced dilemmas related to shock. This was demonstrated by one vocationally disinterested participant, S8 at College Four during an FGD when he said: *"When I went for home practice it was something shocking for me. I had to mark 80 books - it was something I was not expecting"*.

The comment above reflected a dilemma that the pre-service teacher had not anticipated. There was a mismatch between his previously held beliefs and what he experienced when he had to mark 80 exercise books. The pre-service teachers often enter teacher education with problematic or unexamined assumptions, beliefs and knowledge. For transformative learning to occur, the

pre-service teachers had to critically examine themselves. Another vocationally disinterested participant, S7 at College One, expressed shock during their Ind. Int. at having to pay a \$5, 00 fine for flouting any college rules: *“Any silly mistake you pay \$5, even if something small!”*

The transformative journey was not easy for this participant who had to deal with disciplinary issues at college. This participant had to question his previously held beliefs and assumptions Mezirow (2003) for transformative learning to occur.

The student teacher mothers shared almost the same experiences that happened during their transformative journeys. For example, a vocationally disinterested pre-service teacher, S9 at College Four, commented during her CD and discussion: *“We also have to come on weekends. Some of us have children and this is very disturbing to my children for they will not have anyone to look after them during the weekends. I do not like this scenario”*.

The response above provided an example of the unsettling emotional pressure experienced by student teachers who were mothers of young children. Gouthro (2002) argues that such pressures have negative impacts on their learning and on the lives of their children. Stress could thus hinder their transformative learning.

The comments about shock above confirmed the painful transformative experiences that the pre-service teachers underwent. The shock – a disorientation -was a testimony that they were so used to their old way of life prior to training, that changing to suit the new environment was difficult. Mezirow (1996) in Principle Six of his theory affirms that transformative learning is a process where prior interpretation is used to construe a new experience, in order to guide future action. In this instance, the pre-service teachers had to use their critical assessments to experience transformation. As alluded to earlier, the method of assessment was taught in the PSA and the pre-service teachers were trained on how to mark and the essence of supervising their learners’ work.

Assessment is critical in transformative learning because feedback motivates learners to be committed in their work (Mukeredzi and Nyachowe 2018). Having so many learners in a class was caused by the shortage of teachers, since the government had frozen teacher recruitment as an austerity measure. “... The job freeze was among a raft of measures introduced to manage government’s wage bill...” said the Finance Ministry Secretary (Manungo 2017). The

implication of this teacher shortage was that when the pre-service teachers went to do their TP, they would have to brace themselves for hard work. According to Lysychkina, Hildenbrand and Reid-Martinez (2016), transformative learning is triggered by a dilemma, which in turn propels the learners to think critically and re-examine their beliefs and attitudes and plan for future action. In the case of the shocked vocationally disinterested pre-service teacher, participant S8, self-reflection helped to challenge their previous held assumptions that teaching was ‘killing’ (*80 books to mark*). Transformative learning was likely to have occurred when the pre-service teachers experienced changes in the way they thought about their world (Mezirow 2000) - in this case about teaching.

In addition, transformative learning also seemingly occurred when the vocationally disinterested participants adhered to the disciplinary rules of the college. This was done in line with the expectations of the diploma awarding University of Zimbabwe. The experience influenced critical reflection, which was core to transformative learning.

The monetary fines (\$5) which were meted out to the pre-service teachers were meant to promote discipline across all learning activities. Undisciplined teachers were likely to be less effective and innovative, which would impede their learners’ academic growth (UNESCO 2014). In this instance, disciplined pre-service teachers would be indicators of transformative learning having taken place.

From the discussion above, the vocationally interested pre-service teachers’ experiences ranged from excitement, to happiness and pride. These emotional experiences were indicators of passionate or intrinsic motivation for the teacher training course and the teaching profession. It is evident from research (Van Iddekinge, Putka and Campbell 2011; Schelfhout et al. 2019) that passion induces critical thinking, creativity and innovation, which are flag posts for transformative learning. Critical thinking is required for transformation to take place because people are different afterwards. In addition, Brock (2012) asserts that passion leads to improved learner performance, culminating in transformative learning. Hence, vocationally interested teachers are expected to be torch bearers for quality education, which has a cascading effect on these learners’ success. Thus, excitement, happiness and pride could facilitate transformative learning of the vocationally interested pre-service teachers.



Contrary to this, some vocationally disinterested pre-service teachers felt otherwise. They had feelings of fear, confusion, shame, being overwhelmed, frustration and shock. The emotional dilemmas in this study symbolised insecurity and the lack of motivation towards learning. Surveyed literature (Carbonneau *et al.* 2008; Day 2004) indicates that lack of interest in teaching may result in less enthusiasm in the profession, resulting in low performance and failure. These disorientations mentioned above may either hamper or propel transformative learning Morgan, Isaac and Sansone (2001); Serin (2017). Furthermore, Illeris (2003) emphasises the importance of the emotional dimension if any change is to occur. He further points out that emotions are critical for transformative learning because they secure the mental balance of the learner and thereby ensure that effective transformative learning takes place. Since all cognitive learning is driven by desire, interest, necessity or compulsion, it follows that without the passion to train as teachers, as indicated by the vocationally disinterested, and without emotions to get the mental balance right, the zeal to learn may be diminished (Morgan, Isaac and Sansone 2001). Mezirow's (1991) theory acknowledges the link between extra-rationality and transformative learning. Student teachers make use of both the cognitive and emotional aspects to critically reflect on their previous assumptions, hence transformative learning occurs. As alluded to in Chapter Two, Swartz and Tisdell (2012: 325) assert that in the process of adult education, "emotion must be recognized as an essential element, always present and worthy of reflection". Thus, emotions and transformative learning are inseparable for they result in self-awareness. However, the response to different dilemmas is not universal as responses are an individualised experience (Cranton 2006). What might be stressful to some student teachers could be relaxing experiences for others.

Having dwelt on the emotional transformative experiences of both the vocationally interested and disinterested pre-service teachers which were likely to have propelled transformative learning, the next section discusses their transformative learning experiences. The analysis still centres on the nature of the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers, which responds to question one of the study. The participants in this study, both the vocationally interested and the vocationally disinterested, were exposed to the same learning experiences and therefore, the discussion highlights whether responses came from interested or disinterested participants.

## **6.4 Transformative learning through learning experiences**

In relation to the nature of the transformative learning of the vocationally interested and vocationally disinterested pre-service teachers, it emerged that learning experiences promoted transformative learning. In the context of this study, learning experiences referred to the ways in which the pre-service teachers encountered or underwent learning inside and outside lecture rooms, through interactions and/or through use of technology. Illeris (2003; 2009) defines learning as comprising of three dimensions, namely: the cognitive dimension of knowledge and skills; the emotional dimension of feelings and motivation; and the social dimension of communication and co-operation. The description of learning addresses the nature of transformative learning where self-examination, critical assessment of assumptions, acquiring new knowledge and skills are quite conspicuous. Mukeredzi (2018) notes that learning is behaviour change. It is expected that learning should effect change in the behaviour of the learner. As alluded to in Chapter Three, transformative learning has to do with change in one's self, in others, and in the world in which one encounters situations that challenge one's deeply entrenched assumptions, values, beliefs, and knowledge uncritically assimilated from the various experiences and socialising agencies throughout one's life (Mezirow 2012). Consequently, learning embraces fundamental change in the learner and in this case, in the pre-service teachers.

Related to learning is experience. Experience includes what people do, what they believe, what they put up with, what they suffer for, how they react, their desires, faith, perspectives, and dreams. In short, it explains their life story (Sayilan 2009). In this study, the pre-service teachers were influenced by their experiences to realise transformative learning.

### ***6.4.1 The nature of transformative learning experiences related to classroom techniques***

The following learning experiences promoted transformative learning of both the vocationally interested and vocationally disinterested pre-service teachers: research, demonstration, group work, lectures, questions and answers, and ICT. Each classroom technique is analysed and discussed.

#### ***6.4.2 Transformative learning experiences related to research***

Research emerged as a popular learning strategy across the four selected teacher training colleges in the study. Creswell (2018) describes research as a process that increases understanding on an issue. Thus, in this study, some pre-service teachers conducted research for assignments to acquire new knowledge. The participants highlighted various ways in which they experienced transformative learning through research. This was exemplified by a vocationally interested participant, S3 at College Three, during an Ind. Int. when they said: *“We use internet researching using our phones, interacting with others to share ideas”*. Similarly, another vocationally interested participant, S5 at College One, concurred with this during an FGD when she said: *“We use research to learn”*. This was also confirmed by a vocationally disinterested pre-service teacher, S7 at College Two, during a CD and discussion, when he pointed out that: *“We are told to go and research from the library”* and a vocationally disinterested participant, S8 from the same college, when they echoed this during their Ind. Int.: *“We are given assignments to go and do our own research. And then you can get help on the researches”*.

Research enabled the pre-service teachers to answer the questions of ‘what’ and ‘how’, and to build upon the assumptions they had brought to the classroom (Cranton and Taylor 2007). The process of answering such questions was a process of learning, which related to Mezirow’s (1991) Principle Seven of the Transformative Learning Theory which emphasised the acquisition of new knowledge and skills. At tertiary level, it is no longer adequate to gain only informational knowledge; students must also gain transformational knowledge which goes beyond transmitted facts. Through transformative learning, the student teachers could challenge the distortions they had carried from early life into adulthood (Cranton and Malkki 2014). For example, drawing on Principle Six (Mezirow 1991), the new knowledge gained could be used to challenge their previously held beliefs on the topics that were researched and the pre-service teachers could then plan to ‘move on’ using their new knowledge. Hence, the purpose of research as a learning strategy was seemingly to facilitate the development of the pre-service teachers into ‘self-directing’, ‘self-monitoring’ and ‘self-correcting’ individuals (Gregory 2002). With regard to transformative learning, the pre-service teachers had to critically analyse their frames of reference or their previous understandings through the process of self-examination. Consequently, their learning was transformed by engaging in research (Mezirow 1997). This

process suggested transformative learning. Another form of their transformative learning experiences was through demonstration.

#### ***6.4.3 Transformative learning experiences through demonstration***

The demonstration method is understood as a visual approach to scrutinising and observing information, ideas and processes Mukeredzi (2009). It is generally viewed as a pedagogical approach which allows students to see the teacher actively engaged as a model, rather than merely telling them what they need to know. As a teaching strategy, demonstration means that communication of ideas is done through visual support Criticos *et al.* (2002). Here, the participants become active and mentally engaged as they have to look carefully and follow steps. For example, vocationally interested participant S2 at College Two suggested during the CD and discussion that they experienced transformative learning through demonstrations by saying: *“We learn through demonstrations. Our Art and Design lecturer always teaches us using the demonstration method. She shows us the colours to use”*. A vocationally disinterested participant, S7 at College Four, intimated during an FGD: *“We learn using the demonstration method because I easily understand concepts because I see them in my mind’s eye”*. Both groups appreciated the demonstration method as propelling their transformative learning. Through the demonstration method, student teachers were able to visualise and master concepts and as a result, they were able to examine their own conceptual understandings, beliefs, assumptions, and perspectives. Thus, transformative learning apparently occurred as they were engaged in their work.

From the responses given by vocationally interested participant S2 and disinterested participant S7 above, transformative learning was seemingly experienced using the demonstration strategy. The pre-service teachers understood what was required of them, for instance the appropriate colours to be used in Art and Design, and they were able to master quickly the concepts that the lecturer was trying to put across. In relation to transformative learning Mezirow (2012), demonstration promotes the development of mental models or pictures of what is seen and learned from a lecturer’s demonstration and this engages and motivates students. It would appear then that exposure to transformative learning through demonstrations fostered these pre-service teachers’ perceptions of their learning efficiency and of the importance of those subjects,

and this was likely to have enhanced their achievements and understanding of concepts. They experienced transformative learning through knowledge acquisition.

In terms of the theoretical framework, participants could then have been persuaded to challenge their previously held beliefs and to adapt to new ways of seeing the world through critical thinking, and transformative learning could possibly have been realised (Santalucia and Johnson 2010; Brown 2015). Principle Three of Mezirow (1991)'s Transformative Learning Theory emphasises critical thinking and critical reflection of assumptions. As students watched the demonstration critical thinking was promoted, resulting in them challenging their existing assumptions. Other experiences of their transformative learning were through participants' involvement in group work, where they received and shared ideas based on their individual backgrounds and academic experiences.

#### ***6.4.4 Transformative learning experiences through group work***

Group work, also often known as cooperative learning, is a method of instruction that gets students to work together in groups. Group work usually creates more opportunities for critical thinking and can promote student learning and achievement as students can compare their ideas and assumptions with those of their peers. Their communication is often enhanced as they can verbalise their thoughts at a similar echelon, thereby developing skills critical to successful teamwork for both classroom and workplace practice. Group work engagement draws the student teachers into deeper reflection as they dialogue about what they have experienced or learned (King 2004; Cranton 2006). The pre-service teachers seemingly learnt with and from each other as they received and shared ideas based on their knowledge and experiences. Both vocationally interested and disinterested pre-service teachers concurred that group work was one of the most effective learning strategies which seemingly exposed them to transformative learning.

Surveyed research has defined group work as a situation in which two or more students work together to search for understanding or meaning, or to solve a learning problem (Gillies 2003; Gillies and Boyle 2011; Chiriack 2011). Furthermore, in group work, learners depend on each other for their experiences and knowledge (Lave and Wenger 1991). Many studies have shown that when implemented correctly, cooperative learning improves information acquisition and retention, higher-level thinking skills, interpersonal and personal communication skills, and self-

confidence (Johnson, Johnson, and Smith 1998; Johnson and Johnson 2004). Transformative learning experiences through group work were exemplified by one vocationally disinterested participant, S6 at College Two, when he commented during a CD and discussion: *“We learn a lot using group work; students sharing their views, and even telling others their views. Telling others that this is wrong, this is right”*. Another vocationally disinterested participant, S9 at College One, said during an Ind. Int.: *“I like group work because if I Google for information on the internet but cannot understand it all, I join group discussions to get help and ideas from others, some which you cannot get on the internet”*.

In concurrence, vocationally interested pre-service teacher S3 at College Three had this to say during an Ind. Int.: *“I value the group work because we learn and study with others. It’s easier for me to understand concepts when we interact with others”*. The same sentiments were echoed by vocationally interested participant S1 at College Four, who said during an FGD: *“I value group work because people are able to interact with each other and also discuss with each other”*.

There was a concurrence of transformative learning experiences that the vocationally interested and disinterested participants went through when they engaged in group work. It was evident from the above responses that the pre-service teachers experienced transformative learning when they engaged in group work activities, as their understanding of concepts was enhanced. This meant that when collaborating with their peers, the pre-service teachers engaged themselves in productive dialogues, thus generating new knowledge (Baumfield and Butterworth 2007). Mezirow’s Transformative Learning Theory highlights the significance of self-disclosure and dialogues and multilogues through which learning may take place (Mezirow 2000). In addition, it is through the process of critical reflection, negotiation and re-negotiation, discussion and dialogue that learning takes place (Ileris 2014). In this instance, the pre-service teachers were exposed to a community of learners where they were challenged to question their own beliefs and attitudes, and pushed into reflection, thereby assimilating new knowledge. Another learning strategy by which the vocationally interested and vocationally disinterested participants experienced learning was the lecture method.

#### ***6.4.5 Transformative learning experiences through the lecture method***

Data also showed that both the vocationally interested and vocationally disinterested pre-service teachers were exposed to the lecture method by which they also seemingly experienced transformative learning. Literature defines the lecture method as a teaching strategy where learning is centred on subject content (Banda 2014). In this case, the lecturer is the content expert and the learners are recipients of the knowledge. Kegan (2000) and Drago-Severson (2010) call this type of learning ‘informational learning’ as it results in increased knowledge and skills. Linked to the Transformative Learning Theory, the lecture method promotes the acquisition of new knowledge and skills, which is Principle Seven of Mezirow’s (1991) theory. A vocationally interested participant, S1 at College One, commented during the CD and discussion: *“I like the lecture method because you learn with a group of friends”*. In addition, vocationally interested participant S3 at College Two also said during their Ind. Int.: *“Lecturers encourage us to consult in the lecture halls. It’s a friendly environment”*. In support of the lecture method, vocationally disinterested pre-service teacher S8 at College Three reported during an FGD: *“I value the lecture method. Because everything is about the lecturer giving you notes, they give us instructions. I value the lecture method”*.

Contrarily, vocationally disinterested participant S6 at College Four had this to say during an FGD: *“The lecture method; you will be very shy to ask questions because you think you will lose value when you fail to answer a question.”*

While some pre-service teachers seemed to suggest having gained transformative learning experiences using the lecture method, the approach has been criticised for not promoting active engagement and for falling prey to what has been referred to as ‘information transmission fallacy’ (Schmidt *et al.* 2015). As indicated in the responses above, the lecture method helped in explaining difficult concepts. However, some participants were not comfortable with the lecture method because they faced the dilemma of not being able to ask questions for fear of being laughed at. This kind of dilemma could hamper transformation. Although lecturing can be quite effective in delivering facts or ‘information’, often it does not enable student-centred learning and thinking processes or bring about a change in the behaviour of students as they are regarded as passive recipients of facts or empty vessels (Lammers and Murphy 2007). Consequently, this may hinder effective transformative learning as adults tend to develop mental habits, biases and assumptions that usually make them resistant to new ideas and alternative methods of learning

when they do not actively participate in the learning process (Palis and Quiros 2014). Generally, the lecture method was appraised by both vocationally interested and disinterested pre-service teachers for facilitating gaining new knowledge and skills. Student teachers were able to critically reflect and question new knowledge against their existing assumptions (Mezirow 2003). Critical evaluation of assumptions enhances transformative learning. The next section discusses transformative learning experiences using the question and answer strategy.

#### ***6.4.6 Transformative learning experiences through question and answer technique***

The vocationally interested and disinterested pre-service teachers in the four colleges affirmed that the ‘question and answer’ technique enhanced their transformative learning. Literature surveyed (Tofade, Elsner and Haines 2013) indicates that effective questions asked in a psychologically safe learning environment support student learning by probing for understanding, encouraging creativity, stimulating critical thinking, and enhancing confidence. As a result, transformative learning may be fostered since creativity, critical thinking and confidence are core elements for transformational learning Wang and King (2006). This was exemplified by vocationally interested participant S1 at College One, who reported during an Ind. Int. that: *“I value the question and answer method during the lectures because I learn from my friends”*. The same sentiments were echoed by vocationally interested pre-service teacher S5 at College Four during a FGD when he said: *“I understand better when the lecturer uses the question and answer technique”*.

Similarly, the vocationally disinterested pre-service teachers affirmed the importance of the question and answer approach during their transformative journey. This was evidenced by vocationally disinterested participant S6 in the CD and discussion, who said: *“Our lecturer uses the question and answer strategy in delivering lectures and I find this very effective”*.

The comments given by the vocationally interested and vocationally disinterested participants concurred that the question and answer technique which enabled their learning seemingly promoted their transformative learning. Mezirow’s (2003) Transformative Learning Theory principles are embedded in the question and answer technique. For example, Principle Three calls for a critical assessment of assumptions, which occurs when an individual is asked tantalising questions. Principle Seven emphasises acquiring knowledge and skills, which is



promoted during the question and answer sessions, and Principle Nine deals with self-confidence and self-efficacy gained after acquiring relevant knowledge and skills. Hence, the participants seemingly experienced transformative learning using this teaching/learning strategy. The pre-service teachers also seemed to have experienced transformative learning through information and communication technology, which is discussed next.

#### ***6.4.7 Transformative learning experiences through information and communication technology (ICT)***

For lecturers and student teachers alike in higher education, technology is usually engaging and animating to the imagination as it stimulates the mind in ways that can make a profound and lasting difference. In recent years, technology seems to have become the most important new teaching strategy and learning style. Several studies (Gonzalez-Sanmamed 2016; OECD 2019) have identified the benefits of information and communication technologies (ICTs) for promoting communication during the learning process. From surveyed research, technology is viewed as the tool that teachers use to help their students use, create, manipulate and share information on computer devices and over computer networks (Eady and Lockyer 2013). Laptops, desk top computers, tablet devices and smart phones are examples of technologies used to learn. With regard to transformative learning, the use of ICTs acts as a catalyst for change. The participants are encouraged and supported to learn (Jonassen and Reeves 1996). For example, vocationally interested participant S3 at College One said in a CD and discussion: *“We use laptops or phones when learning on the course”*. Another vocationally interested pre-service teacher, S2 at College Two, commented during their Ind. Int.: *“I value the use of ICTs. We learn using our laptops”*.

Similar sentiments were echoed by vocationally disinterested participants in the four colleges. This was evidenced by vocationally disinterested participant S9 at College Three during an FGD, when he said: *“I like it when our lecturer tells us to go and design a lesson plan using computers.”* Another vocationally disinterested participant, S6 at College Two remarked during a CD and discussion: *“Our co-ordinator has created a WhatsApp group for us where she informs us that the lecture has started or where we assemble for group discussions”*.

With reference to the comments given by both vocationally interested and vocationally disinterested participants above, the learning experiences were both fascinating and communicative, which then probably promoted transformative learning. Literature (Underwood 2006) confirms that ICT introduces new ways of teaching and learning, where students are engaged in activities to produce knowledge. In this instance, the vocationally interested pre-service teachers experienced transformative learning by acquiring new knowledge.

The responses demonstrated the value of ICTs in enhancing the transformative learning experiences of both the vocationally interested and disinterested pre-service teachers. Both groups had similar learning experiences regarding the use and effectiveness of ICTs. Literature (Lysychkina, Hildenbrand and Reid-Martinez 2016; OECD 2019) says that active and interactive learning fosters transformative learning. Here, the vocationally interested and vocationally disinterested pre-service teachers acquired knowledge and skills Mezirow (2003), which is Mezirow's Phase/Principle Seven of the Transformative Learning Theory. Another aspect of technology that emerged from their discussion was social media.

The use of the social media as a learning experience emerged as an interactive learning activity, which seemingly promoted their transformative learning. Some vocationally disinterested participants commented on the effectiveness of social media as a source of their transformative learning experiences. From a vocationally disinterested participant above, the use of social media enhanced communication; the giving and receiving of information and instructions and sharing knowledge and ideas amongst learners and the college community. They knew where to go and when to attend lectures. Surveyed research has defined social media as tools, services, and communication facilitating connection between peers with common interests (Tess 2013). Hence, effective incorporation of social media and other information communication technologies into classroom settings or outside the classrooms is shown to benefit student learning outcomes and participation in classroom activities (Tang and Zhang 2010 and Tess 2013). When this happens, transformative learning may be realised. This is in tandem with Mezirow's (1991) Transformative Learning Theory which emphasises the social aspect of knowledge acquisition.

The next section summarises the analysis of the responses given by both the vocationally interested and disinterested pre-service teachers on their learning experiences while on the course.

From the comments of both categories of pre-service teachers on how they experienced transformative learning on the course, it was clear that the pre-service teachers from all four selected teacher training colleges experienced similar teaching and learning strategies. The most popular pedagogical approaches by which the participants reported experiences of transformative learning on the course were research, demonstrations, group work, lectures, question and answer sessions and ICTs. Using these classroom techniques, transformative learning was enhanced by the acquisition of knowledge and skills, which is Principle Seven of the Transformative Learning Theory (Mezirow 1991). The student teachers would have critically reflected on their acquired knowledge and were likely to have realised and acknowledged that their existing meaning structures were no longer relevant to their life experiences Brown (2005); Cranton (2006); Taylor and Laros (2014). In light of this, the learning environment in this context allowed participants to develop their own strategies for addressing problems, and to present and negotiate solutions to these problems in a collaborative manner (Hannafin, Hill and Land 1997). Literature reports that when students take a self-centred approach to their learning, they are actively and responsibly involved in transformative learning, where they construct meaning from newly acquired information (Johnson and Johnson 2015; Hoidn 2017). This self-centred engagement where student teachers took charge of their learning promoted self-examination and critical thinking, which form the key elements of transformative learning (Mezirow 1991).

Concomitantly, both the vocationally interested and vocationally disinterested pre-service teachers reported experiencing transformative learning through research, demonstrations, group work, lectures, question and answer sessions, and ICTs.

Given that the student-centred strategies like research, demonstrations, group work, question and answer sessions and ICTs enhanced the student teachers' transformative learning through engagement in the learning processes, the lecture method was reported to be largely teacher-centred. However, the student teachers appraised it as they could easily get information from the lecturers. Empowered with new knowledge, the pre-service teachers challenged their existing assumptions and changed or modified how they understood the teaching profession.

## **6.5 Conclusion**

This chapter analysed and discussed the findings around the nature of the transformative learning experiences of both the vocationally interested and disinterested pre-service teachers in the four selected teacher training colleges in Zimbabwe. The findings that emerged revealed that the nature of the transformative learning experiences centred around the emotional experiences and the learning experiences of both the vocationally interested and disinterested pre-service teachers. For the vocationally interested pre-service teachers, the emotional experiences included excitement, happiness and pride. The passionate feelings about teacher training seemingly propelled their transformative learning. Committed teachers were likely to achieve their goals. On the contrary, the vocationally disinterested pre-service teachers experienced different feelings of fear, confusion, shame, being overwhelmed and shock. These disorienting dilemmas were, however, pre-cursors to transformative learning.

Both the vocationally interested and disinterested pre-service teachers in all four selected teachers' training colleges reported that the nature of their transformative learning experiences also revolved around teaching and learning strategies such as research, demonstrations, group work, lectures, question and answer sessions and ICT. The next chapter presents and analyses the data that addresses question two and question three of the study.

## CHAPTER 7

### DATA PRESENTATION AND ANALYSIS

*How vocationally interested and disinterested pre-service teachers understand their transforming learning in selected teacher training colleges in Zimbabwe.*

*The forms of support offered by the college communities to enhance preservice teacher transformative learning.*

#### 7.1 Introduction

The aim of this study was to explore the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in selected teacher training colleges in Zimbabwe. The previous chapter analysed and discussed the findings regarding the nature of the transformative learning experiences of both the vocationally interested and vocationally disinterested pre-service teachers, where it emerged that the pre-service teachers transformed through their emotional and learning experiences.

This chapter presents and analyses data that address two questions: question two and question three. The data addressing these questions, just as for the data that addressed question one, were generated across all research sites using the three data sources: focus group discussions, individual face-to-face interviews, and continuum drawings and discussions. In the discussion, I pooled all the data from the discussions together to avoid overlaps. However, where differences were noted, these were highlighted in the discussions. The presentation is organised around the two research questions. Question two investigated the pre-service teachers' understandings of their transformative learning, while question three sought to understand the forms of support offered by the college communities that enhanced their transformative learning.

The second research question: '*How did the vocationally interested and vocationally disinterested pre-service teachers understand their transformative learning?*' This is addressed in the first part of the chapter.

The pre-service teachers understood their transformative learning as revolving around two themes: transformative learning as change, and transformative learning as knowledge and skill

acquisition. This first part of the chapter which is organised under these two themes is discussed and summarised under these sub-themes. A conclusion, that draws together the key findings related to how the pre-service teachers understood their transformative learning, ties up the section. Mezirow's ten principles of transformative learning helped me to explain the findings and throughout the discussion, I also draw on the literature in Chapter Two to illustrate how my findings relate to existing research.

## **7.2 Transformative learning as change**

Responding to the question about how the vocationally interested and the vocationally disinterested pre-service teachers understood their transformative learning, the data indicated that participants understood their transformative learning as a change. This major theme is discussed under the following four sub-themes: first, a change in views/attitudes about teaching; second, change related to self-concept; third, change in their personal attributes; and fourth, changes in views about dress code. These sub-themes are discussed in turn below.

### ***7.2.1 Transformative learning as a change in views/attitudes and perceptions about teaching***

With regard to changes in perceptions/views/ attitudes and beliefs, surveyed literature (Illeris 2009; Taylor and Snyder 2012) suggests that transformative learning implies personality changes or changes in the organisation of the self as a result of a crisis-like situation. In addition, transformative learning leads to profound changes in one's thoughts, feelings, perspectives, beliefs, and behaviours because it is a radical shift of consciousness that permanently alters one's way of being in the world. In the same vein, Mezirow (2003) indicates that the process of transformation involves validating contested beliefs through discourse, taking action following one's reflective insight and critically assessing it. Further literature surveyed (Brook 2009; Henderson 2012; Weimer 2012; Provident 2015; Kalu and Kelly 2018); Ableser and Moore 2018) adds that individuals understand their transformative learning as a change when they experience fundamental shifts in their thinking, which becomes broader, more reflective, active and inclusive. Consequently, in this study, both vocationally interested and vocationally disinterested pre-service teachers in all four selected colleges and across all data sources concurred that they understood transformative learning as a paradigm shift; changes in the way

they perceived and viewed teaching and viewed themselves, as well as a change in their belief systems and attitudes (Sakinofsky, Amigo and Janks 2018; Hodge 2019).

In this study, perceptions were the way something was understood through the use of senses in this case the senses of sight, feelings and hearing. The vocationally interested and vocationally disinterested pre-service teachers experienced similar changes in how they now perceived the teaching profession. One of the vocationally disinterested participants, S8 at College Four, commented during an FGD:

*When I started doing these subjects like, uuum... Methodology, where they actually tell you how you are supposed to be as a teacher, to present yourself to learners, how you teach, everything... I have actually changed my perception of what teaching is all about, I now enjoy teaching.*

This vocationally disinterested participant, S8, had a negative attitude towards teaching at the commencement of the training programme. There was a mismatch between his career interests and the environment in which he found himself (Morgan, Isaac and Sansone 2001). However, through self-examination and critical assessment of his assumptions Mezirow (1991) of what teaching entailed, he made a paradigm shift. Mavhunga, Mavhundutse and Mavhunga (2008) say that the subject of Methodology (Professional Studies Syllabus PSA) is meant to develop professional competence and appropriate thought processes within student teachers. The teacher training system is intended to empower an individual to achieve the threshold of skilled participation and involvement in classroom practice, which encompasses the initial development of basic competencies, attributes, commitments and characteristics of the teaching profession (Mukeredzi 2016). To add on, the PSA aims to develop a holistic teacher taking cognisance of general classroom practice, theories of teaching, classroom management, public service regulations and conditions of service (Mavhunga, Mavundutse and Mavhuto 2008). Hence participant S8 understood transformative learning as a change involving the personal values of *ubuntu* (respect for the wellbeing and dignity of fellow human beings (Ministry of Education, Sports, Arts and Culture 2013). The learning in PSA exposed the student teacher to the crucial attributes of a competent teacher: a self-motivated learning facilitator, an innovator, trustworthy and respectful, and an effective communicator who was a highly responsible and co-operative team player (Mukeredzi 2016).

Furthermore, a vocationally interested participant also understood his transformative learning as a change in his attitude towards teaching. Pre-service teacher S4 at College Three had this to say during his Ind. Int.: *“Now, I am a professional. I can now speak properly with others. I have come to like this profession”*. In this regard, some of the vocationally interested and vocationally disinterested participants who recognised and expressed changes in their beliefs, perceptions and attitudes may have been influenced by this PSA course, enabling them to understand their transformative learning as involving changes in their perceptions. They now understood the ‘what’ and ‘how’ of the teaching profession. In addition, another vocationally disinterested pre-service teacher, S6 at College Two, explaining how she understood her transformative learning, said during her CD and discussion: *“Yes, I think positively about the teaching career now, and I have come to understand the importance of myself as a teacher”*. Further, vocationally disinterested participant S9 at College Four also explained that his views about teaching had changed as follows during an FGD:

*As for me, now I can see that teaching is a noble profession because here at college during Professional Studies peer teaching lectures, my colleagues refer to me as ‘Sir’. I am excited by this title and envisage myself already in the classroom with my learners; teaching well ... and even people in the college community now respect me.*

The comments from participants S6 and S9 reflected their understanding of transformative learning as a paradigm shift where they started to see things (the teaching profession) differently. Their views about teaching had changed completely. To them, teaching was now a noble profession and they understood and saw themselves as teachers with a social responsibility, and viewed teaching as a profession which could earn them respect, appreciation and acknowledgement in the community. Surveyed literature (Pilonieta *et al.* 2017) indicates that when pre-service teachers experience change, it has to do with their self-awareness and the teaching profession. These changes influenced their personal development and growth, resulting in transformative learning. The change in perception by the vocationally disinterested pre-service teachers was pleasing to note, given that some of these disinterested student teachers like S8 at College Four and S6 at College Two had reported a serious dislike of the profession at the commencement of the programme. Their development of interest was likely to improve their effectiveness as teachers, thereby enhancing the quality of their teaching (Savickas 1999; Krapp



2003; Carbonneau *et al.* 2008; Day 2004; Serin 2017). Concomitantly, vocationally interested or passionate teachers strove for success and this would have a ripple effect on the pupils that they were going to teach after graduation, since such attributes contributed to their commitment, goal achievement and in this case transformation. Change related to self-concept was also highlighted.

### ***7.2.2 Transformative learning as change in self-concept***

Some vocationally interested and vocationally disinterested pre-service teachers also understood their transformative learning as a change in self-concept. In this study, self-concept represents the overall idea of who one is, including cognitive and affective judgements about one's self (Bong and Clark 1999). Self-concept was exemplified by a vocationally interested participant, S2 at College One, when she said the following during an FGD:

*When I woke up early in the morning, I pinched myself. I said, Waal, is this happening to me? I even pictured myself in the mind's eye already with the pupils in class. I now feel that I am a teacher.*

The comment above revealed a change in her perception of herself. She could now imagine herself in class with her pupils. From Mezirow's (1991) standpoint (Principle 2), transformative learning emphasised the need for self-examination. This student teacher seemingly questioned her previous assumptions and understandings about the teaching profession and reconstructed her new worldview. She now considered herself a 'teacher'. Thus, participant S2 above understood her own transformation as a change in her self-concept. From surveyed literature (Darling-Hammond *et al.* 2005), the ability to reflect on self-beliefs and understandings in light of new experiences is crucial to the change process. The idea of 'pinching' herself was equivalent to validating her assumptions in light of her new knowledge.

Pleasantly, a vocationally disinterested participant, S8 at College Two, reported this during an FGD:

*My thinking about the teaching profession has been influenced in a big way. Yes. In one of the lectures, our Dean of students showed us a lecturer she once taught at a high school and they were now lecturing together. That was really uplifting. It encouraged me to*

*continue training as a teacher... I see myself as a teacher now. I wish to do the same at some point in life. It influenced me in a better way.*

From the comments above, the pre-service teacher may have recognised her discontent with teaching when she joined teacher training. However, her beliefs, values and assumptions were challenged when she witnessed an uplifting experience (Mezirow 2003). She might have constructed reality by revisiting her existing assumptions and moved towards the life-changing personal and professional developments (Mezirow 2000; Cranton 2002). As she interacted with the new environment, the process of transformation seemingly started and this was in keeping with Mezirow (1991)'s Principle Four of the Transformative Learning Theory, which is about recognition of one's discontent and the process of transformation is shared after realising that others have also experienced similar transformations.

During an Ind. Int. a vocationally interested pre-service teacher, S4 at College Three, responding to the same question about how his transformative learning experiences had influenced his understanding of teaching, pointed out: *"Teaching is a good career. I like it very much. I had always wanted to teach the small children"*. Furthermore, during a CD and discussion another vocationally interested participant, S1 at College Two, reported: *"Yes, of course. I like teaching since this has been my dream profession"*.

The comments from S4 and S1 above revealed the altruistic-intrinsic value placed on the teaching profession. Besides being a good job, the vocationally interested participants were also motivated by their interest to teach. These pre-services teachers understood their transformative learning as becoming aware of themselves. Drawing on the Transformative Learning Theory, self-knowledge is central to knowledge construction (Brock 2012; Banda 2014; Simm and Marvel 2015; Morley 2016). Having questioned their previous held beliefs, understandings and values about teaching the vocationally interested and vocationally disinterested participants had to critically analyse why teacher training was important to them. The pre-service teachers understood their transformative learning as changes that involved the way they viewed and saw themselves which involved fundamental shifts in their thinking about the teaching profession.

### ***7.2.3 Transformative learning as a change related to personal attributes***

From the four sites, both the vocationally interested and disinterested pre-service teachers understood their transformative learning as a change involving personal attributes. Mahere (2014) defines professionalism as the possession of attributes, skills and knowledge as required by the teaching profession. Further consulted literature (Mukeredzi 2015) defines professionalism as having to do with ethical and moral behaviour, honesty, empathy, accountability, commitment, enthusiasm, punctuality, confidence, conscientiousness, a desire for life-long learning and enquiry, relational dimensions, interdependence, agency and resourcefulness. One of the vocationally interested pre-service teachers, participant S2 at College Two, reported during a CD and discussion: *“I feel very proud to now identify with the teaching profession. I value the teacher attributes that we were given during the PSA lecture. Among those attributes I like most are that teachers have to be morally upright, empathetic and committed”*. Echoing the same sentiments, a vocationally disinterested participant, S10 at College Four, reiterated during an FGD: *“From the day when we were given the Professional Ethics Module, my attitude to teaching changed. Now I understand it when people say that I should behave as a professional, as a teacher. I should be committed to work, should always maintain punctuality”*.

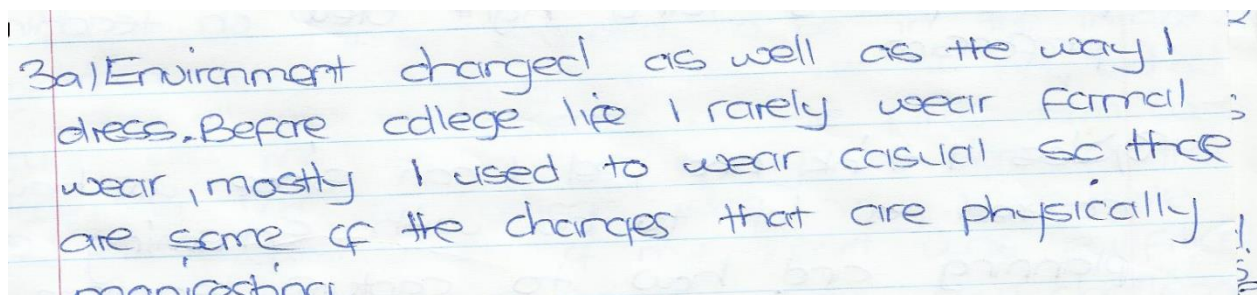
The comments from participants S2 and S10 above indicated that they understood their transformation as a change related to personal attributes. The participants identified with the teaching profession after having acquired knowledge and skills Mezirow (1991) (Principle 7) about the profession in the PSA lectures.

### ***7.2.4 Transformative learning as a change in attitude to dress***

In this study a change in behaviour was based on the idea of learning, which shaped how an individual behaved or acted. The vocationally interested and vocationally disinterested participants explored in the four selected colleges concurred that they understood transformative learning as a change in their behaviour. They were now happy to dress formally, a thing that they were not happy with at the commencement of their training. As alluded to in Chapter Six, some vocationally disinterested student teachers had felt like they were in prison, having spent

the whole day wearing a tie. Surveyed literature (Rollman 1980; Phillips and Smith 1992; Sebastian and Briston 2008; Lavin, Davies and Carr 2010) indicates that teachers' professional dress has a positive impact on their credibility, level of preparation and knowledge, which in turn impacts the pupils' enthusiasm to learn and influences their behaviour. Consequently, the vocationally interested and vocationally disinterested participants understood their transformative learning as a change involving dress code.

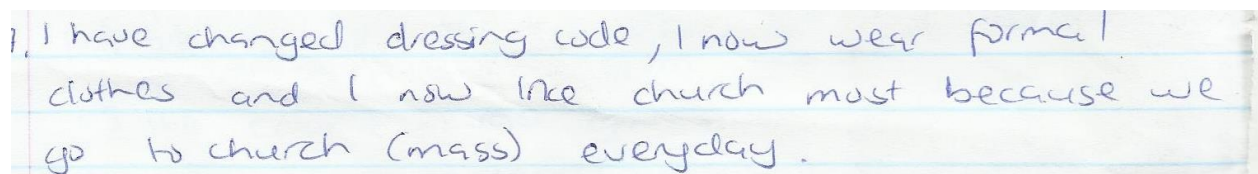
This was exemplified by one vocationally disinterested participant, S8 at College Two during a CD and discussion when she said:



[SIC]

Change for this participant related to their style of dress; from casual to formal dressing. In addition, during an Ind. Int. another vocationally disinterested pre-service teacher, S6 at College Three, echoed the same sentiments about behaviour change in relation to dress when she said: *"I also learnt how to dress. Before I became a teacher, I used to dress anyhow but now I know how to dress professionally"*.

The vocationally interested participants thus concurred with the vocationally disinterested participants in terms of dress code. This was confirmed by a vocationally interested pre-service teacher, S3 at College Four, during an FGD when he said: *"Dressing formally is now becoming a habit, which wasn't my thing at all when I started teacher training. I have to be formal every time now"*. During an Ind. Int. another vocationally interested participant, S4 at College One, also concurred with the preceding speakers when she said: *"My learning experiences in the course are that I have learnt to dress professionally, to be in formal attire always"*. To build on this another vocationally disinterested participant, S10 at College Four, added during a CD and discussion:



I have changed dressing code, I now wear formal clothes and I now like church most because we go to church (mass) everyday.

The issue of change related to formal dress may not only have come about as a result of transformative learning, but may also have been influenced by the requirements of the profession, as stipulated by the Public Service Dress Code for all civil servants. As alluded to in Chapter Six, the (Public Service Commission 2006) prescribed a professional dress code to maintain a professional image of the MHTESTD. From Mezirow's Transformative Learning Theory, the vocationally interested and vocationally disinterested pre-service teachers above understood their transformative learning as challenging their existing knowledge and practices, and they had no choice in that crisis-like situation within the college environment but to make a paradigm shift (Mezirow 1991). Thus, through apparent self-examination, they changed the way they dressed. The teaching environment provoked changes in their perceptions of the self and identity (Zhou *et al.* 2008). They had to change and abide by the expectations of the teaching profession, a profession some of them were not intrinsically motivated to join. Taylor (1997) affirms that in a transformative learning environment, the student teachers might begin to perceive themselves differently. Thus, the pre-service teachers had to follow the dictates of the profession and had to perceive themselves differently, in this case as trainee teachers - hence understanding transformative learning as changes in their views about the dress code.

From the above comments, the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning as a change in their perceptions, attitudes and beliefs about teaching. Again, they understood their transformative learning as a change involving personal attributes and dress code. Consequently, self-examination and critical assessment of assumptions, which are Mezirow's (1991) Phase/Principles Two and Three, were significant in how the pre-service teachers understood their transformative learning as a change in behaviour. The pre-service teachers questioned their existing assumptions and critically assessed their assumptions of whether or not they should have changed their world view about their habitual behaviour, in this case - the dress code. Literature (Schoo *et al.* 2015) affirms that students transform when they are presented with information that challenges and alters their attitudes, values and behaviours. In this situation, even the vocationally disinterested

participants S8 and S6, who had joined teaching as a last resort, made a paradigm shift and got used to the professional attire. Further, in line with Mezirow's (1991) Phase/Principle Ten of the Transformative Learning Theory, both the vocationally interested and the vocationally disinterested pre-service teachers also had to integrate the new expectations of formal dressing into their life routines, thus understanding their transformative learning as a shift of their paradigms.

From the discussion above, the vocationally interested and the vocationally disinterested pre-service teachers understood their transformative learning as changes in their views/attitudes about teaching; as changes in self-concept; as changes related to their personal attributes; and as changes involving their dress code. They understood their transformative learning as changes in their perceptions, understandings and feelings about themselves. Consequently, they now viewed teaching differently after having critically assessed their previous assumptions. The pre-service teachers also understood their transformative learning as the acquisition of knowledge and skills, which is discussed next.

### **7.3 Transformative learning as the acquisition of knowledge and skills**

In responding to the research question about how they understood their transformative learning, the acquisition of knowledge and skills emerged as another major theme. Four sub-themes that emerged around transformative learning as the acquisition of knowledge and skills related to: assignment writing, communication and interaction, confidence development and new content. Each sub-theme is analysed and discussed below.

#### ***7.3.1 Transformative learning as acquisition of knowledge and skills through assignment writing***

Acquisition of knowledge and skills is Phase/Principle Seven of Mezirow's (1991) Transformative Learning Theory. Both the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning as acquiring knowledge and skills through assessments. Mukeredzi and Nyachowe (2018) define assessment as the process of gathering data to better understand the strengths and weaknesses of students' learning. In brief, assessment is about measuring the progress of students' learning. In this study, the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning as involving acquiring knowledge and skills through assignment writing, which is a

form of assessment. Hence, an assignment is an assessment technique used in all formal learning, including teacher training colleges.

Surveyed literature (Holtzman *et al.* 2005) has described the writing of assignments as involving the ability to communicate effectively and it has been recognised as a hallmark for membership in the learned professions. This was exemplified by vocationally interested participant S2 at College One, who said during a CD and discussion: *“My learning was through writing assignments, as you can see in this portfolio I have drawn here”*. Furthermore, another vocationally interested participant, S3 at College Three, commented during their Ind. Int.: *“Learning through assignment writing was the best method for me. I was forced to read widely, hence becoming an avid reader”*.

Similarly, a vocationally disinterested participant, S6 in College Three, said during an Ind. Int.: *“I have learnt the skills of writing assignments and now I can write good assignments, which I couldn’t do before”*. Another vocationally disinterested pre-service teacher, S9 at College One, said during an FGD: *“I have gained more knowledge of writing assignments. I now feel I am competent”*. A further vocationally disinterested participant, S8 at College Two, added during a CD and discussion: *“The best skill that I have achieved during this course is that of essay writing. I still remember getting distinctions in my second Theory of Education assignment and the lecturer used it to demonstrate how good assignments were written”*. The comments from participants S2 at College One, S3 at College Three, S6 at College Three, S9 at College One and S8 at College Two all indicated that they understood transformative learning as the acquisition of knowledge and skills around assessments, which came about through assignment writing.

In Mezirow’s (1991) Transformative Learning Theory, writing is a dialogical process which involves active intellectual engagement. This creative, reflective and problem-solving process of assignment writing enhances transformative learning (DeFazio *et al.* 2010). Assignment writing is encompassing creative inspiration, problem solving, reflection, and revision. Thus, transformative learning provided avenues for knowledge and skill acquisition through writing these assignments, and this process promoted the analytical skills of the vocationally interested and disinterested pre-service teachers. Thus, student teachers understood their transformative learning as the acquisition of knowledge and skills through assessment.

Apparently, in all four selected colleges, assessment was carried out through assignment writing. From consulted literature, (Gregory 2015) writing invites deep and lasting change which can lead to the development of other skills such as reading and research. As such the knowledge and skills that emerged from assignment writing were going to be permanent. The transformative learning was seemingly realised as the pre-service teachers were now able to write good assignments. Related to assessment, participants also understood transformative learning as the acquisition of knowledge and skills involving communication.

### ***7.3.2 Transformative learning as acquisition of knowledge and skills related to communication and interaction***

With regards to how they understood transformative learning, the vocationally interested and vocationally disinterested participants commented that they understood transformative learning as the acquisition of knowledge and skills related to communication and interaction.

Communication is one of the major competencies of an effective teacher. Consulted literature (Zlatic and Bjekic 2012; Van Ruler B. 2018) explains that the purpose of communication is to transmit messages about experiences or perceptions and to express a point of view about those experiences and perceptions. Hence, a teacher requires the ability to communicate. One of the vocationally interested participants, S1 in College One, said during their Ind. Int.: *“My English has improved very much; I am now in the debate and poetry club. I can now express myself in the presence of many people.”*

The response given by the vocationally interested participant S1 confirmed her understanding of her own transformative learning, which related to gaining knowledge and skills for improved communication. Her transformative learning brought about her active participation in the debate club, which enhanced her critical thinking skills and spoken English (Zare and Othman 2015). These skills were indicators of transformative learning.

Furthermore, a vocationally interested pre-service teacher, S5 at College One who was on TP at that point, highlighted the value of debates during an FGD: *“Now I can speak fluently in front of the kids without any problem, without any hesitation”*. Similar sentiments were echoed by vocationally disinterested participant S7 at College Two during a CD and discussion: *“I am involved in the debate club and I can articulate my ideas clearly, and just recently we were in*



*Mutare for debating competitions where we won a bronze medal*”. Another vocationally disinterested participant, S6 at College Four, during an FGD said: “... *I am now good at public speaking, I wasn’t before*”.

With reference to how the pre-service teachers understood their transformative learning, participants S1 at College One, S5 at College One, S7 at College Two and S6 at College Four all pointed to transformative learning being understood as the acquisition of skills related to communication. From the standpoint of Mezirow’s Transformative Learning Theory, communication skills promote critical thinking through dialogical learning. Habermas (1984) and Freire (1970), who influenced Mezirow’s Transformative Learning Theory, highlight the fundamental role of communication in transformative learning as it leads to self-knowledge. Communication influenced how the pre-service teachers felt and acted when dialoguing with each other and when comparing views, experiences and ideas. Again, it was through communication that the vocationally interested and vocationally disinterested pre-service teachers developed relationships with others Stover (2016). In addition, literature surveyed (Bucata and Rizescu 2017) accentuates communication as a vital life skill. Being able to communicate sets participants free from various forms of oppression Freire (1970); Kitchenham (2008); Calleja (2014) as they had acquired the knowledge and skills to express their feelings and ideas. Hence, in this study the student teachers understood their transformative learning as the ability to understand their assumptions, which constrained the way they saw the world and this self-knowledge was the avenue for self-emancipation (Freire 1970; Jesson and Newman 2004). The next section discusses transformative learning as the acquisition of knowledge and skills leading to the development of confidence.

### ***7.3.3 Transformative learning as the development of confidence***

The majority of the pre-service teachers in this study reported that they understood their transformative learning as the development of confidence, which they said occurred during training. Saragi (2017) defines self-confidence as a belief that a person possesses of their capability to behave as needed to obtain the desired results. Drawing on theory, confidence inspires the learner to successfully achieve a learning goal, and having achieved that they move on to the next stage (Mezirow 1991). This was exemplified by vocationally disinterested participant S9 at College One during a CD discussion when he explained: “*I now have self-*

*esteem. I now have confidence. I can even speak in front of people. I can address people on anything. I can participate more even in group discussions. I have also improved on English use*". In support of this, vocationally interested pre-service teacher S1 at College Three echoed the same sentiments during an FGD when she said: *"The new things that I have learned... eeh, speaking. I was having a problem of standing in front of large groups of people. I now have confidence. I am now a good public speaker as compared to the first days"*. In addition, another vocationally disinterested participant, S9 at College Four, was more elaborate during an FGD:

*My mother tongue is Tonga, so talking to my peers and my class was frightening in my first days at college. I also had a difficult time during peer teaching in PSA to interact with my colleagues. I am happy to say that now all the fears are gone and I can now interact with every one freely and confidently. I can also partake in discussions; a thing I always feared before.*

From the comments made above, both the vocationally interested and disinterested pre-service teachers understood transformative learning as gaining skills that enabled public speaking and engaging in participatory activities in class. Through communication and interaction, the student teachers seemingly overcame the hurdles that could have hindered their personal and professional growth. Research (Sihotang, Setiano and Saragi 2017) indicates that students who have high confidence levels will understand issues better than students who have low self-esteem. Consequently, transformative learning occurs when learners think critically and gain additional knowledge and skills about themselves and others (Mezirow 2012). Their first days at college were filled with different dilemmas, and a lack of confidence to express themselves was one of them. Now they understood transformative learning as gaining skills that developed their confidence to air their views and interact with others. Mezirow (2000) says transformative learning, is a journey of change - change that is growth enhancing and developmental and these pre-service teachers have changed in this manner.

#### ***7.3.4 Transformative learning as acquisition of knowledge and skills related to new content***

The vocationally interested and vocationally disinterested pre-service teachers came from diverse backgrounds and were exposed to the new college environments where they had to learn new content. The majority of the pre-service teachers agreed that they were now competent and

proficient in using computers and searching for information in the library. This was exemplified by vocationally interested participant S2 at College Four, who said during an Ind. Int.: *“I have learnt downloading information from the internet, operating the computer and gained knowledge about computers. This I did not know when I started teacher training”*. In addition to this, vocationally interested participant S4 at College One reported during a CD and discussion: *“I have learnt new subjects such as Heritage and Social Studies, which I had never come across before”*.

The comments by these participants, S2 at College Four and S4 at College Two, indicate that they understood their transformative learning as the acquisition of new knowledge and skills related to computers and new subjects. Similar sentiments were echoed by vocationally disinterested pre-service teachers. For example, vocationally disinterested pre-service teacher S9 at College Three explained during their Ind. Int.: *“There are some new courses such as NASS and Computers, which we were not familiar with”*. In addition, another vocationally disinterested participant S10 at College Three reported during an FGD: *“There are new subjects such as ICT, Agriculture NASS, and Health and Life Skills that I learnt”*. Another vocationally disinterested participant, S7 at College Four, also said during an Ind. Int.: *“We are doing new subjects such as Philosophy, Psychology and Sociology”*.

The vocationally disinterested pre-service teachers saw transformative learning as the acquisition of knowledge from new subjects and computer resources. The pre-service teachers learned new subjects which probably developed them intellectually and enhanced their transformative learning.

From the standpoint of Mezirow’s Transformative Learning Theory, ‘new’ content and competencies gained seemingly drew the vocationally interested and vocationally disinterested pre-service teachers into deeper reflection, which as Cranton (2006) puts it, is the basis for transformative learning. Having been equipped with new knowledge and skills, the student teachers would probably become enthusiastic about engaging in meaningful tasks that enhanced their transformative learning. Surveyed literature (Meyer and Land 2003) says that studying new subjects widens learners’ knowledge base and by doing so there is a shift in perspective, which may lead to transformative learning. Hence the pre-service teachers, basing their understanding

on the new acquisitions, understood their transformative learning as gaining new knowledge and competencies.

The discussion above has shown that the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning as the acquisition of knowledge and skills through assessments of assignment writing. Other knowledge and skills gained related to communication, interaction with peers and learners, and the development of confidence, a crucial skill in transformative learning. Lastly, the new courses exposed them to new content and competencies which facilitated critical reflection and evaluation Asif (2013), which are the basis for transformative learning.

This section of the chapter analysed and discussed the findings concerning the ways in which the vocationally interested and disinterested pre-service teachers understood their transformative learning. The two major themes that emerged were transformative learning as a change and transformative learning as knowledge and skills acquisition, and these were discussed and analysed.

Both vocationally interested and disinterested participants in all four selected colleges and across all data sources concurred that they understood their transformative learning as changes in their perceptions, views, attitudes and beliefs. Their views about teaching had changed completely, except in the case of the two vocationally disinterested pre-service teachers alluded to in Chapter Six who held onto to their rejection of the teaching profession and hoped to get other ‘jobs’, even after completion of the teacher training programme. Teaching was now viewed as a noble profession through which they could earn respect from learners and the community.

Both the vocationally interested and disinterested participants studied in the selected colleges also understood their transformative learning as changes in their personal attributes and dress code. This was in keeping with the Public Service Commission’s prescribed professional dress code to maintain the professional image of the MHTESTD. In spite of the dilemma that some pre-service teachers, particularly the vocationally disinterested pre-service teachers, experienced at the beginning of the training where they equated formal dressing to punishment or being in prison, they had changed their attitudes.

The second major theme that emerged in answer to how the vocationally interested and vocationally disinterested participants understood their transformative learning related to the acquisition of knowledge and skills. Four aspects that emerged under this theme related to: assessment, communication and interaction, confidence development and new content.

First, the vocationally interested and vocationally disinterested pre-service teachers investigated in all four colleges across all data sources understood their transformative learning as involving knowledge and skills acquisition through assessment related to assignment writing. This type of assessment enhanced their knowledge and writing skills as they had to conduct research to write their assignments. Second, these two categories of pre-service teachers in all four colleges also understood transformative learning as the acquisition of knowledge and skills around communication and interaction. Communication enhanced their dialogical learning, and these student teachers learned about themselves, about others and about the world they lived in. Again, communication was identified as an indispensable attribute of a teacher as it was used to convey information and express ideas and feelings. Third, the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning as the acquisition of new knowledge and skills related to the development of their confidence, which followed Mezirow's Phase/Principle Nine. They also understood their transformative learning as gaining new knowledge from new subjects. These pre-service teachers expanded their knowledge base by learning new content and this enhanced their critical evaluation and reflection, and consequently enabled them to see the world through a new lens.

Having discussed and illustrated that the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning as a series of changes and as the acquisition of knowledge and skills, the next section presents and analyses the findings that addressed research question three about the forms of college community support that enhanced the transformative learning of the vocationally interested and vocationally disinterested pre-service teachers.

Question three is addressed in the following section. *'What forms of support are offered by the college community to enhance pre-service teachers' transformative learning?'*

One major theme related to the supportive environment emerged in answer to this question. This theme is discussed and analysed through its sub-themes, which frame the section. Before discussing the supportive environment, it is important to point out that both the vocationally interested and the vocationally disinterested pre-service teachers experienced similar supportive environments in their different contexts, but to varying degrees.

## **7.4 Supportive environment**

Generally, both the vocationally interested and the vocationally disinterested pre-service teachers indicated that their transformative learning occurred in a supportive environment.

In this study, a supportive environment represented a setting that provided the pre-service teachers with safe and enabling conditions that promoted their learning. Surveyed literature defines supportive environments as diverse physical locations, contexts and cultures in which students learn freely (Ambrose, Bridges and DiPieto 2010; Mukeredzi and Nyachowe 2018; Donlan, Loughlin and Bryne 2019; Loughlin and Bryne 2019).

The supportive environments that enhanced the pre-service teachers' transformative learning are discussed under the following six sub-themes: resource support; lecturer support; peer support; management support; spiritual support; and co-curricular support.

### ***7.4.1 Resource support***

Resource support emerged as an effective aspect for promoting the transformative learning of the vocationally interested and disinterested pre-service teachers. Literature surveyed (Fernandez-Rio 2016; Alshahrani, Ahmed and Ward 2017) defines teaching and learning resources as acceptable quality and quantities of material resources, infrastructural or physical facilities and human resources that enhance teaching and learning. These aspects frame the discussion below.

### ***7.4.2 Material resource support***

Material resources are the equipment and tools that the pre-service teachers needed for their transformative learning. Both the vocationally interested and disinterested pre-service teachers in all four selected colleges and across all data sources concurred that the colleges supported them with material resources that enhanced their transformative learning. This was exemplified by

vocationally interested participant S3 at College One, who commented during their Ind. Int.: *“The College has provided adequate computers in the computer laboratory”*. Another vocationally interested pre-service teacher, S1 at College Four, also said during an FGD: *“Our College has just purchased 500 computers and we will each have a computer during our lectures”*. However, vocationally disinterested pre-service teacher S7 at College Two stated during a CD discussion: *“We do not have adequate computers because we share the few that are there; six students per computer. However, the administration has allowed us to bring our own laptops”*. In this instance, there was a resource shortage where six students shared one computer. In addition, vocationally disinterested participant S10 at College Three also had this to say during their Ind. Int.: *“We are required to bring laptops on the day of registration, so we are adequately resourced in terms of computers”*. The college asked all first-year students to bring laptops and on the day of registration the administrators checked if they had brought them. The pre-service teachers who could not afford their own laptops then shared the few college computers that were available. While asking students to bring their own laptops did not demonstrate support, the fact that there was some provision for the use of college laptops by those who could not afford their own illustrated support.

The responses from both the vocationally interested and disinterested pre-service teachers suggested the value that student teachers attached to computers in supporting their transformative learning. In a study conducted in Denmark by Niels (2019), he found that the quality of the teaching and learning, the service systems and support for students were crucial for their transformative learning. In this study, technologies such as computers were identified as supportive of student teachers’ transformative learning. Consulted literature (Alkhawaldeh and Hyassat 2017) indicates that computers provide teachers and students with the expertise and skills to enable them to keep pace with knowledge in the information age. The Zimbabwean education system was focusing on developing ICT policies in the new curriculum so that the pre-service teachers would learn through electronic means (Ministry of Primary and Secondary Education (2013). Literature surveyed (Grant-Vallone *et al.* 2004) indicates that student teachers felt more integrated into campus life when their social and academic lives were supported, and consequently this supported their transformative learning. The provision of teaching and learning materials was therefore mandatory for the support of transformative learning. From the standpoint of Mezirow’s Transformative Learning Theory, computers assisted the participants to

acquire new knowledge and skills and to critically analyse them, which promoted their engagement in creative learning (Mezirow 2000). Phase/Principle Seven of Mezirow's Transformative Learning Theory affirms that when students acquire new knowledge, they encounter changes that challenge their assumptions, in particular their sense of self.

The Participants S3, S1, S7 and S10 all indicated that the college community supported pre-service teachers with the provision of computers and laptops, which seemingly promoted their learning and consequently their transformative learning. While Colleges One and Four were adequately resourced with computers, Colleges Two and Three that were privately owned and had inadequate computer support, to the extent that College Three specifically asked the student teachers to bring their own laptops, and College Two allowed the pre-service teachers to bring their own laptops so that the few computers available could be used by those most in need. Another form of support that emerged related to infrastructure.

#### ***7.4.3 Infrastructural resource support***

Generally, infrastructure refers to the immovable buildings that an organisation needs in order to function effectively. With reference to how the college communities' support enhanced their transformative learning, the vocationally interested and vocationally disinterested pre-service teachers pointed out that infrastructural support also promoted their transformative learning. Laanemets and Rostovtseva (2015) indicate that learning environments facilitate transformative learning with the appropriate space-school architecture, classroom facilities and health requirements. The library, lecture halls and students' halls of residence were highlighted as major forms of infrastructural support that enhanced their acquisition of knowledge and skills, and hence their transformative learning. Drawing on Mezirow's (1991) Transformative Learning Theory, student teachers also needed a welcoming and friendly environment so as to allay their fears, frustrations, guilt and embarrassment which were disorienting. Echoing the same sentiments, Clapper (2010) and Taylor (2007) comment that a supportive environment allows learners to reflect critically upon their fears, expectations and future goals, leading to transformative learning. These infrastructural resource supports that enhanced their transformation are discussed below.



#### 7.4.3.1 Library

The library was identified as a critical form of support in enhancing the pre-service teachers' transformative learning. Surveyed literature (Bilal 2015) confirms that an effective library is one that is adequately resourced and able to provide educational materials appropriate for teachers, students and the entire institutional population. This was exemplified by both the vocationally interested and disinterested participants at the two public Colleges, One and Four, who identified the library support offered by the college community as fostering their transformative learning. For example, vocationally interested pre-service teacher S1 at College One said during a CD and discussion: "... *our library is big and is well resourced with current books*". Similarly, vocationally interested pre-service participant S4 commented during their Ind. Int. at College Four: "*Our library is one of the biggest libraries in the country and it has many text books and computers. One can even read online*". The students' (S1 and S4) responses demonstrated that the libraries were well established, stocked and developed and hence apparently promoted their transformative learning.

The colleges with spacious and well-resourced libraries in terms of text books, other reading materials and computers seemingly enhanced the pre-service teachers' transformative learning. Literature surveyed (Williams, Wavell and Coles 2001; Ndirangu and Udoto 2011) reports that libraries impact on students' achievement in standardised tests and also support learning more broadly. In other words, well stocked libraries are likely to have promoted the participants' transformative learning by enhancing their self-esteem, confidence, independence and sense of responsibility with regard to their learning (Dyer 2001). Participant S4 at College Four implied that the student teachers became autonomous and self-directed in their learning through research and reading online and other materials in the library and this promoted their self-esteem, confidence, independence and sense of responsibility for their learning. Essentially, their sense of self-esteem motivated them to learn; their improved confidence prompted reading and gaining new knowledge; their independence empowered them to take control of their learning; while their sense of responsibility made them responsible for their learning. However, overcrowded library facilities may impede transformative learning, according to (Ndirangu and Udoto 2011). Mezirow's (1991) Principle Seven of the Transformative Learning Theory advocates for knowledge and skills acquisition and these were provided for by the state of the library described

by participants S1 and S4 above. Lecture halls were another form of support provided by the college community that enhanced transformative learning.

#### *7.4.3.2 Lecture venues*

Lecture halls emerged as forms of support for both the vocationally interested and disinterested pre-service teachers' transformative learning. A lecture hall (classroom) was usually a physically comfortable place that allowed the students to learn by seeing and hearing the teaching material presented to them. Hence the environmental comfort within the lecture rooms was an important factor for enhancing transformative learning. A study by Marchand *et al.* (2015) indicates that the learning space, particularly lecture theatres, should be comfortable. These authors conclude that the room should not be too hot or too cold as this impacts the students' moods and learning capabilities. Further, Amsterdam (2013) indicates that the size of the room indirectly influences student achievement; in this case this would also influence transformative learning. This was exemplified by vocationally interested pre-service teacher S2 at College One, who commented during their Ind. Int.: "*We have mass lectures in a big and spacious lecture theatre, and for our main subject areas we learn from our lecture rooms*". The comment from S2 acknowledged the significance of learning in a big and spacious lecture hall. Mass lectures were usually conducted for entire year groups for the core or cross-cutting modules, for example the Theory of Education and the PSA, as alluded to earlier. The main subject areas or the specialisation subjects (as discussed in Chapter Five) were taught to the groups of students who had selected those particular subjects for in-depth study during training, for example English language or Mathematics.

With regard to transformative learning support, students who felt comfortable and supported in the classroom were more likely to share their thoughts and ask questions (Mezirow 1997). Thus, as Cranton (1994) attests, there is a need to establish an environment that builds trust and facilitates development among the lecturers and the students. Literature surveyed (Clapper 2010; Freeman 2015; Shernoff *et al.* 2016) highlights the essence of suitable supportive physical environments in facilitating transformative learning. The physical characteristics of the learning environment promoted student engagement and performance, which were vital aspects of their transformative learning. Consulted literature (Garibay 2015) further indicates that a supportive

learning environment where all feel safe, valued, and respected is necessary for students to achieve and demonstrate their full potential.

Conversely, a negative and unsupportive environment could be an obstacle to transformative learning and progress, as seen at Colleges Two and Three below. The pre-service teachers at these two private institutions reported that while the provision of the lecture halls was a sign of support, the small sizes of the venues were unsupportive of their learning and consequently their transformative learning. For example, vocationally interested participant S3 at College Two explained during a CD and discussion: *“We will be too many in the old hall when we have mass lectures. Imagine in this heat; you can’t concentrate or even listen sometimes!”* Further, vocationally disinterested pre-service teacher S10 at College Three echoed similar sentiments during an FGD: *“We have mass lectures in the hall but it will be hot there because it is small”*. The pre-service teachers S3 and S10 indicated the unsupportive learning environment that some student teachers experienced. Most student teachers would find learning difficult in crowded and uncomfortable environments, as explained above. As alluded to in previous chapters, the massification of the education system in Zimbabwe across all levels and fields of study, including teacher training colleges, following independence meant that enrolment numbers had swelled, however the institutional capacity in some colleges had remained the same (Mukeredzi 2015). Hence, mass lectures for the co-modules in these two private colleges were held in small pre-independence venues, which may have limited transformative learning as they were not very supportive. From Mezirow’s (1997) standpoint, in a safe and supportive environment an individual could become more accepting and transform the overall habits of their mind. Spacious and comfortable lecture halls were thus crucial as they facilitated transformative learning. Consulted literature (Freiberg and Driscoll 2000; Wilson, Summers and Wright 2020) confirms that the classroom’s climate must be taken into account to ensure adequate support for students during learning. A study by Ngene *et al.* (2018) emphasises the need for an appropriate supportive learning environment, which requires a combination of physical structures support and a high level of sanitation and pollution-free environment. This implies that inadequate, non-spacious and unsupportive venues may not promote transformative learning. Another form of support offered by the college community to enhance the transformative learning of the pre-service teachers was the provision of students’ residences.

#### 7.4.3.3 Students' halls of residence

Students' accommodation was offered in all four colleges to promote the pre-service teachers' transformative learning. Surveyed literature (Whalen 2002) shows that residence halls have been designed to support students' effective learning and academic engagement during their training. The issue of student accommodation as a form of support was exemplified by vocationally interested pre-service teacher S4 at College One, who said during an Ind. Int.: *"Hostels are good. I enjoy myself when we are in the hostels. We share jokes and the day's learning experiences"*. This kind of support also provided space for relaxation. Another vocationally disinterested pre-service teacher, S8 at College Three, commented during their Ind. Int.: *"I ask my friends difficult concepts which I will have failed to grasp during the lecture. I like it when they explain in Shona (home language). I quickly understand"*. Further, vocationally disinterested participant S6 at College Two had this to say during a CD and discussion: *"I am a non-resident student and in most cases I stay in the halls of residence up to 9:00 pm discussing assignments with my friends, then I would go home late"*. The supportive collaborative engagements which promoted reflections often created dynamic processes for student teacher learning and consequently transformative learning. Collaborative engagements draw on socio-cognitive and socio-cultural theories, where learning is a social activity (Mukeredzi 2015). Drawing on Mezirow (1985), the critical role of collaborative learning was based on three aspects: the instrumental aspect where student teachers could ask their peers how an assignment had to be done; secondly, a dialogic aspect where the pre-service teachers could share information with their peers; and thirdly, the self-reflective aspect where student teachers could critically question their assumptions and understandings. This self-reflective learning led to self-awareness, a crucial aspect in transformative learning (Mezirow 1991).

The supportive role of collaborative learning was also echoed by a vocationally interested non-resident, participant S1 at College Four, who echoed during an FGD: *"Had I not been breastfeeding, I would stay in the halls of residence because I will have time to partake in group discussions that resident students have during the evening"*. Participants S6 and S10 above wished to be in residence to collaboratively and transformatively learn with their peers after normal school hours. The pre-service teachers valued collaborative learning because student levels of understandings were never initially equal and they could assist each other to understand

content better. Mezirow (2000) says that when individuals learn collaboratively they are reflective on their and others' perspectives and meaning schemes, resulting in transformative learning. Through sharing of learning experiences, the pre-service teachers would become more open and inclusive and would comfortably justify the reasons for changing their points of view or remaining in their former states. Often students understood better when they were reflecting, comparing mindsets and engaging with peers who explained points at their level, and this was likely to better foster their transformative learning. However, the college rules did not allow non-resident students and breastfeeding mothers to stay in the halls of residence.

Other pre-service teachers acknowledged student residence support but opted not stay on campus, for example one of the vocationally disinterested participants, S6 at College Two, had this to say during a CD and discussion: *"We struggle financially so I opted to stay off campus"*. Another vocationally disinterested pre-service teacher, S10 at College Four, also commented during an FGD: *"I chose to stay with my family because I had no one to leave my children with"*. It would appear that even if pre-service teachers S6 and S10 wanted to take advantage of supportive resident halls and stay on campus, their personal and social aspects highlighted would not permit it. This may have been a limiting factor to their transformative learning as they missed discussions after school. The issue about fees put forward by S6 was a challenge for most of the non-resident students. Literature consulted (Mngomezulu, Munro and Dhanpath 2017) illustrates how poverty and the lack of sufficient funding have consistently been cited as key reasons for students' academic failures and progression difficulties. Such challenges often interfere with transformative learning. Mezirow's (1991) Phase/Principle One which is about disorienting dilemmas affirms what the student teachers experienced in terms of disorientations. On the other hand, S10 highlighted family responsibilities as the reason of not benefitting from the college community's support by way of the halls of residence. Turley and Wodtke (2010) point out that living off campus with family may be more difficult for the pre-service teachers if they have more family responsibilities and fewer financial resources. Hence, while students who live on campus may be independent and better prepared to learn, those who live outside of the colleges' residential premises may not experience forms of support that enhance their transformative learning and growth of independence.

From the responses of participants S4 and S8 above, supportive learning environments provided by college halls of residence seemingly enhanced their transformative learning. The residences provided platforms where the participants shared learning experiences and this was likely to trigger critical evaluations of their assumptions Mezirow (1991), leading to their transformative learning. Literature surveyed (Turley and Wodtke 2010) suggests that living on campus is an important supportive factor as it is associated with increased student involvement, which in turn is a determinant of improved reflection and critical thinking ability, intellectual growth, persistence to graduation and satisfaction with college. From Mezirow's Transformative Learning Theory (2012), critical thinking and reflection are precursors and catalysts to transformative learning. Thus, the halls of residence provided a supportive learning environment which promoted transformative learning.

Although residence support was also linked to the social aspects, participants S6 and S8 reported that residence halls had a positive influence on their academic performance, and consequently their transformative learning. The pre-service teachers learned from and with each other when they conversed and critically reflected in their mother tongue in order to understand difficult concepts that were presented in the English language. Thus, the social support Mezirow (1997) experienced by the participants enhanced their transformative learning.

#### ***7.4.4 Human resource support***

Human resources were another form of support. The support provided by lecturers which enhanced the pre-service teachers' transformative learning is discussed below.

##### ***7.4.4.1 Lecturers***

Both the vocationally interested and disinterested pre-service teachers in all four selected colleges and across the data sources confirmed that lecturers' support enhanced their student learning and consequently their transformative learning. This was exemplified by vocationally interested participant S1 at College Three, when he said during his Ind. Int.: *"My lecturers help me when I ask them questions. Where I don't understand they clarify and make me understand"*. Similarly, vocationally interested participant S4 at College Four commented during their Ind. Int.: *"We learnt a lot of things from our lecturers. We get a lot of ideas from them"*. This was

further exemplified by vocationally disinterested participant S9 at College One, when she elaborated during a CD and discussion:

*Lecturers are different from school teachers. Lecturers teach us to teach other people... When you are coming from home you don't know anything. You don't know how to interact with the learners that you are going to meet, but when you are taught some things at the college, that's when you can have the confidence that I can become a better teacher.*

The pre-service teachers SI, S4 and S9 above appreciated the value of the support that they received from their lecturers as a part of their college community's support to enhance their transformative learning. The lecturers offered support in the form of knowledge and skills. They were like reservoirs of knowledge from which students could draw guidance during their transformative journeys in preparation for the profession. Again, the lecturers played a supportive role in shaping the pre-service teachers' academic mindsets; by promoting critical thinking Darling-Hammond *et al.* (2020) and critical reflection and self-interrogation, thus transformative learning was enhanced. Above all, the lecturers instilled confidence in the student teachers as a support mechanism to enhance their transformative learning. Surveyed literature (Frymier and Houser 2016; Donlan, Loughlin and Bryne 2019) affirms the supportive role of the lecturers, as they provide classroom activities that are aligned with student teachers' personal and professional goals.

Further, vocationally disinterested participant S6 at College Three commented during an FGD:

*... There are a lot of things I have learnt from my lecturers, like how to prepare for lessons. The planning process is difficult and I am actually continuing to learn about it...*

Student S6 above had received lecturer support related to one of the major components of classroom practice - lesson planning. Lesson plans support and direct the teacher on lesson delivery, showing them the steps to follow. The student teacher might have encountered challenges in developing his lessons; perhaps in choosing the appropriate content and methods, formulating the lesson objectives and presenting systematic lesson plans. This would have led them to view planning as a difficult process.

The supportive role of lecturers, reflected by S1, S4 and S9 above, was also echoed by participant S6 who confirmed ongoing learning related to the teaching profession. Drawing on

Mezirow (1991), disorienting dilemmas emanating from difficulties in planning could cause anger, frustration and embarrassment and these could either inhibit or propel transformative learning. In this case, S6 seemingly experienced transformative learning because of the assistance that he got from his lecturer on how to plan lessons and his anxiety was seemingly minimised, which probably gave rise to transformative learning. He acknowledged that although this process was difficult he was still learning, showing his willingness to change.

From the responses above, the lecturers provided support in the form of knowledge and skills about the teaching profession. The lecturers were also empathetic and they provided ‘scaffolding’ to the pre-service teachers who had learning difficulties. Consequently, participants developed confidence through the acquisition of new skills and knowledge, and from assessing their learning through feedback on their efforts (Mezirow 2000). Thus, through these processes, transformative learning was enhanced. Ciobanua (2013) advises that it is the role of lecturers to design and deliver flexible curricula that are supportive to the students’ transformative learning. Lesson planning was key to the training programme, and as alluded to in Chapter Six, it was mandatory for the pre-service teachers to master this skill. During PSA student teachers were exposed to pedagogical knowledge, which included lesson planning and delivery, as highlighted by participants S6 and S9. The next section discusses peer support.

#### 7.4.4.2 Peers

Surveyed literature Preston, Ogenchuk and Nsiah (2014) says peers are a circle of friends who support one another with many additional personal and professional growth opportunities. In this regard, peer support was an ingredient for academic achievement and personal growth, and consequently transformative learning for the pre-service teachers. This was exemplified by vocationally interested participant S5 at College One when she said during an Ind. Int.: *“At my department we speak the same language. We support each other as we learn from each other, for example we share notes and help each other in discussing assignments”*. The pre-service teacher above confirmed the form of support obtained from peers. The reference to ‘speaking the same language’ meant that they shared common interests and understandings, and assisted each other in their learning. This was apparently a strong form of support. Fredericks, Blumenfield and Paris (2004) says that learning is more interesting and students are more motivated when they are actively involved in their learning activities with others at their level.



Another vocationally interested participant, S4 at College Two, emphasised the value of peers in their learning during an FGD. She said: “...*We always meet and discuss assignments freely, like we have been friends for many years. With my peers we learn how to use technology*”. Thus peer support promoted the learning of new skills from each other in terms of ICTs and assignment writing. According to William, McKnight and Phillip (2017), peer-based learning provides the opportunity for collaboration, and where there is cooperation there is critical analysis and reflection and weighing of one’s own and colleagues’ comments and answers, and this is a basis for transformative learning (Mezirow 2000).

Similarly, vocationally disinterested pre-service teacher S6 at College Three explained during an Ind. Int.: “...*We discuss ideas and at the same time, sharing jokes ... even if you didn't catch up anything during a lecture, your peers can assist you to understand issues that were difficult in the lecture*”. Another vocationally disinterested pre-service teacher, S7 at College Four, elaborated on the value of peer support during an FGD when he remarked:

*With my peers, I can discuss issues. We can sit down and we can talk without fear. I think our student-to-student interaction is very effective, especially for students who are on campus. Like evening hours, we discuss the assignments and the days’ experiences. I find it much more effective than lectures.*

The students S6 and S7 above acknowledged peer discussion as a form of college community support that enhanced their transformative learning. Discussions were hailed for being helpful to clarify information, see new points of view and perpetuate shared information that the group members had. This process enhanced self-assessment and evaluation; processes which were critical for transformative learning (Mezirow 1997). The pre-service teachers in the four colleges thus acknowledged peer support as enhancing their transformative learning, as demonstrated by S5, S8, S6 and S7 above.

Further, the value of peer support in enhancing transformative learning was supported by Preston, Ogenchuk and Nsiah (2014), who acknowledged that each student housed a raft of rich knowledge, and when personal insight was shared among trustworthy peers, transformative learning emerged. Through sharing learning experiences with their peers and critically reflecting on their existing assumptions, the student teachers were likely to have made a paradigm shift and begun to see the world anew. Reflection and critical thinking are Principles

Two and Three of Mezirow's Transformative Learning Theory. These are core components of transformative learning, and without them transformation is unlikely (Mezirow 1991). Surveyed literature (Kuh *et al.* 2006; Taylor 2007; Clapper 2010) affirms that a supportive environment allows peers to reflect upon their fears, expectations and future goals critically, leading to transformative learning. This means that the peers acted as resources for each other, and drawing on each other as resources enhanced the collaborative achievement of their goals. Peers thus seemingly provided a strong student support system, which enhanced transformative learning. The role of management in enhancing transformative learning is discussed next.

#### *7.4.4.3 The college management*

Both the vocationally interested and vocationally disinterested pre-service teachers indicated that college management played a pivotal supportive role. In this study, management was the governing body of the college which directed and controlled the institution's welfare in order to achieve its goals. Management being in charge and in control therefore meant that they enabled all the forms of support that the students enjoyed from all other arms of the college. From literature (Shernoff *et al.* 2016), management is committed to providing a peaceful, productive and supportive learning environment in which students can give their best, participate fully in all aspects of college life, learn effectively and be successful.

While both the vocationally interested and the vocationally disinterested pre-service teachers in all the colleges did not clearly specify the support given by college management to enhance their transformative learning, one could discern that they were supportive from the pre-service teachers' responses.

A vocationally interested participant, S3 at College Two, said during a CD and discussion:

*...During registration time, I wanted to change my maiden surname to use my husband's name. I was so confused. I then went to the administration and they told me what to do.*

The confusion experienced during the first days at the college was a dilemma that was associated with the new environment, and that caused confusion to the extent that the student teacher did not know what to do. As discussed in Chapter Six, such emotions are necessary and effective triggers for transformative learning to occur. At this particular point management provided

technical support to the pre-service teacher by guiding her on how to complete the registration forms using her preferred name. Similarly, a vocationally disinterested participant, S7 at College One, explained during an FGD: “... *We only see the Principal when she comes for assembly. She guides and counsels us on college life*”.

While the majority of the vocationally interested and disinterested pre-service teachers commented that they only saw their Principals occasionally, when they were available they offered guidance and counselling on living and learning at the tertiary institution. Similarly, another vocationally disinterested pre-service teacher, S9 at College One, said during an FGD: “*We rarely see the administration*”. Furthermore, vocationally interested participant S4 at College Four commented during an Ind. Int.: “... *I have only interacted with the Dean of Students*”. In this case, like in all colleges in Zimbabwe, the Dean of Students was part of management and they attended to students’ issues regarding both their academic and social lives. The Dean of Students also offered guidance and counselling support. Student teachers were from diverse backgrounds and as such many experienced context shock. The disorientations therefrom included fear, loneliness, confusion, guilt and homesickness. It was the role of the Dean of Students to support student teachers, to enable their smooth adjustment and settling into the new college environment. As part of their role, the Dean’s support included being a bridge between student teachers and management, to convey the pre-service teachers’ needs or concerns to the college’s management team.

The comments from both the vocationally interested and disinterested pre-service teachers revealed that while management provided background support for the student teachers’ transformative learning, the students had very little direct contact with the management at their colleges. Management’s role in enhancing transformative learning was indirect as it influenced every decision and form of support concerning the academic and social lives of the pre-service teachers. It was management that ensured that the institutional goals were realised by supporting every component that enhanced transformative learning. From Mezirow’s standpoint, student teachers experienced transformative learning in environments that could challenge their prejudices, prior experiences and assumptions (Mezirow 1991). This implied that the pre-service teachers had to learn in supportive communities where they were able to self-assess and evaluate

their prior assumptions and understandings. The other form of support offered by the college community was spiritual support, which is discussed in the following section.

#### *7.4.4.4 Spiritual support*

Both the vocationally interested and disinterested pre-service teachers in the private colleges reported that the college community provided spiritual support, which enhanced their transformative learning. Spirituality in this study is the way in which human values, lifestyles, and spiritual practices relate to understandings of God (<https://oxfordre.com/religion/view/>). As discussed in Chapters One, Four and Five, two colleges were public/government run institutions, while the other two were non-government colleges owned and run by Missionary Responsible Authorities.

A vocationally interested participant, S3 at College Two, reported during a CD and discussion: “... *So I got to learn and grow spiritually, by following the liturgical activities with peers at this college*”. In concurrence, another vocationally disinterested participant, S6 at College Three, highlighted during their Ind. Int.: “...*I like the religious part of it. Like you grow in faith, and I have faith that I am going to finish teacher training*”.

The pre-service teachers S3 and S6 saw the college community as promoting their transformative learning through spiritual growth support. The responses above suggested that the church was a strong learning support system. The pre-service teachers apparently got strong emotional support and connection by praying together. Astin (2016) confirms that religious service attendance has a positive effect on emotional health. Further, spirituality and emotions embracing empathy provide crucial support and play a role in enhancing students’ transformative learning (Goss, Cuddihy and Michaud-Tomson 2010; Dirkx 2012).

Empathetic teachers are supportive of their students’ learning as they allow them to see the world with a different eye and strengthen their abilities to focus and persevere in their transformative learning. In Mezirow’s (1991) Transformative Learning Theory, Phase/Principle Two is about self-examination. Consequently, when an individual knows himself/herself and feels purposeful, transformative learning is enhanced. In this regard, a healthy religious learning environment on campus supported the participants’ transformative learning. The next section discusses the support gained from taking part in extra-curricular activities.

#### 7.4.5 Extra-curricular activities

The vocationally interested and disinterested participants from the four colleges underscored the role of extra-curricular activities in enhancing their transformative learning. Extra-curricular activities provided supportive opportunities for the pre-service teachers to make new friends, feel socially connected, and learn from them. When they participated in various activities, the pre-service teachers were academically, socially and emotionally developed (William, McKnight and Phillip 2017). This was exemplified by vocationally interested pre-service teacher S1 at College Two, who said during an FGD: *“During extra-curricular activities, we are able to interact and express ourselves in the ways which we have never used before”*. In this instance, participant S1 probably self-examined and critically assessed her previous assumptions Mezirow (1991), and made a paradigm shift. She now had a different world view because of the way she and her fellow students interacted with each other, which was different from what they were used to, reflected in *“... in ways which we have never used before”*.

Another vocationally interested pre-service teacher, S3 at College Three also explained: *“One can create one’s own leisure time. I can do music, physical education, sports, and athletics. I now enjoy sporting activities. I like athletics”*. Similar to participant S1, participant S3 reported that she now enjoyed some out-of-class activities, probably after critically challenging her existing assumptions. She began to see the benefits of these activities as enhancing her transformative learning. In these responses, management support was implied by both S1 and S3, with the provision of various materials and equipment for the sporting activities. Hence the college management, as part of the college community, provided platforms and resource support for extra-curricular activities, which in turn enhanced the pre-service teachers’ transformative learning.

The supportive value of extra-curricular activities in promoting transformative learning is affirmed by O’ Sullivan (2006), who indicates that students’ engagement in sport and recreational activities reduce alienation and increases their chances of involvement in college community life. Being involved in the various activities outside the lecture room kept the pre-service teachers’ motivation to learn alight and this ensured their academic achievement. Consequently, the curricular and extra-curricular activities contributed to the student teachers’ transformative learning. These activities enhanced their acquisition of knowledge, skills and self-

confidence, which were important aspects of their transformative learning. The supportive role of the extra-curricular activities enhanced the academic, emotional and social aspects of the student teachers' Tinto (2003) lives on campus, resulting in their transformative learning.

## **7.5 Conclusion**

This section of the chapter analysed and discussed the findings around the forms of support that were offered by the college community to enhance the transformative learning of the vocationally interested and disinterested pre-service teachers. A number of forms of support came into play, ranging from material resources such as computers, to infrastructural resources like well-stocked libraries, lecture theatres and lecture halls as well as halls of residence for students, all of which supported the student teachers' transformative learning. The libraries were sources of information that catered for research and assignment writing, thus expanding the student teachers' knowledge base. Lecture theatres and halls of residence provided academic and social support spaces. In Mezirow's (2003) theory transformative learning is both a cognitive and a social activity.

The significant roles played by lecturers, peers and management in supporting transformative learning were also highlighted. While peers provided critical pillars for dialogic and reflective learning Mezirow (1991), lecturers were supportive in providing content which the student teachers could critically analyse, prompting their transformative learning. Generally, management facilitated support for all the learning activities in and outside the lecture rooms which occurred at the colleges, and this enhanced the pre-service teachers' transformative learning. Thus, from the findings, the college community supported both vocationally interested and vocationally disinterested pre-service teachers' transformative learning.

However, the differences that stood out were that public colleges had big and adequately stocked libraries and spacious lecture halls, which supported the transformative learning of the vocationally interested and vocationally disinterested pre-service teachers. At the private colleges the vocationally interested and vocationally disinterested pre-service teachers did not feel adequately supported in that regard due to under stocked libraries, inadequate computers and small lecture halls, which they felt were not conducive to their effective transformative learning.

Further, the issue of spiritual support fostering students' transformative learning also emerged in the two private institutions. By focusing on the spiritual aspect as a support system, both the vocationally interested and the vocationally disinterested pre-service teachers were able to reframe their world views (Mezirow 1997). Through spiritual support, the student teachers learnt through their 'souls', which aimed at transforming their hearts, characters and wisdom (Moore 1996). The pre-service teachers in the private colleges, notwithstanding the limited spaces in the lecture halls and libraries, seemingly experienced holistic transformation as it included their body, spirit and the soul, and this kind of support was missing in the two government run colleges.

Having discussed how the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning and the forms of support offered by the college community to enhance their transformative learning in this chapter, the next chapter synthesises the findings of the study and offers conclusions and recommendations.

## CHAPTER 8

### DISCUSSION, CONCLUSIONS AND SYNTHESIS

#### 8.1 Introduction

The study explored the transformative learning experiences of forty vocationally interested and vocationally disinterested pre-service teachers in selected teacher training colleges in Zimbabwe. Globally, the goal of teacher education is to develop effective and proficient teachers who have the competencies required for the teaching profession. The training of teachers should therefore promote the acquisition of the vital generic skills that the individuals need to be functional in the education labour market Ashwin (2019). These vital skills and competencies relate to attitudes, dispositions, behaviours, reflections, reflexions, intrinsic motivations, self-efficacy and autonomy, as well as communication, collaboration, engagement, and teaching/learning productivity (Mukeredzi, Mthiyane and Bertram 2015; Sedyukov 2017). Furthermore, the teachers must be employable to meet the needs of the 21<sup>st</sup> century (Barber, Mourshed and Company 2007; World Bank 2012; Ashwin 2019).

In Zimbabwe, teachers' training colleges have been turned into new 'job factories' Mercurio (2016). The economic meltdown in the country, highlighted in Chapter One, has seen industries folding and retrenchments scaling up (Mukeredzi 2016; Mlambo 2017). While research has identified intrinsic and altruistic motivations for joining teaching, such as a desire to work with children or adolescents, a desire to impart knowledge, an opportunity to continue one's own education, and service to society, inter alia extrinsic reasons such as using teaching as a last resort or stepping stone to other professions have also emerged (Alavi *et al.* 2017; Friedman 2016; Liu, Lix and Zou 2019; Richardson and Watt 2006; Sibanda 2018; Sutchter, Darling-Hammond and Carver-Thomas 2016).

In Zimbabwe, the closure of industries exacerbated unemployment levels, which have currently reached alarming rates of more than 90% (United Nations Coordination of Humanitarian Affairs 2019). Ordinary Level and Advanced Level graduates realised that the only avenue to the job market was through teaching (Mukeredzi 2013). These graduates were joined by the retrenches, who also saw teaching as their only window of hope for employment subsequent to graduation. Given this scenario, a combination of vocationally interested (passionate) and vocationally



disinterested (dispassionate) pre-service teachers entered teacher training colleges (Han and Yin 2016; Bergmark *et al.* 2018). Teacher education was thus expected to ‘stew’ and transform this mixed bag of student teachers into effective classroom practitioners who would make a meaningful impact on the millions of learners under their care subsequent to graduation (Shelton 2011). Therefore, developing an understanding of how such pre-service teachers experienced transformative learning in teacher education became worthwhile. As the pre-service teachers explored in this investigation constituted student teachers in teacher training colleges, studying them would locate this enquiry within bigger debates on initial teacher education. *Hence, the purpose of this study was to explore the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in selected teacher training colleges in Zimbabwe.*

The study sought to answer one key research question: *What were the transformative learning experiences of vocationally interested and vocationally disinterested pre-service teachers in selected teacher training colleges in Zimbabwe?* To answer this key research question, three sub-questions were developed. The sub-questions were:

1. What was the nature of the transformative learning that the vocationally interested and vocationally disinterested pre-service teachers experienced?
2. How did pre-service teachers understand their transformative learning?
3. What forms of support were offered by the college community to enhance the pre-service teachers’ transformative learning?

Addressing the above research questions would enable understanding of the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers, as told by the participants. Thus, informed by the findings presented in the previous two chapters, this chapter explains their transformative learning in that light.

The preceding chapters (Six and Seven) presented the findings that answered the research questions. Chapter Six addressed the nature of the transformative learning experiences of the vocationally interested and disinterested pre-service teachers, and it emerged that the pre-service teachers experienced transformative learning through emotional experiences and learning experiences. Chapter Seven, the preceding chapter, addressed two questions, firstly the pre-service teachers’ understandings of their transformative learning, and it emerged that they

understood their transformative learning as a change and as the acquisition of knowledge and skills. The chapter also presented and analysed data around the forms of support offered by the college community to enhance transformative learning experiences, and a supportive environment coupled with material, infrastructural and human resources emerged as being supportive of the pre-service teachers' transformative learning.

This chapter is organised into six sections. First is the introduction that foregrounds the major issues to be addressed in the discussion. Second are the methodological reflections which enabled a critical evaluation of the effectiveness of the choices and moves that I made and strategies that I employed in the study. Third is the review of the study, while the fourth section presents the contribution of the study to the existing body of knowledge. Fifth are the implications drawn from this research, and finally the conclusion that ties up the discussion and the chapter.

Four selected teacher training colleges were involved in the study. Two were run by missionary responsible authorities: the Catholic Church and the Reformed Church in Zimbabwe. Both trained primary school teachers specialising in either Early Childhood Development or Junior Level (the phase Grade 3 to Grade 7). The other two teachers' colleges were government owned colleges; one trained Secondary School teachers while the other developed Technical Secondary school teachers.

## **8.2 Methodological reflections on the study**

The study was located in the interpretive paradigm in which a multi-site case study design, a qualitative research approach, interviews, focus group discussions and continuum drawings and discussions enabled me to understand the transformative learning experiences of forty vocationally interested and vocationally disinterested pre-service teachers from their own perspectives (Creswell 2014; Kivunga and Kuyini 2017). The target population and the purposively selected sample size proved appropriate as this provided relevant and adequate data to answer the research questions. Literature surveyed (Banerjee and Chaudhury 2010; Forero *et al.* 2018) indicates that as a primary source of data, the target population and the sample influence research credibility. The data that I elicited through focus group discussions, face-to-face individual interviews and continuum drawings and discussions enabled me to uncover the

pre-service teachers' perceptions and values about their transformative learning experiences (Hargreaves 2012; Nyumba et al. 2018; Creswell 2018). The multiple site case study Yin (2014) enabled the in-depth examination and unpacking of the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers informed by (Mezirow's Transformative Learning Theory 2012). Consequently, studying this phenomenon at the different selected colleges enhanced my understanding.

However, while the study involved four different sites, member-checking was only possible at two of them due to the unforeseeable changes made by the MHTESTD, as detailed in Chapter Four. During member-checking I provided the pre-service teachers who had participated in the focus group discussions and individual face-to-face interviews with the opportunity to verify the accuracy with which I had captured their statements when transcribing. I gave them room to make some adjustments where they felt that their comments were misrepresented. Literature (Yin 2014; Candela 2019) indicates that member checks are meant to eliminate researcher bias and this improves the trustworthiness of the research.

In the focus group discussions, a more balanced discussion would have been achieved had both categories, vocationally interested and vocationally disinterested, been open right from the beginning. However, the vocationally interested pre-service teachers were open throughout the focus group interviews in comparison to their vocationally disinterested counterparts who only opened up midway through the discussions, after more in-depth probing. I realised that she should have asked the vocationally disinterested pre-service teachers more follow-up questions earlier, directly addressing them individually to get their perspectives during the focus group interviews to make and keep them more engaged. I also realised that some of these non-passionate interviewees were hard to engage DeJonckheere and Vaughn (2019), probably because they were uncomfortable about sharing their reasons for being disinterested in teaching and may have felt they were 'outcasts' because teaching was not their 'home'. Again, while I was able to generate comprehensive and complete data through lots of probing, I felt that the interview question asking the participants what their expectations were of the college should have been directed more towards the vocationally disinterested pre-service teachers, as it would probably have given them more leeway in describing their expectations and enhanced their openness.

Continuum drawings and discussions emerged as a novel way of generating data as it allowed participants to make reflections and reflexions on their experiences and internalise their progress in a meaningful and creative manner (Phillips 2019). Self-reflection, as suggested by Utley and Showalter (2007) and Peer (2017), has the potential to make changes in perceptions and beliefs, thereby fostering transformative learning. Through this process, the student teachers understood themselves better by stepping back and pondering their personal beliefs and assumptions. The continuum drawings also broke the monotony of the narratives and made the events more tangible (Zweifel and Van Wezemael 2012; Bennett 2013). These drawings also offered a way of enhancing triangulation of the data (Beltman *et al.* 2015).

With regard to analysing the data, while I could have used computer data analysis software packages, I preferred to immerse myself in the data to obtain a deeper understanding and manual coding software packages could always be learnt and utilised at a later stage, if necessary. Open coding, which I adopted for the data analysis, was interesting and invigorating, but time consuming to come up with codes, categories and themes. However, drawing up tables illustrating responses, codes, categories and themes assisted me to come up with appropriate answers after reading and re-reading the responses and listening to audio tapes several times. Consultations with my supervisor helped me to get back on track when I deviated from the plan.

Notwithstanding the hitches cited above, the methodological choices and moves were valuable as they enabled addressing the research questions adequately regarding how the vocationally interested and vocationally disinterested pre-service teachers experienced transformative learning in selected teacher training colleges in Zimbabwe generally, and the explored pre-service teachers in particular.

### **8.3 Review of the study**

This study is composed of eight chapters which are summarised below.

In *Chapter One*, I unpacked the concept of transformative learning to provide clarity on what I was ‘on about’, which was followed by the debates on transformative learning from global and regional contexts. A detailed discussion on teacher training provision in Zimbabwe in the post-independence era was discussed next. This was followed by focus and the purpose of the study, which enabled me to draw parameters for this study on establishing how the vocationally

interested and vocationally disinterested pre-service teachers experienced transformative learning. Subsequent to the focus and purpose, I spelt out my personal context and motivation for the study and the rationale behind the study. Literature (Razak, Darmawan and Keeves 2009; World Bank 2012; Rogoff *et al.* 2016; Altun 2017) indicates that vocationally interested or intrinsically motivated student teachers are likely to be excited, energetic and enthusiastic about their work and will consequently pass that energy and enthusiasm onto their students, who will eventually perform very well academically.

On the other hand, the vocationally disinterested student teachers will create dispassionate learners and ineffective learning, and consequently poor student achievements (World Bank 2012; Balyer and Özcan 2014; Cotnoir *et al.* 2014; Mukeredzi 2016; Serin 2017). International and regional debates have targeted adults and university students, and not much academic work on this phenomenon has been done in teachers' colleges. Without much academic work on this aspect, and given the diverse student teachers' motivations for joining teaching in Zimbabwean teachers' colleges, it was vital to understand in particular how the vocationally disinterested students experienced transformative learning during the training programme. Subsequent to the rationale was the key question and subsidiary questions. Thereafter, overviews on the theoretical framework, literature review, methodological approaches and limitations of the study were discussed. The chapter ended with an outline of the chapters which made up the thesis.

In ***Chapter Two***, a review of related literature was discussed. The chapter discussed global and regional literature around the transformative learning experiences of students. Transformative learning emerged as a process of examining, questioning, validating, and revising perspectives (Taylor 2008). Emotions emerged as a significant aspect in the transformation process, which could either impede or promote transformative learning (Dirkx 2006; Chen and Chen 2013; Bella *et al.* 2014; Kumi-Yeboah 2014; Senyshyn 2018). In addition, disorienting dilemmas emerged as vital catalysts for transformative learning Senyshyn (2018), as they provoked examination of the learners' (in this case student teachers) pre-existing assumptions and meaning structures, and these triggering events promoted transformative learning. Thus, the critical role played by self-examination and critical assessment of assumptions in transformation was evident in the discussions. After a critical examination of assumptions, the goal was to move toward a new

frame of reference, thus facilitating new understanding and attainment of new behaviours, and consequently transformative learning (Taylor and Cranton 2012).

**Chapter Three** presented Mezirow's theoretical framework which guided this study, covering its historical development, the principles and their application to my study, and its critique.

Transformative learning comprises all learning that implies change in the identity of the learner, a 'paradigm shift' that may directly impact their future experiences (Illeris 2014). Mezirow was informed by ideas from Kuhn's (1962) paradigm, Habermas' (1984) learning domains and communicative action, and Freire's (1970) conscientisation of the oppressed. These ideas and views were also discussed in the chapter. Mezirow identified ten Phases/Principles/Stages through which an individual moved on their journey to transformation: 1) A disorienting dilemma; 2) Self-examination; 3) A critical assessment of assumptions; 4) Recognition that one's discontent and the process of transformation was shared; 5) Exploration of options; 6) Planning a course of action; 7) Acquiring knowledge and skills; 8) Provisional trial of new roles; 9) Building self-confidence; and 10) A reintegration into one's life on the basis of conditions dictated by one's new perspectives.

These principles which were directed towards learning and change Mezirow (1991; 2012) were useful for my study, given the focus on personal experiences, reflection, and self-assessment/self-criticism, re-planning and trialling of new roles, which formed the basis for transformative learning Fenwick (2004); Taylor (2009); Pappas (2016). After encountering a disorienting dilemma, individuals could reflect, self-assess and self-question, thereby experiencing transformative learning. Alternatively, they could remain in a liminal phase which, without a supportive environment, would mean that transformation was unlikely and they would then return to their familiar 'cocoons of meaning' Green (2011); Green and Malkki (2017). While use of Mezirow's Transformative Learning Theory has grown exponentially, it has been criticised for its emphasis on individuation or its focus on one's sense of self and one's values <https://elearningindustry.com/transformative-learning-theory-what-elearning-professionals-should-know>.

**Chapter Four** outlined the methodology that was adopted for my study. This chapter defined the interpretive research paradigm which allowed the discovery of reality through the participants' perspectives, views, their backgrounds and their experiences (Creswell 2013; Cohen, Manion

and Morrison 2018; McQueen 2006). Given the aim of the study, which sought to understand student teachers' transformative learning experiences, the acceptance of multiple perspectives in interpretivism led to a more insightful understanding of the transformative learning experiences of the pre-service teachers (Creswell 2013; Cohen, Manion and Morrison 2018). Consequently, I used a qualitative approach, where meaning was embedded in the participants' experiences and mediated through my own perceptions (Furlong 2013; Sharan, Merriam and Tisdell 2015; McQueen 2006). In this study, I adopted a multiple-site case study design to understand the worlds of my participants by gaining insight into their backgrounds, beliefs and experiences from their perspectives (Creswell 2013; Yin 2014). Further, my goal was to attain an insider's view of the pre-service teachers' transformative learning experiences, and I used focus group discussions, individual face-to-face interviews and continuum drawings and discussions to generate data. This multi-modal approach enabled the participants to make meanings of their own realities and they appreciated their own knowledge construction through their transformative learning journeys (Cohen, Manion and Morrison 2018). I also discussed the process of open coding that I used to analyse the data, which enabled capturing of the subjective viewpoints of the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers. I concluded the chapter by addressing trustworthiness, discussed under four aspects: credibility, transferability, dependability and conformability (Lincoln and Guba 2018; Johnson, Adkins and Chauvin 2020). Ethical issues were discussed in detail to illustrate that I carried out my study with careful consideration and observance of these ethical issues. The chapter ended by discussing the major limitations of the study.

**Chapter Five** described the research setting in which this study was conducted. Surveyed literature (Given 2008) describes the research setting as the physical, social, and cultural site in which the researcher conducts the study. In this qualitative research, the focus was mainly on meaning-making, and I therefore studied the participants in their natural setting in order to understand their transformative learning experiences as authentic people (Creswell 2014; Gentles *et al.* 2015; Nieuwenhuis 2016). The four selected colleges offered the contexts from where the data were generated, analysed and discussed. The chapter discussed the policy aspect, the governance of the colleges and the enrolments. The chapter also presented and discussed the biographical data of the participants, and their reasons for joining teaching, from where both

altruistic and intrinsic pull/push factors emerged. These different motivations had an impact on the transformative learning experiences of both the vocationally interested and disinterested pre-service teachers.

**Chapter Six** presented and analysed the data addressing research question one, which explored *the nature of the transformative learning that the vocationally interested and vocationally disinterested pre-service teachers experienced*. The findings discussed in the chapter revolved around emotional and learning experiences. The emotional experiences of excitement, happiness and pride emerged from the responses of the vocationally interested pre-service teachers, while disorienting dilemmas like fear, confusion, shame and shock were experienced by vocationally disinterested participants at the commencement of teacher training. These emotions created fertile ground for transformative learning. Learning experiences through different learning techniques, including engagement in extra-curricular activities, also promoted transformative learning.

**Chapter Seven** presented the findings answering research questions two and three, which sought to determine how the pre-service teachers understood their transformative learning, and the support provided by the college communities that enhanced that process. It emerged that the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning as involving two facets: the change of their perceptions, views, attitudes and beliefs about the teaching profession; and that transformative learning involved the acquisition of knowledge and skills. Answers to question three about the forms of support that enhanced transformative learning, which were also discussed in this chapter, gave rise to three types of support: material support such as the provision of computers; infrastructural support such as lecture venues and libraries; and human resource support, for instance lecturers who conducted lectures, peers who offered social and academic support and college management who facilitated all aspects of their learning life in college.

**Chapter Eight** This present chapter discusses, concludes, and synthesises the findings, explaining how the forty vocationally interested and vocationally disinterested pre-service teachers experienced transformative learning in four teacher training colleges.



## 8.4 Discussion of findings

The theoretical framework that informed this study was Mezirow's Transformative Learning Theory (2012). The ten principles/phases/stages of the theory provided an appropriate lens for understanding and explaining the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in the four selected teacher training colleges in Zimbabwe. The findings from Chapters Six and Seven are discussed, concluded and synthesised. Both chapters were guided by Mezirow's Transformative Learning Theory to analyse, explain and present the findings as indicated in the figure 8.1.

**Figure 8.1: Mezirow's stages of transformative 1991 learning (Mezirow 2012)**



Using this theoretical framework, I was able to compare, match and explain what participants said with the appropriate phases of the theory. Mezirow's Transformative Learning Theory has widely been used to understand adult learning experiences in various contexts (Kitcheman 2008). In my study, its consistency was evident in helping understand the transformative learning experiences of the student teachers in the teacher training colleges explored. Using Mezirow's ten phases enabled an objective and systematic analysis of the transformative learning process of the vocationally interested and vocationally disinterested pre-service teachers (Johansson 2008). In this study, it emerged as a universal theory which could address higher order questions, and answers could be understood more comprehensively, thus it was relevant to this study. Transformative learning involved the pre-service teachers questioning their assumptions, beliefs and values, considering multiple points of view, and the ability to verify their reasoning (D'Amato and Krasny 2011; Rahman and Hoque 2017).

Although the steps of the process are placed in numerical order in the model, the transformative learning process itself is not necessarily linear in its nature Johansson (2008); McEwen, Strachan and Lynch (2010). The pre-service teachers in this study did not clearly exhibit passing through all the stages, and did not pass through the stages in a linear fashion when experiencing their transformative learning. Mezirow (1990) notes that seemingly simple, transformative learning consists of complex and varied responses, yielding change for some but not for others. Disorienting dilemmas, self-examination, critical assessment, exploration, acquisition of knowledge and skills and building competence and self-confidence were more evident and pronounced than the other three stages. The findings here confirmed existing research by Taylor (2007), which indicates that not all steps in the process are of equal importance or value in every transformative learning experience, and learners do not necessarily choose to take all opportunities to be transformed. In this study the transformative learning experiences witnessed did not follow the ten stages exactly. In essence, the vocationally interested and vocationally disinterested pre-service teachers did not experience these stages in a linear form, nor did they go through all ten phases. McEwen, Strachan and Lynch (2010) attest that transformative learning is not necessarily gradual, progressive and linear, but may have significant thresholds for change. In other words, while this model describes a critical path to transformation, it is not an ethnographic description of the lived experiences of transformation (Johansson 2008).

Reviewed literature (Taylor 1997; Stover 2016) indicates that more attention needs to be given to the importance of relationships in transformative learning. Placing student teachers in an environment where they could share, and that could challenge their prejudices, prior experiences and assumptions could give rise to critical evaluation, leading to the student teachers learning about themselves and comparing their prejudices, prior experiences and assumptions with those of others. Transformation is, by its nature, a personal and individual reality and it occurs as prompted and is facilitated and acted out in the social context, in other words in our existence. This was evident in my study, where both vocationally interested and vocationally disinterested pre-service teachers reported personal experiences in their transformative learning journeys; journeys which included other people.

Taylor (1998) confirms that Mezirow's transformative learning as a process may at times not be realised because individuals (student teachers) are comfortable with their beliefs and with what they think they know (Cranton 2002). In addition, surveyed literature (Santalucia and Johnson 2010; Castelli 2011; Roberts 2011; Green and Malkki 2018) indicates that individuals feel safe and secure in their established meaning perspectives - their comfort zones. This was evident in my study, where two of the vocationally disinterested pre-service teachers apparently remained stuck to their previously held beliefs and desires, which they perceived as comfortable and non-threatening. As such, these particular student teachers did not want to consider alternatives and therefore did not engage in reflection or consideration of alternative points of view in order to move forward (Mezirow 1997). Consequently, questioning their understandings, beliefs and attitudes through self-reflection could have been traumatic. Thus, in this study, the situation of these vocationally disinterested pre-service teachers implied that shifting perspectives could make them feel insecure and unsure (Taylor 1997). In this case, resistance to transformative learning, as Kennedy (1990) attests, could be entrenched in personal and cultural world views hidden from the pre-service teachers' consciousness. Consequently, in this context transformative learning seems to have been hampered. Arguably though, drawing on Mezirow (1996b), the fact that the two vocationally disinterested pre-service teachers indicated that they made informed and reflective decisions to act, meant that they realised some transformative learning. Another stance from literature (Fortes 2016) indicates that transformative learning would take place if the student teachers continued the process of reflecting on and revising their assumptions. As these student teachers were only in their first year of study, and still on the

training programme, the remaining two years on the teacher training programme would probably see them shifting their world views.

#### ***8.4.1 The nature of the transformative learning experiences***

In answer to the sub-question querying the nature of the transformative learning experienced by the vocationally interested and vocationally disinterested pre-service teachers, the findings in Chapter Six identified two aspects related to their emotional and learning experiences. These are discussed below.

##### ***8.4.1.1 Transformative learning experiences related to affirmative feelings***

With regard to assenting feelings; the vocationally interested pre-service teachers experienced excitement, happiness, joy and pride. As Goleman (1997) puts it, emotions are the cognitive manifestations of one's behavioural acts and are primal to learning. Twenty pre-service teachers who were interested or passionate about the teaching profession felt excited, happy and joyful about being in teacher training. These feelings propelled their transformative learning through creativity, openness and receptiveness to new learning in a new environment (Morgan, Isaac and Sansone 2001; Van Iddekinge, Putka and Campbell 2011; Serin 2017). Being creative, open and receptive to new knowledge are indicators of transformative learning linked to the acquisition of knowledge, and constitute Phase/Principle Seven of Mezirow's (1991) Transformative Learning Theory. The feelings of excitement, happiness and joy induce high motivation to develop relevant knowledge and skills, set higher professional goals, and take action to achieve them (Holland 1997). This may have given rise to the pre-service teachers experiencing transformative learning. One may conclude that vocational interest or intrinsic motivation propels pre-service teachers' transformative learning during teacher education.

Feelings of pride also emerged, which are likely to have propelled transformative learning. Getting into teacher education was an achievement for five pre-service teachers which warranted pride given the long waiting periods and the stiff competition to enter teacher training, as signified by one participant who said: *"I feel like a soldier who has won some battle. So many people came competing for vacancies. So, I think I have won. I am proud of the victory"*, (participant S2 at College Two). The sense of pride for some emanated firstly from having

earned the chance to train as teachers at a tender age. Secondly, in Zimbabwe it had become very difficult to gain entry into teacher education as the teaching profession was one of the few surviving ‘industries’. Thirdly, the economic meltdown had caused high unemployment rates; consequently, getting a place in an institution of higher learning to engage in teacher development was a unique achievement (Nystrom 2019).

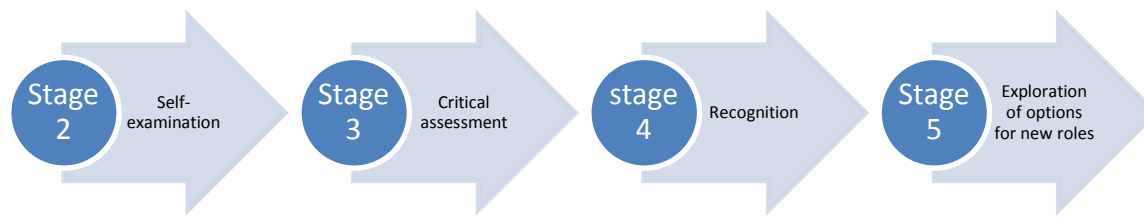
In the context of this study, pride in such situations propelled hard work and this seemingly had a positive effect on transformative learning (Mark 2005). This also relates to Mezirow’s Phase/Principle Two of the Transformative Learning Theory, where the individual engages in self-examination before taking action. What this suggests is that when student teachers are passionate about teaching, upon embarking on teacher education they are likely to experience transformative learning without too much effort. Literature surveyed (Holland 1997) asserts that individual interests are pillars for transformative learning as there is an interwoven relationship between interest and career. In this case, as the vocationally interested participants were committed to teaching, they were likely to have commitment to their work, focusing on goal achievement.

#### *8.4.1.2 Transformative learning experiences related to disorienting dilemmas*

All 20 disinterested pre-service teachers experienced disorienting dilemmas (Phase 1 in Figure 8.1) in the form of context shock at the commencement of the training programme. These pre-service teachers were afraid, anxious, shocked and frustrated to be in a new environment. However, they tried to find their feet in the new environment, so as to adjust their minds and behaviours in order to move forward (survive) with their peers in the college. As time progressed, their interactions with their peers improved, which seemingly fostered their will to learn and transform. Thus, in this study, the disorienting dilemmas laid the basis for transformative learning (Nuangchalerm and Prachagool 2010). The dilemma of the context shock prompted the pre-service teachers’ transformative learning, as shown in Figure 8.2.

## Figure 8.2: The transformative learning experiences related to context shock

Source: Adapted from Mezirow's Transformative Learning Theory (1991)



Further, disorienting dilemmas were experienced when the pre-service teachers felt anxious and fearful. Literature surveyed (Mukeredzi 2019) indicates that anxiety is not bad as often it is a normal reaction to certain situations, informing one that something needs one's attention. In this case, the pre-service teachers needed a supportive environment in order to allay their fears of being in the new environment, to enable them to move on. The disorienting dilemmas which the vocationally disinterested pre-service teachers experienced seemingly propelled a personal drive to reflect on and critically assess and understand their new environment and what needed doing. This process seemingly gave rise to their transformative learning. Critical assessment is linked to Phase/Principle Three of the Transformative Learning Theory, which is about critical thinking. The student teachers challenged their existing assumptions in order to move on/continue with their training. Transformative learning also occurred when some participants satisfied Principle Four, which is about recognition. The vocationally disinterested pre-service teachers recognised that they were not the only ones navigating the murky waters, and that others were also going through similar experiences of disorientation from being in a new environment. As such, Mezirow's Phase/Principle Six, which is about planning a course of action, probably helped them to decide which action to take - either to make a paradigm shift or to remain in their liminal zones. Surveyed literature (Akinade 2005) highlights that this transition to college life, notwithstanding the dilemmas experienced, is in itself transformative as the pre-service teachers acquired knowledge and skills, which is linked to Mezirow's Principle Seven of the Transformative Learning Theory.

From the findings, further disorienting dilemmas were also caused by overwhelming assessment tasks. Some pre-service teachers were afraid that they would fail and be withdrawn from the college. After self- and critical examination of their assumptions, which are Mezirow's (1991) Transformative Learning Theory Principles Two and Three respectively, which deal with self-

assessment and critical self-examination, these pre-service teachers recognised that assessment was part and parcel of the learning processes. Recognition of the source of their fear, which is Mezirow's Principle Four, followed by planning a course of action to take, which is Principle Six, must have taken place. Furthermore, some vocationally disinterested pre-service teachers who were overwhelmed and felt like quitting due to pressure from the many assessment tasks that they had to work on, must have experienced these phases: Mezirow's Phases/Principles Two, Three, Four and Six to have been able to 'soldier' on. Consequently, transformative learning occurred as the pre-service teachers realised the need to work harder on their assessments. Literature surveyed (Mukeredzi and Nyachowe 2018) indicates that assessment either motivates or propels the individuals to work harder. In this case, the participants were motivated to work harder, thus realising transformative learning.

Drawing on findings, feelings of shame were another source of disorienting dilemmas. The 18 vocationally disinterested pre-service teachers had feelings of failure and shame which emanated from their lack of passion for teaching. Surveyed literature (Ryan and Deci 2000; Van Iddekinge, Putka and Campbell 2011; Ambiel, Noronha and Nunes 2012; Serin 2017; Schelfhout *et al.* 2019) indicates that being passionate propels an individual's commitment to work and achieve as passion or interest is closely related to learning and experiencing new ideas. On the contrary, non-passionate teachers are usually demotivated and unwilling to learn (Carbonneau *et al.* 2008). The lack of interest, in this case caused by feelings of shame, may have given rise to poor performance and less enthusiasm in achieving success. This uneasiness and the disorienting dilemmas during the transformative journey came with taking up a profession that the participants had no passion for (Morgan, Isaac and Sansone 2001; Swanson 2012; Mukeredzi 2018). Lack of passion in student teachers may give rise to demotivation, and if this continues until they get into the classroom, there will be no enthusiasm, leading to demotivated students and eventually poor student achievements. In such cases, teacher commitment is low grade, hence a drop in the professional and academic standards (Savickas 1999; Krapp 2003; Chireshe and Shumba 2011). The pre-service teachers had to work on their feelings of shame through critical self-examination and critical self-assessment, and consequently transformative learning occurred. Mezirow (1999) affirms that for transformative learning to occur the individuals, in this case, pre-service teachers, move from unexamined ways of thinking to more examined and critically reflective ways.

The vocationally disinterested pre-service teachers experienced cultural shock as they tried to adjust to the new religious environment in the colleges. What emerged was that 20 vocationally disinterested pre-service teachers in the church-run institutions experienced pressure exerted on them by attending liturgical services that they were not familiar with. The student teachers had to work on their emotions, so as to fit in with the religious environment. However, two pre-service teachers in this category found these practices uncomfortable. In this case they had to engage in self-examination and critical reflection Mezirow (1991) in order to cope with the college's rules. Transformative learning could have been stalled for such vocationally disinterested pre-service teachers who found this change unappealing.

Literature surveyed (Cranton 2006) indicates that changes in location or being in a new environment with new requirements stimulate transformative learning. In the study, some (2) vocationally disinterested pre-service teachers apparently did not experience transformative learning, notwithstanding the other dilemmas in their new environment. This was consistent with Mezirow (2000), who notes that a disorienting dilemma can induce either positive or negative emotions as individuals respond to crises differently. For the two student teachers, their transformative learning could have been hampered. The implication could be taken from Illeris (2014), who indicates that not all learning results in transformation.

Findings also showed that some (10) vocationally disinterested pre-service teachers were in a state of despair and frustration. The feelings of frustration and despair, according to Dirkx (2006), are deeply entrenched in the process of transformative learning and in this case the pre-service teachers had to critically reflect on alternative ways of being in the world. These feelings of despair and frustration had to be replaced by functional and self-directed thoughts, leading to transformative learning (Gregory 2002). In addition, the learning environment was also threatening, given the new academic demands. Similar to the study abroad programmes conducted by ( Fullerton 2010; Kumi-Yeboah 2012; Strange and Gibson 2017; Senyshyn 2018; Onosu 2020) in the reviewed literature, the student teachers experienced dilemmas which emanated from the new environment and its academic and social demands. However, these dilemmas were seemingly sources of transformative learning as the student teachers were able to re-evaluate their views of 'self' and of others (Mezirow 1991).



From the Transformative Learning Theory, all staff would need to be empathetic and supportive of the pre-service teachers to help them experience transformative learning smoothly and settle in the new environment (college) without any frustrations. Literature surveyed (Darling-Hammond *et al.* 2020) indicates that there is a need to create a safe and welcoming environment so as to minimise frustration and boost the speedy emergence of transformative learning. This means that colleges would be called upon to create safe and student friendly environments for transformative learning to take place. Significant transformative learning is impossible, as Taylor (2007) puts it, without emotional support. Disorienting dilemmas can either facilitate or impede transformative learning (Mezirow 1991). Further, Mezirow (2003) affirms that student teachers are able to change their beliefs, perspectives and understandings by experiencing a ‘disorienting dilemma’ and resolving this through reflection, re-evaluation and discussion, consequently experiencing transformative learning. Student teachers who experienced positive changes in their mental models saw dilemmas as a challenge which increased their determination and persistence to acquire new knowledge, practice new skills and change their attitudes and thus experienced transformative learning. Literature surveyed (Agbakwuru 2009; Modipane 2011; McRae 2015) highlighted supportive learning environments as enablers for transformative learning in order to minimise frustrations, in this case during the training programme. Hence, there was need for reciprocal interaction between the student teachers and their environments as they engaged in transformative learning activities. Mezirow (1997) attests that the process of dialogue with self and others is an essential medium through which transformative learning is encouraged and developed.

Based on findings, while vocationally interested pre-service teachers’ transformative learning experiences were promoted by assenting emotions of excitement, happiness, joy and pride; the vocationally disinterested pre-service teachers’ experiences were promoted by dilemmas which created disorientations such as fear, anxiety, confusion, being overwhelmed, shame frustration, and shock. Echoing Mezirow’s (1991) Transformative Learning Theory, Dirkx (1998) indicates that emotions are the chief drivers of transformative learning.

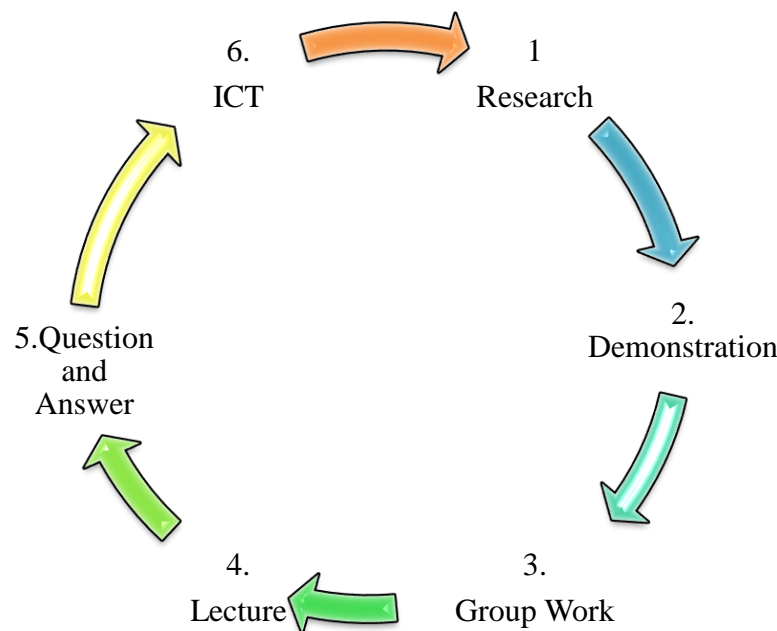
Findings regarding the nature of the transformative learning of the vocationally interested and vocationally disinterested pre-service teachers also emerged around their learning experiences.

#### 8.4.1.3 The nature of transformative learning experiences related to classroom learning techniques

The nature of the transformative learning experiences related to six distinct classroom learning techniques: research, demonstration, group work, lectures, question and answer sessions and ICT.

**Figure 8.3: The nature of transformative learning related to classroom learning techniques**

Source: Researcher (2019)



First of all, from the findings learning experiences promoted the transformative learning of both the vocationally interested and vocationally disinterested pre-service teachers. These pre-service teachers also experienced transformative learning through research. Research emerged as a strategy that facilitated transformative learning as it propelled them into being self-directing, self-monitoring, and self-correcting individuals (Gregory 2002). Through this strategy, the student teachers were able to build upon the assumptions that they had brought to the learning situation Cranton and Taylor (2007) with the acquisition of new knowledge and skills (Mezirow's Principle 7). The pre-service teachers had to do research for assignment writing and for staging presentations individually and collaboratively. Having acquired new knowledge and skills, the participants were able to critically reflect on their existing assumptions which they

were socialised into from birth (Cranton and Malkki 2014). Drawing on Mezirow's (1991) Transformative Learning Theory, the student teachers were able to move on after critically challenging their previously held beliefs using their new knowledge gained through research. The pre-service teachers researched information in the library and on the Internet. In addition, they learnt how to synthesise ideas, criticise and evaluate them - a process which was in tandem with transformative learning. In other words, the pre-service teachers had to critically analyse their frames of reference through the process of self-examination and assignment question analysis. Consequently, research emerged as a catalyst in this transformative learning process (Mezirow 2003).

Second, the nature of the transformative learning experiences through demonstration lessons that the lecturers conducted promoted the development of mental models or pictures of what the participants were seeing and learning from the lecturers' expositions, and this not only engaged but also motivated them (Criticos *et al.* 2002; Mukeredzi 2009; Basheer *et al.* 2016). From the findings, it would appear that exposure to observational learning enhanced the pre-service teachers' understanding of the concepts being learnt. This was given that observational learning through watching others in action promoted knowledge retention, useful for subsequent replication of the observed behaviours, and gave rise to transformative learning (Rijlaarsdam and Groenendijk 2013). Findings further indicated that this pedagogical approach allowed student teachers to see the lecturers actively engaged in the action as a model rather than merely telling them what they needed to know (Mukeredzi 2019). As they observed the stages modelled by the lecturers, critical thinking, reflection and analysis were promoted. These aspects of transformative learning related to Principle Three of the Transformative Learning Theory Mezirow (1991). Furthermore, findings suggested that through critical thinking and analysis during observational learning Santalucia and Johnson (2010); Sweeder and Jeffery (2013); Brown (2015), the pre-service teachers were probably persuaded to challenge their previously held beliefs and adapt to new ways of seeing the world, and this promoted transformative learning (Mezirow 1991). This could imply that demonstration as a teaching strategy not only engaged learners and enhanced their mastery of concepts, but also contributed to the disruption of their attitudes and perceptions.

Third, in relation to collaboration, findings indicated that some (16) vocationally interested and disinterested pre-service teachers also experienced transformative learning through engagement in group work activities. Teaching basically involves group work, given that classes are composed of more than one student and teaching is premised on the notion that while every learner may excel in certain aspects, they may be mediocre in other aspects, thus working in small groups helps plug the gaps (Mukeredzi 2009). Again, literature (King 2004; Cranton 2006) affirms that student teachers were drawn into deeper reflection as they dialogued about what they had experienced or learned. For example, some vocationally disinterested participants appraised the collaborative learning as gap filler that enhanced their understanding of some of the concepts that they had missed in the lectures.

Thus, through peer collaboration, the pre-service teachers engaged themselves in productive dialogues and multilogues, generating new meaning which according to Mezirow's Principle Seven of the Transformative Learning Theory, relates to the acquisition of knowledge and skills. In addition, the pre-service teachers learning from and with one another Steny (2017) aligned with Principles Two and Three of Mezirow's (1991) theory relating to self-examination and critical assessment of assumptions which challenged them to question their own knowing, beliefs and attitudes, and pushed them into reflection. They thereby assimilated new knowledge and experienced transformative learning. Besides assimilating new knowledge, group work enhanced higher-level thinking skills, interpersonal and personal communication skills, and self-confidence Johnson, Johnson, and Smith (1998); Johnson and Johnson (2004), all aspects which promoted transformative learning.

Fourth, transformative learning was also experienced by way of the lecture technique. Findings from both vocationally interested and vocationally disinterested pre-service teachers also pointed to the fact that despite its traditionalistic characteristic of being informational rather than transactional Kegan (2000); Drago-Severson (2010), the lecture strategy was apparently the most widely experienced teaching technique across the selected colleges which promoted transformative learning. Findings revealed that the lecture method was effective in explaining difficult concepts while promoting the acquisition of new knowledge and skills, which related to Principle/Phase Seven of Mezirow's (1991) Transformative Learning Theory. While the majority applauded this technique, a few participants highlighted limited experiences as they lacked the

courage to ask any questions or get clarity on issues that they did not understand. Broadly, the lecture method exposed the pre-service teachers to new knowledge and skills which they could critically assess and in the process construct new meaning when viewing the world Mezirow (2003), thus it enhanced transformative learning.

Fifth, the vocationally interested and vocationally disinterested pre-service teachers in the four colleges affirmed that learning using the ‘question and answer’ technique enhanced their transformative learning experiences. However, this contradicted the pre-service teachers who indicated in the discussion about the lecture method that they had a problem with this method as they lacked the courage to ask for clarity when they lacked understanding. Nevertheless, some pre-service teachers confirmed that by questioning, they were able to challenge their existing or established ideas and understandings or misconceptions.

Questioning enabled clarifying or rectifying misunderstandings and/or gaps in the student teachers’ knowledge by the lecturer. Concomitant with this finding, literature surveyed (Paul and Elder 2000) suggests that students' questions play an important role in the learning process as they are a potential resource for both teaching and learning. Further, related literature by (Tofade, Elsner and Haines 2013) indicates that effective questions asked in a psychologically safe learning environment support student learning by probing for understanding, encouraging creativity, stimulating critical thinking, enhancing confidence and rectifying misconceptions. Self-examination and critical thinking, as alluded to above, are critical in Mezirow’s Transformative Learning Theory. The question and answer approach also enables students to reflect on and re-think their responses, and in the event of wrong answers see where they went wrong, thereby experiencing transformative learning. As such, Dweck (2000) attests that the lecturers can offer differentiated instruction and support to enable student teachers’ optimal growth in competence, openness and motivation. Consequently, transformative learning was likely to have been experienced by these pre-service teachers, fulfilling Mezirow’s knowledge and skill acquisition stage. Additionally, Mezirow’s (1991) Transformative Learning Theory, which addresses self-confidence and self-efficacy, which the participants gained after acquiring the relevant knowledge and skills, may also have been fulfilled.

Sixth, with regards to the nature of transformative learning related to ICTs, findings suggested that both vocationally interested and vocationally disinterested pre-service teachers experienced

transformative learning through this avenue. While the other avenues that depicted the nature of transformative learning were more along the lines of teaching strategies, ICTs could be employed with any of the teaching strategies and thus offered an effective avenue through which the vocationally interested and vocationally disinterested pre-service teachers experienced transformative learning.

ICTs promoted active and interactive learning among the student teachers and as such fostered their transformative learning. It emerged that using computers was a creative and fascinating way of learning, for instance in the design and development of lesson plans in the Professional Studies modules. PowerPoint lecturer presentations made the lectures fascinating. Literature surveyed (Basri 2018; Guillen-Gamez et al. 2019) points to the fact that ICTs introduce new ways of teaching and learning in fascinating and communicative ways. Hence, the vocationally interested and disinterested pre-service teachers experienced transformative learning by acquiring new knowledge through use of ICTs. In addition, the findings also suggested that the pre-service teachers experienced learning through effective use of social media. Surveyed literature (Sangra and Gonzalez-Sanmamed 2016; OECD 2019) also indicates that ICTs promote communication during the learning process as students are kept thoroughly engaged through such technologies, thus experiencing transformative learning. Communication is one of the pillars of transformative learning (Habermas 1984). What the above discussion suggests is that the nature of transformative learning of both vocationally interested and vocationally disinterested pre-service teachers in the selected teachers' colleges was experienced through six learning techniques: research, demonstration, group work, questions and answers, lectures and ICTs. These facilitated the acquisition of new knowledge and skills which promoted a critical evaluation of their previous assumptions, leading to them reframing their meaning perspectives (Mezirow 2003).

#### ***8.4.2 Vocationally interested and vocationally disinterested pre-service teachers' understandings of their transformative learning***

With regard to how the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning, findings revealed that both categories of pre-service teachers understood their transformative learning as revolving around two major aspects:

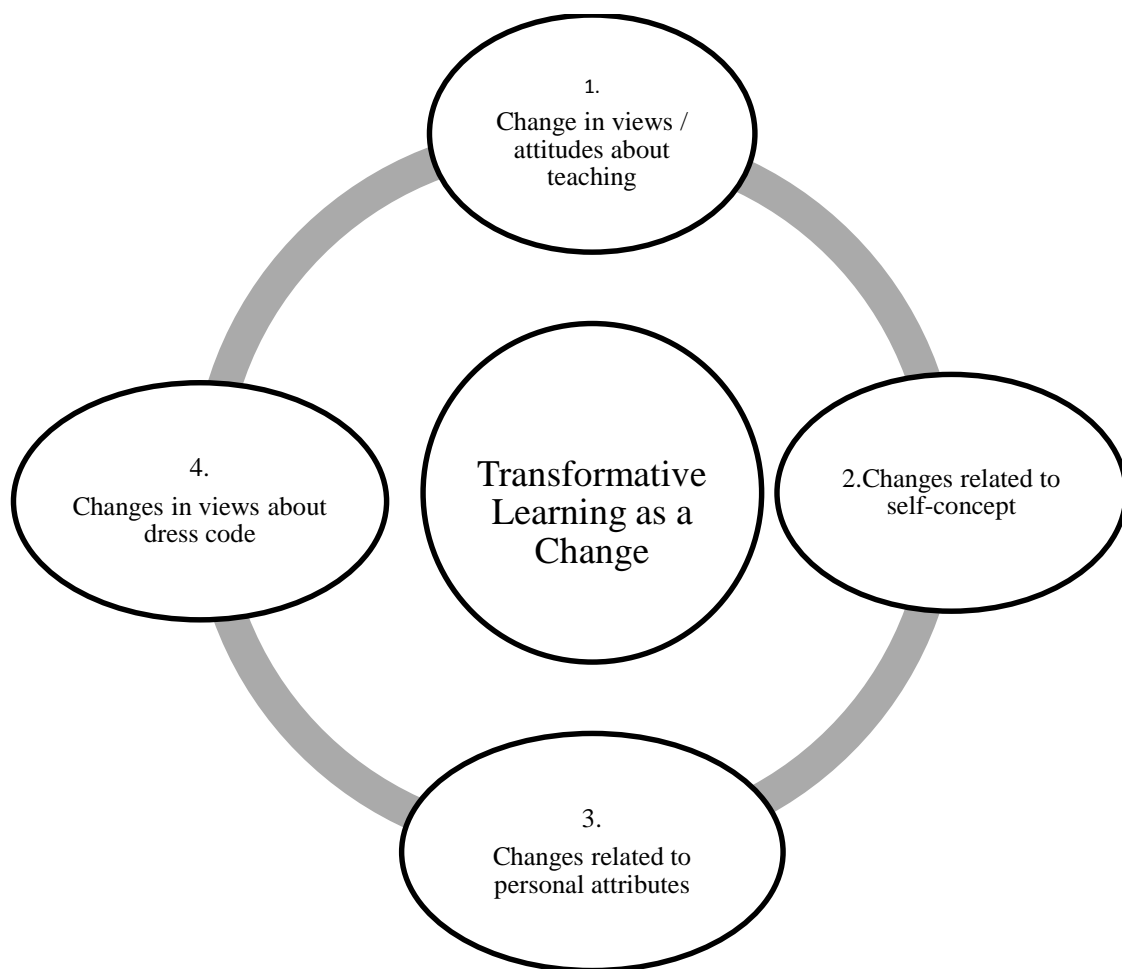
transformative learning as a change and transformative learning as the acquisition of knowledge and skills.

#### *8.4.2.1 Transformative learning as a change*

Transformative learning as a change was realised in four areas: a change in views/attitudes about teaching, a change related to self-concept, a change in personal attributes and a change in views about dress code.

**Figure 8.4: Transformative learning as change**

Source: Researcher 2019



#### *8.4.2.2 Transformative learning as a change in views and/or attitudes about teaching*

First, with regard to the pre-service teachers' understanding of their transformative learning in relation to a change in their views and attitudes about teaching, while the vocationally interested

pre-service teachers were passionate about teaching from the beginning, they apparently lacked a clear comprehension of what teaching entailed. On the other hand, all except two of the vocationally disinterested pre-service teachers who had no passion initially had completely changed their views and attitudes towards teaching. Teaching was now perceived as a noble profession. The pre-service teachers understood their transformative learning as a change that had to do with their self-awareness and the teaching profession. The two categories of pre-service teachers now understood teaching's joys, demands and obligations within and outside the classroom. Findings suggested that these vocationally interested and the majority of the disinterested pre-service teachers understood transformative learning as a paradigm shift; a change in the way they perceived and viewed teaching. They now understood and saw themselves as teachers with a social responsibility, and viewed teaching as a profession which could earn them respect, appreciation and acknowledgement in the community.

This was in line with literature surveyed (Illeris 2014) that defines transformative learning as learning which implies a change in the identity of the individual in terms of their belief systems and attitudes. Furthermore, the change in the perceptions and attitudes about teaching by the vocationally disinterested pre-service teachers in particular was a huge paradigm shift, given that these disinterested student teachers had reported embarrassment at being known to have joined teacher education at the beginning of the programme. They probably experienced transformative learning after the discovery of 'more and new' knowledge about teaching.

Further, findings indicated that the participants understood their transformative learning as changes in their perceptions of and attitudes towards teaching - the transformative learning experiences seemingly gave rise to the development of passion for teaching. And the passion for teaching seemingly drove these vocationally disinterested pre-service teachers to work hard. Related literature (Morgan, Isaac and Sansone 2001; Lee 2018; Dogan 2015; Serin 2017) highlights that enthusiasm and passion are catalysts for students' engagement in their learning, which has positive effects on their academic performance. The new knowledge and skills acquired (Phase/Principle Seven of Mezirow's Transformative Learning Theory) by the vocationally disinterested pre-service teachers gave rise to self-knowledge through the process of self-examination and self-reflection, and consequently led to transformative learning.



At the start of the teacher training programme these vocationally disinterested pre-service teachers expressed frustration and lacked the zeal to engage in college activities and generally to train as teachers; an attitude that had seemingly changed. What this pointed to was that while some student teachers could enter teacher education without being called to teaching and while being vocationally disinterested and non-passionate about teaching, their vocational interest could develop during the course of their training. According to Fried (2001), vocational interest is discoverable, teachable and reproducible; therefore, these vocationally disinterested student teachers could develop an interest and would refine that interest for teaching throughout the training programme. Surveyed literature (Yahaya 2009; Ambiel, Noronha and Nunes 2012; Ibrahim and Ibrahim 2014) indicates that training given to student teachers can make them develop very positive emotional feelings towards the teaching profession, can make them identify with the teaching profession, and can make them favourably disposed towards it, resulting in a paradigm shift. Given the effective role of emotions in enhancing transformative learning, this was likely to have been the case.

However contrarily, the findings also showed that two of the vocationally disinterested pre-service teachers had not yet experienced any transformative learning despite having spent a year on the training programme, although they professed to having acquired some professional attributes like respect. In other words, they apparently had not changed and become vocationally interested. The disinterested pre-service teachers, as stated in previous chapters, had joined teacher training not because of a 'calling' or passion for the profession, but rather as a last resort or stepping stone into other professions. Drawing on the Transformative Learning Theory Mezirow (2012), students are expected to revise their underlying assumptions, adopt a new paradigm, and apply this new paradigm Cranton (2002) in their learning in order to transform. As such, being 'forced' by a situation (teacher training) to consider, evaluate and revise underlying assumptions can be an emotionally charged experience.

Literature surveyed (Illeris 2003) indicates that resistance to perspective transformation is common, even among students who are motivated to learn. In the case of the two vocationally disinterested pre-service teachers, their transformative learning was most likely hindered as they still remained immersed in their previous life experiences, views and attitudes towards teaching (Roberts 2011; Castelli 2011). Thus, while some student teachers could experience a paradigm

shift from being vocationally disinterested to being vocationally interested during teacher training, this study discovered that some student teachers did not experience such personality changes to prompt shifts in their paradigms. They probably needed more time to experience transformative learning; the period of one year during which they were explored could have been inadequate for them to make a paradigm shift.

Looking at Mezirow's Transformative Learning Theory, and as O' Sullivan (2012) puts it, transformative learning may either take place in an epochal way, in which a sudden major reorientation occurs or is required, or in a gradual manner. Changing the habits of their minds could thus be progressive for these two student teachers. By the end of the three-year training period, these two students will probably have changed their attitudes towards teaching and started to identify with the teaching profession.

Literature surveyed (Desimone and Stuckey 2014) concur that teachers are likely to continue to reflect on and examine their roles, and this will change their personal belief systems over time. However, given that teachers' attitudes and qualities ultimately affect their students' learning and achievements and impact the quality of the education system, if untransformed, these two vocationally disinterested pre-service teachers will have a negative impact on their students' learning if and when they finally get into the classroom. This study also showed that while some vocationally disinterested pre-service teachers may not transform completely through training, they will have experienced some personality changes in the 'self'.

#### *8.4.2.3 Transformative learning as a change in self-concept*

Based on the findings, some vocationally interested and vocationally disinterested pre-service teachers also understood their transformative learning as a change in their self-concept. The pre-service teachers, particularly the vocationally disinterested ones, made a paradigm shift in their thinking and how they envisioned themselves in the teaching profession. Drawing on Mezirow's Transformative Learning Theory, these participants probably reflected on their self-beliefs and understandings about themselves in relation to the teaching profession in light of their new experiences, and this resulted in the change process. Self-examination and critical assessment of their previous assumptions was likely to have taken place.

#### *8.4.2.4 Transformative learning as a change in personal attributes*

Second, based on the findings, both the vocationally interested and disinterested pre-service teachers understood their transformative learning as a change involving their personal attributes. The pre-service teachers acquired new knowledge Mezirow's (1991) Principle 7) about professional ethics. It emerged from the findings that they had acquired personal attributes related to time management, commitment to work, respect, sharing and enthusiasm; qualities which they did not possess at the commencement of the training programme. Affirming these teacher qualities, Mukeredzi (2015) indicated that the attributes had to do with ethical and moral behaviour, honesty, empathy, accountability, commitment, enthusiasm, punctuality, confidence, conscientiousness, a desire for life-long learning and enquiry, relational dimensions, interdependence, agency and resourcefulness. The acquisition of knowledge about the characteristics of a good teacher would probably have influenced their understanding about transformative learning as changes related to teachers' personal attributes.

#### *8.4.2.5 Transformative learning as a change in views about dress code*

Third, the student teachers in the four selected colleges also understood their transformative learning as a change in their perceptions of and attitudes towards the professional dress code.

The transformative learning that the vocationally interested and vocationally disinterested pre-service teachers experienced gave rise to way they started to view the dress code expected of all civil servants, inclusive of teachers. For many of these pre-service teachers at the beginning of the programme, putting on a tie was a disorienting dilemma which caused annoyance. However, as time progressed, notwithstanding the influence of the professional requirements stipulated by the (Public Service Standard of Dress 2006), the dress code was no longer viewed with anger as had been the case at the beginning of the programme. Similarly, in the church-run institutions, daily religious and liturgical practices were no longer viewed negatively. These expectations were instead followed religiously. Hence these changes in the understanding and appreciation of the professional requirements regarding dress and religious practices were signs of transformative learning.

As alluded to in the previous chapter, the Public Service Commission prescribed the dress code for teachers and other civil servants to maintain the professional images of the MHTESD and the Ministry of Primary and Secondary Education (MPSE). Looking at Mezirow's Transformative Learning Theory, the vocationally disinterested pre-service teachers understood their transformative learning as initially challenging their existing knowledge and practices (casual dressing). Thus, by experiencing those challenges, they had no choice in that crisis-like situation within the colleges but to make personality changes - paradigm shifts (Illeris 2009). The implication here, according to the theory, was that when the individuals (pre-service teachers) were afforded opportunities to challenge their views and attitudes, self-examine and critically self-reflect, they experienced transformative changes. In this case, the pre-service teachers had to make choices about their dress code and religious adherence and decided to stick to them and follow the dictates of the situation (colleges and subsequently the dictates of the profession, in the case of the dress code).

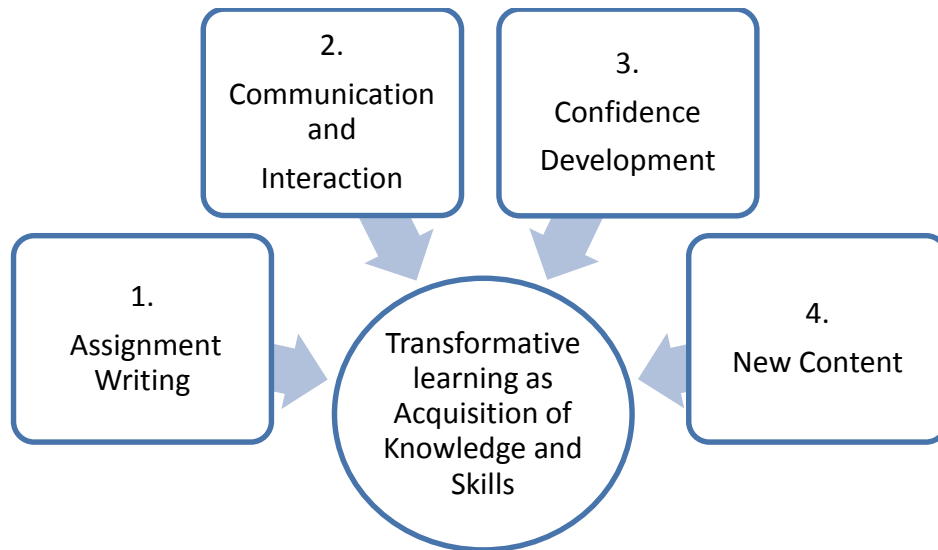
The above discussion indicated that both the vocationally interested and the vocationally disinterested student teachers understood their transformative learning as changes in their views/attitudes about teaching, changes related to self-concept, changes in their personal attributes and changes in their views related to the formal dress code. According to Hodges (2019), self-belief and understanding are bound to change in a transformative learning context. Transformative learning in this case changed the student teachers' very being; their beliefs and their core sense of self and of how they would live (Tisdell 2012). These changes led to the development of their passion for teaching.

#### ***8.4.3 Transformative learning as the acquisition of knowledge and skills***

The vocationally interested and vocationally disinterested pre-service teachers also understood their transformative learning as the acquisition of knowledge and skills. From Mezirow's Transformative Learning Theory, the acquisition of knowledge and skills discussed in this section relates to Phase/Principle Seven. To avoid repetition by making continuous reference to Mezirow's Principle Seven, that reference will be overlooked. Findings indicated that the pre-service teachers acquired knowledge and skills related to four facets: assessment, communication and interaction, confidence development and new content. These aspects are reflected in Figure 8.5 below.

**Figure 8.5: Transformative learning as the acquisition of knowledge and skills**

Source: Researcher (2019)



First, findings showed that all the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning as the acquisition of knowledge and skills related to assessment by assignment writing. Student teachers indicated that they recognised assignments as a tool that effectively promoted their learning through information searches, peer discussion and lecturer feedback on their written work. Thus, the assignment writing process was an avenue for knowledge and skill acquisition, which promoted the participants' transformative learning. Consulted literature (DeFazio *et al.* 2010; Gregory 2015) affirms assignment writing as encompassing creative inspiration, problem solving, reflection and revision. The pre-service teachers indicated that through a systematic and critical process of inquiry, they researched for information in the library and by surfing the Internet, thereby enriching themselves with information. Thus, the vocationally interested and vocationally disinterested pre-service teachers expanded their world views by acquiring knowledge and skills and experienced transformative learning. Transformative Learning Theory Mezirow (2009) indicates that transformative learning is effective when a learner is struck by a new way of

thinking, and the ‘a-ha’ experience changes their world view. Assignment writing and research in the four selected colleges complemented each other towards the pre-service teachers’ transformative learning.

Second, drawing on the findings, all the vocationally interested and disinterested participants also understood their transformative learning as the acquisition of knowledge and skills related to communication and interaction. Given that communication is one of the major competencies of an effective teacher, the pre-service teachers understood their transformative learning as embracing knowledge about communication. Again, Mezirow’s Transformative Learning Theory emphasises discourse as a mediating aspect in assessing beliefs, feelings and values (Cranton 1996). The student teachers were engaged in communicative activities which enhanced their critical thinking skills and at the same time exposed them to learning different aspects of communication. Again, teaching and learning takes place through the medium of communication, hence they viewed their transformative learning as the acquisition of knowledge and skills related to this vital aspect. Related literature (Zlatic *et al.* 2013; Zare and Othman 2013) highlights communication as central to the teaching profession.

While Mezirow’s Transformative Learning Theory glosses over communication, the other chief proponents, Freire (1970) and Habermas (1971), highlight the fundamental role of communication in transformative learning, as it leads to self-knowledge and liberation from all forms of oppression. In this study, communication influenced how the student teachers felt and acted through dialoguing with each other and comparing views, experiences and ideas. Literature surveyed (King and Anderson 2004) shows communication as a vital life skill which enhances transformative learning, without which there is no survival and growth. Concomitant to communication, the pre-service teachers also understood their transformative learning as gaining knowledge and skills on interaction. The philosophy that learning is primarily a social activity, dates back to (Lindeman 1926) and (Dewey 1963). Many of the vocationally disinterested participants reported that they were now able to interact freely and engage socially with their peers, confessing that they could not do so at the beginning of their teacher training. This implied that their knowledge base had expanded. Again, while transformative learning is understood as a process which occurs at a psychological level, it is also a mediated process - mediated socially through interaction (Taylor 1998).

Third, the vocationally interested and disinterested pre-service teachers in all four colleges also understood their transformative learning as confidence development. The three habits of the mind Mezirow (1991): epistemic (knowledge of how a person uses acquired or possessed knowledge); sociolinguistic (how people use language in a social setting); and psychological (how people perceive themselves) habits are crucial in the understanding of transformative learning. In this case, the pre-service teachers seemingly developed self-confidence after acquiring new knowledge and skills. Confidence is Phase/Principle Nine in Mezirow's (1991) theory, and confidence emerges following self-examination and the critical re-evaluation of assumptions Mezirow (2000). An example of the development of self-confidence was when vocationally disinterested participant S1 at College One testified during an FGD: *"... I am now able to stand in front of peers and talk boldly and fluently, a thing which I previously could not do"*. Surveyed literature (Mukeredzi and Nyachowe 2018) confirms that confident people are daring, open to learning and are self-expressive, and this was evident in these pre-service teachers. In the absence of a healthy level of confidence in learners, the instructor needs to ensure that the learning environment is such that all of them feel safe enough to be able to share, even if their answers are wrong (Mukeredzi 2015).

Fourth, the findings further indicated that both vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning to be related to knowledge and skill acquisition around new content. The pre-service teachers attested to acquiring knowledge and skills related to computers and new content in the subjects studied. From Mezirow's (1991) standpoint, new content and competences influence critical reflection, which is the basis for transformative learning. The subjects studied by the participants included: Heritage, Agriculture, National and Strategic Studies, Health and Life Skills, Computers and Information Communication Technology, Philosophy, Psychology and Sociology. It was in these subjects that the pre-service teachers professed to have acquired new knowledge and skills. Surveyed literature by (Meyer and Land 2003 and Gatley 2020) indicates that studying new subjects widens students' knowledge base and shifts their perspectives, leading to transformative learning.

From the above discussion, the vocationally interested and vocationally disinterested pre-service teachers understood their transformative learning as the acquisition of knowledge and skills

around: assessments, communication and interaction, confidence development and new content. Informed by Mezirow's Transformative Learning Theory, the new knowledge gained by these pre-service teachers provided them with new ways of thinking and viewing the world. The study also tried to establish the types of support offered by the colleges to enhance transformative learning. These forms of support are discussed below.

#### ***8.4.4 Forms of support offered by the college communities to enhance the pre-service teachers' transformative learning***

Drawing on the findings, a supportive environment emerged as the foundation of the pre-service teachers' transformative learning experiences. Both the vocationally interested and the vocationally disinterested pre-service teachers in the four selected colleges indicated that their transformative learning occurred in supportive environments. There were six types of support offered: resource support, spiritual support, peer support, lecturers' support, management support, and co-curricular support. Resource supports included the provision of laptops and computers, and infrastructural resources like libraries, lecture venues and residential halls.

**Figure 8.6: Forms of support offered by the college communities**

Source: Researcher (2019).





With regard to the provision of computers and laptops, the findings indicated that the colleges provided such support to foster the vocationally interested and vocationally disinterested pre-service teachers' transformative learning experiences. However, while government Colleges One and Four were adequately resourced with computers, the church-owned Colleges Two and Three had inadequate computer resources and support. Consequently, these two colleges encouraged student teachers to bring their own laptops. This encouragement to complement the available computer resources also indicated a form of support by the college that enhanced transformative learning. While the computers were used for research, more importantly, they were for the Information Communication Technology (ICT) courses. The value of computers was discussed above under classroom techniques and will not be repeated here.

In relation to libraries, lecture venues and the students' halls of residence, these provided the major forms of infrastructural support offered by the college communities to promote the students' transformative learning. However, while government Colleges One and Four offered apt infrastructural library resources (spacious, well-stocked and developed libraries), the private Colleges Two and Three offered limited support in this regard, with small lecture venues and inadequately stocked libraries. According to Mezirow's Transformative Learning Theory, these infrastructural resources enabled transformative learning, as sources and spaces for reflection and for knowledge and skill acquisition. Literature surveyed (Williams and Wavel 2001; Dyer 2001; Ndirangu and Udoto 2011; Laanemets and Rostovtseva 2015; Shernoff *et al.* 2016) indicates that libraries enhance students' self-esteem, confidence, independence and sense of responsibility with regard to their learning, as they can search for information independently. Hence, a sense of self-esteem motivated them to learn, confidence prompted reading and gaining new knowledge, and independence triggered responsibility for their learning, which gave rise to ownership of the learning.

Further, the lecture halls were supportive of the transformative learning of the pre-service teachers as it was in these spaces that learning activities occurred. As in the case of the libraries, government Colleges One and Four had spacious lecture venues contrary to the private Colleges Two and Three which had small, inadequate venues in which student teachers were always crowded during mass lectures. This may have interfered with these particular students' effective transformative learning experiences. Surveyed literature (Henderson 2012; Amsterdam 2013;

Garibay 2016; Belnaine 2017; Ngene *et al.* 2018) indicates that the physical characteristics of the learning environment can affect student engagement and performance. This was likely to be the case in the private institutions studied.

There were also halls of residence, another form of infrastructural support offered by the college communities. Residence halls provided settings in which the pre-service teachers' transformative learning was enhanced through sharing of academic and social issues, where these student teachers learned with and from one another. On-campus accommodation was viewed as an important supportive aspect as it fostered increased student involvement, which promoted collaborative engagement, reflection and critical thinking, self-evaluation and consequently, transformative learning. Mezirow's Transformative Learning Theory emphasises self-evaluation, reflection and critical thinking as effective precursors to transformative learning. Literature consulted suggests that collaborative academic engagement promotes intellectual growth, persistence to graduation and satisfaction with the college (Pascarella and Terenzini 1983; Whalen 2002; Gellin 2003; Turley and Wodtke 2010). However, as not all the pre-service teachers were resident on campus due to financial constraints and multiple identities and roles related to family issues. This tended to interfere with their transformative learning as collaborative engagements could not extend past learning and lecture times.

The findings also revealed that the vocationally interested and vocationally disinterested pre-service teachers placed great value on their lecturers as a critical college community support mechanism which enhanced their transformative learning. The pre-service teachers appreciated the teaching and guidance offered by the lecturers, and the feedback arising from the lecturer's efforts in the assessment of their learning. From these supporting efforts they acquired new skills and knowledge, which shaped their mind sets. Literature surveyed (Donlan, Loughlin and Byrne 2019) indicates that lecturers' support takes the form of course content teaching and assessment strategies. On top of that, lecturers in this study supported the participants by showing empathy and instilling confidence in them to enhance their transformative learning.

Further, regarding further forms of support, the findings suggested peer support as an important aspect in the college communities that all the vocationally interested and vocationally disinterested pre-service teachers in the colleges studied enjoyed. Through this form of support participants engaged in cooperative work, sharing notes and clarifying information to each other

to understand and see new and divergent points of view, which was vital for transformative learning. From the findings, with this kind of support the pre-service teachers found learning more interesting. From literature (Nsiah 2014; William, McKnight and Phillip 2017) peer-based learning provides opportunities for collaboration and this forms a basis for transformative learning through comparisons, self-checking and reflection, which is consistent with Mezirow's Transformative Learning Theory. Again, peer support promoted critical thinking, intellectual growth and the promotion of academic integration through discussion, negotiation and re-negotiation. According to Mezirow's Transformative Learning Theory, reflection and critical thinking constitute some of the central components of transformative learning Mezirow (2000), without which transformation may not occur.

With regard to support by management, participants revealed that college management played a pivotal role in supporting their transformative learning. College management was accountable and in control of all processes; they directed all the support that the student teachers enjoyed from all the college sectors and areas. Literature surveyed (Loughlin and Bryne 2019) indicates that management supports learning by allowing and facilitating student engagement in activities that promote transformative learning as a social and transactional process. In addition, a cordial relationship between the management and student teachers often increases lecture attendance, study time, learning satisfaction, and intellectual engagement, leading to higher academic achievement. Drawing on Mezirow's Transformative Learning Theory, creating a favourable and conducive learning climate vital for students' success promotes transformative learning. However, findings from this study further revealed that both the vocationally interested and disinterested pre-service teachers had very little direct contact with the management at their colleges. Management's support was by 'remote control' but still enhanced transformative learning, given their influence on all decisions, aspects and processes concerning the academic and social lives of the pre-service teachers. This was a common picture across all four colleges explored.

With regard to the spiritual support offered by some of the colleges, the findings revealed that almost half (18) of the vocationally interested and vocationally disinterested pre-service teachers at the private church-run Colleges Two and Three enjoyed transformative learning support through spiritual exposure. Dirkx (2012) and Papastmatis and Panitsides (2014) indicate that

spirituality embraces the whole person: the mind, body and spirit. With this in mind, religion shaped and moulded the pre-service teachers into holistic, well behaved and respectful professionals. Religious and spiritual growth was necessary for transformative learning as this prompted critical reflection. On the same note, surveyed literature (Austin 2011; Gatley 2020) attests that religion is impactful in students' lives as it promotes tolerance, academic performance and overall wellbeing, aspects crucial for transformative learning. According to Mezirow's (2009) Transformative Learning Theory, when students experience religious and spiritual growth, the self-questioning, reflexivity and self-assessment that they engage in gives rise to transformative learning. Hence immersion of the pre-service teachers in predominantly religious learning environments implied transformations in positive ways (White and Nitklin 2014; Gatley 2020).

However, it was only 18 pre-service teachers at Colleges Two and Three that indicated that spiritual support had enhanced their transformative learning. Two of the pre-service teachers did not see the essence of religion in their transformative learning, notwithstanding that these colleges were reported to have provided an opportune environment and time for all the participants to question their spiritual beliefs and to learn and grow spiritually. In contrast, the two government colleges (Colleges 1 and 4) did not have any structured religious activities, albeit that the student teachers had the option to attend their denominational services outside campus. This could imply that the college environment did not support their transformative learning from a spiritual perspective.

Finally, extra-curricular activities offered pre-service teachers transformative learning experiences and were highlighted as a form of support offered by management. Student teachers' involvement in extra-curricular activities contributed to their transformative learning by keeping alive their motivation to learn, resulting in improved academic achievements (O' Sullivan 2006). Literature surveyed (Curran and Standage 2017) indicates that extra-curricular activities enhanced the pre-service teachers' transformative learning as they formed new friendships and experienced emotional augmentation and social cohesion when partaking in joint exercises and relaxation, all vital for intellectual enhancement. These social literacies Dirkx (1998) which augmented the knowledge and skills acquired in the classroom promoted self-confidence and were consistent with Mezirow's (1991) Transformative Learning Theory. The implication was

that pre-service teachers' transformative learning was influenced by supportive factors both within and outside of the classroom environment.

The discussion has illustrated that the college communities offered a supportive environment complemented by material and infrastructural resources. Support was provided by lecturers, peers and management, and included spiritual support and extra-curricular activities.

### **8.5 Lessons and contributions of the study**

The purpose of this study was to explore the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in teacher training colleges in Zimbabwe, and the findings of the study showed alignment with Mezirow's theoretical framework (2012). This study has made six contributions to the body of knowledge on transformative learning: the effectiveness of Mezirow's Transformative Learning Theory in exploring pre-service teachers' transformative learning; the significance of passion in transformative learning; disorienting dilemmas as pre-cursors of transformative learning; the psychological-social dichotomy of transformative learning; the process of transformative learning; and the value of community support in enhancing transformative learning.

First, Mezirow's Transformative Learning Theory has generally been used to understand various aspects of learning in adult education and also in studying university students (Taylor and Cranton 2013; Kang and Cho 2017). Employing this theory to understand pre-service teachers' transformative learning in the selected teachers' colleges is thus a major contribution by this study, as this theory worked effectively in exploring this phenomenon in these participants.

While the majority of the pre-service teachers in this study reported having experienced transformative learning, two pre-service teachers apparently did not. This lack of transformation confirmed Mezirow's (2012) claim that some learners are socialised in sub-cultures that place little or no value on critical reflection and as a result, any major challenge to their established perspective is painful since this disrupts their deeply held personal values and threatens their very sense of self. These two vocationally disinterested pre-service teachers were seemingly pulled back towards pre-transformation life instead of being urged forward into transformative life. The two vocationally disinterested pre-service teachers did not shift their paradigms at all;

they most likely still lacked the motivation to be teachers, just as they had at the commencement of training and did not see any reason to transform, as pointed out earlier in the discussion.

Based on the findings, all but two pre-service teachers (38) experienced transformative learning, supporting Illeris's (2014) assertion that learning should bring about a fundamental shift in the way the learners (student teachers) view their learning, in this case the teaching profession. Despite the pre-service teachers having spent a year on the training programme, the two vocationally disinterested student teachers maintained their status quo. This resonates with existing literature by Mezirow (2012) that transformative learning is a demanding process which occurs to some in an epochal manner, to others gradually, while to some never at all.

Second, passion emerged as a significant factor in transformative learning which inspired and motivated the vocationally interested pre-service teachers throughout the programme. Literature surveyed (Ryan and Deci 2000; Van Iddekinge, Putka and Campbell 2011; Serin 2017; Schelfhout *et al.* 2019) indicates that passionate teachers are committed to creating an effective learning environment and increasing the learning potential of their students. The vocationally interested trainee teachers seemingly displayed creativity and profound thinking skills from the start of and during the teacher education programme, and were likely to remain passionate about teaching throughout their teaching career. Literature sourced (Morgan, Isaac and Sansone 2001; Cherkowski 2012) stresses that passionate teachers portray excitement, energy and enthusiasm about their work and these qualities flow onto their students. In other words, the passion that a teacher brings to the teaching situation stimulates student motivation, engagement, and passion for learning. Thus, these passionate or vocationally interested pre-service teachers are likely to become efficient and enthusiastic teachers after training. While 18 of the 20 vocationally disinterested pre-service teachers studied reported having developed a passion for teaching during their training, whether or not such passion will definitely be extended during the remaining year of teacher training and then maintained throughout their teaching career is something that may need further investigation.

Third, while this study found that passion was central to vocationally interested pre-service teachers' transformative learning, disorienting dilemmas also played a critical role in the vocationally disinterested pre-service teachers' transformative learning. The negative feelings of fear, shame, being overwhelmed, confusion, frustration and shock experienced by the

vocationally disinterested pre-service teachers at the start of the programme were not a bad occurrence after all, but rather a vital catalyst for their transformative learning and change. The dilemmas lead the pre-service teachers to reflect on their previously held views and to reframe and learn from their past experiences. These vocationally disinterested pre-service teachers realised that their previously held perceptions were no longer adequate.

Existing literature (Taylor 1998; Mezirow 2000; Cranton 2000) indicates that a triggering event leads to an awareness of inconsistency amongst one's thoughts, understandings, feelings and actions. Thus, it was probably the connection to previous experiences and knowledge that gave continuity and allowed the pre-service teachers to see the significance of their transformative learning experiences. This confirms literature consulted which suggests that significant transformative learning among young adults is often catalysed by disorienting dilemmas (Taylor and Elias 2012). What this study has shown is that for transformative learning to occur to dispassionate pre-service teachers in teacher education, periods of experiencing dilemmas are vital. It can be concluded that the disorienting dilemmas experienced by the dispassionate pre-service teachers played a pivotal role in their transformative learning, hence the reason why only two vocationally disinterested pre-service teachers had not yet experienced transformation.

Fourth, the study found that albeit that transformative learning is an internal, individual process and experience Cranton and King (2003) that requires the individual to focus on their sense of self and their values, there is a need for collaboration and dialogue in order to understand their and others' perspectives (Brookfield 2012; Hirst 2012 and Echterhoff; Merriam and Kim 2012). In other words, while transformation resides purely at a psychological level in the mind, in terms of intrinsic motivation to transform, its occurrence is generally highly mediated by interaction and debate. What my data has shown is that while motivation to transform came from the individuals, much of the transformative learning took place through, with and because of others. Hence, the most significant factor enhancing the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers was dialogue.

Fifth, while the study found that both the vocationally interested and vocationally disinterested pre-service teachers experienced some transformative learning, what this study also found is that they neither experienced all of Mezirow's stages of transformative learning, nor experienced similar stages as a group. Again, neither of the two categories of pre-service teachers

(vocationally interested and disinterested) experienced transformative learning stages in a linear form. From this study I conclude that while transformative learning may take place, it does not necessarily follow Mezirow's stages of transformation in a linear form, and where more people are involved, they do not experience all of the same stages of the Transformative Learning Theory. However, research Langan, Sheese and Davidson (2009) attests that not all pre-service teachers will question their prior experiences or interpretations of the world around them, or their personal values and beliefs. In this study, this could be the reason why the two pre-service teachers did not appear to have experienced transformative learning.

The vocationally disinterested pre-service teachers in this study experienced seven phases of Mezirow's Transformative Learning Theory: phase one - disorienting dilemmas; phase two -self-examination; phase three - critical evaluation of assumptions; phase six - planning a course of action; phase seven - acquisition of knowledge and skills; phase nine - confidence development; and phase ten - integration. On the other hand, the vocationally interested pre-service teachers experienced just four stages: phase two - self-examination; phase three -critical evaluation; phase seven - acquisition of knowledge and skills; and phase ten -integration. The transformative learning experiences and phases were more pronounced in the vocationally disinterested category of pre-service teachers, who reported a clearer paradigm shift than those in the vocationally interested category. This could imply that it would take the vocationally disinterested pre-service teachers longer, and would require more effort for them to realise a paradigm shift and become passionate about teaching. What this study also concluded is that during teacher training, the vocationally interested pre-service teachers could experience fewer stages of Mezirow's Transformative Learning Theory than their vocationally disinterested counterparts who went through more stages to shift their paradigms. Existing literature (Taylor 2010; Mezirow 2012) indicates that transformative learning is often a struggle where individuals have to undergo critical assessments of experiences. Whereas some vocationally interested pre-service teachers reflected and became better 'versions' of themselves Cranton and Kasl (2012); White and Nitklin (2014), reflection was not an easy process for some vocationally disinterested participants who did not experience transformative learning effectively because they seemingly remained stuck to their long-held conceptions or beliefs about their old selves (their disinterest in teaching), in which they felt secure.



Sixth, the study found that government colleges offered good facilities in terms of infrastructure, library resources, halls of residence and sporting facilities, and these supports better promoted transformative learning. At the mission colleges, however, the transformative learning of the vocationally interested and vocationally disinterested pre-service teachers was met with challenges in terms of resource provisioning such as inadequate computer resources, inadequate library resources and inadequate teaching and learning spaces. It would appear that private institutions which relied on funding from students' fees and external donations, struggled to provide adequate student supports in terms of infrastructure and other material resources. Thus, what this study discovered was that where infrastructural resource provision was not entirely the responsibility of the government, related shortages were likely to occur, given the mismatch between student enrolment and the available facilities.

## **8.6 Implications based on the study**

### **Implications of Mezirow's Transformative learning theory**

Teacher education relies on critical thinking, self-reflection, discourse, and collaboration which are critical elements of Mezirow's Transformative Learning Theory. These are developed out of situations of doubt, hesitation, perplexity and mental difficulty that propel the student teachers to inquire about ways to resolve their doubts. Higher-order thinking skills (critical reflection, imaginative, creative, innovative and inventive) are activated when student teachers encounter confusing and challenging learning situations. Hence, effects of disorienting dilemmas can devastate learners and since this is risky, it is very important for adult educators to know their learners' characteristics (Taylor 1998). The adult educators should be compassionate and empathetic and should embrace diversity considering that there are differences in age, experiences, gender, sexual orientation, nationality, race, ethnicity, culture, language, socio-economic status, physical and mental abilities. Each learner should have an open-mind to learn new topics and opinions, therefore, be able to reflect on assumptions in contrast with others. Therefore, the learner must critically reflect on his or her experience, talk with others about his or her world view in order to gain the best judgment, and act on the new perspective (Merriam, Caffarella and Baumgartner 2007). The understanding of student teachers' past perspective and the ability to look at new structures and perspectives are key to the

transformative learning theory. The transformative Learning Theory provides learners with critical ways to make meaning of their lives consciously.

The implications based on the study which are drawn from three important contextual points: methodical, national and institutional are discussed next.

### **8.6.1 Methodology**

Firstly, Mezirow's Transformative Learning Theory proved effective in this study when analysing, understanding, and describing the transformative learning experiences of the pre-service teachers in the teachers' colleges. The transitions from high school to college or a change of location to a new environment (college environment) were major sources of disorienting dilemmas. However, disorienting dilemmas which were sparked by a variety of issues inclusive of orientation programmes were an effective trigger for transformative learning by the vocationally disinterested pre-service teachers. This study found that appropriate supportive practices and cultures make a difference to how people fit into new environments and that these are influenced directly at the institutional level by senior management. If dispassionate pre-service teachers are to be supported to commence their transformative learning journeys without too much stress and delay, support should be built into processes and activities to purposefully cushion their transformative paths, more so given their diverse motivations for enrolling in teacher training.

Literature surveyed (Myers 2003; Kuh *et al.* 2006; Ciobanua 2013; Choppo 2016) indicates that orientation programmes are meant to prepare all new students for smooth entry into their transformative learning routes - their academic and social journeys - by equipping them with the necessary information for success in higher education and for assisting them to cope with the transition from a high school to a tertiary education environment. The colleges should create a culture of support for student teachers by foregrounding student teachers' learning, investing money in support services, asserting the importance of diversity and setting them on the appropriate course for higher education. This also implies staff-development programmes for lecturers to psychologically prepare and expose them to effective ways of welcoming, orienting and enhancing the smooth entry of both the vocationally interested and vocationally disinterested pre-service teachers into the teacher training colleges.

### **8.6.2 National**

Secondly, the study found that ICTs were critical for transformative learning through research in assignment writing and other assessments. While the colleges provided resource supports across the board regarding computer and ICT facilities, essentially there were big variations in the nature and extent of these resource supports within the different college contexts. Provision of resources in which teacher development occurs either constrains or enables transformative learning experiences to occur. Adequate computers and other ICTs need to be provisioned in all teachers' training colleges to meet the demands of the 21<sup>st</sup> century Sangra and Gonzalez-Sanmamed (2016). There is substantial evidence that technology can be an effective tool in supporting learning and teaching. Literature surveyed (Olakulehin 2007) emphasises that the pedagogic application of ICT involves effective learning with the aid of computers and other information technologies as learning aids, which play complementary roles in the classroom. Concomitant to this, the study found severe under-resourcing in the private colleges, apparently due to limited financing which is generally from student teachers' fees. Expansion of the libraries and lecture halls in the two private colleges studied could enhance the student teachers' transformative learning. Surveyed literature (Rashid 2010) suggests close liaison with higher education in the engagement of public private partners (PPP) and other forms of fund-raising activities to enhance finance provisioning to such institutions. This in turn may improve resources such as computers in private institutions. Consequently, student transformative learning and achievement may be enhanced.

### **8.6.3 Institutional**

Thirdly, this study found that the most popular in-class pedagogical approaches through which transformative learning was experienced by both vocationally interested and disinterested participants on the course were: research, demonstration, collaboration, lectures and question and answer sessions. In this light, students' engagement in the learning activities within these strategies promoted self-reflection, critical thinking, innovation, acquisition of knowledge and skills, competence and confidence in their work, propelling their transformative learning. As alluded to earlier on, staff development programmes may be supported through seminars and workshops which promote more use of interactive, participatory and collaborative strategies

(Ciobanu 2018). All staff in colleges need to be encouraged and developed to embrace more interactive, student-centred strategies which locate the student centrally to their learning to enhance their transformative learning.

Furthermore, this study found that interaction was a critical aspect in transformative learning. Interaction facilitated peer learning where the vocationally interested and vocationally disinterested pre-service teachers learnt effectively through assimilation and activation of their existing knowledge prior to the accommodation of new information. The pre-service teachers would then reflect, refine, and build new connections through interactions with peers. Literature consulted (Cranton 2002; Merriam 2014) indicates that interaction triggers the acquisition of new knowledge and skills when student teachers try out what they know by verbalising and sharing ideas based on their individual backgrounds and academic experiences. If transformative learning, particularly of the vocationally disinterested pre-service teachers, is to be supported and promoted, college supports should have built in structures and activities to continuously and purposefully bring such student teachers together and expand the opportunities for transformative learning experiences to occur during the interaction. Typically, heads and instructional leaders at various institutional levels will need to re-structure and re-arrange schedules to enable time for student teacher interaction and collaboration.

#### ***8.6.4 Implications for research***

This study investigated a small sample of pre-service teachers in only four out of the seventeen teachers' training colleges in Zimbabwe. First year pre-service teachers were explored at the beginning of their programme and at the end of their first year of study, using focus group discussions, individual face-to-face interviews and continuum drawings and discussions. As such the results may not clearly typify what is happening in the teachers' colleges countrywide regarding the transformative learning experiences of pre-service teachers. The findings may only be generalised after more comprehensive research involving more colleges, a larger sample, and probably after using longitudinal approaches which would allow tracing the development of the transformational journeys of the pre-service teachers from the beginning to the end of their teacher training. The study therefore recommends further and more comprehensive studies on the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in teachers' training colleges in Zimbabwe.

As I wind up my research journey, the purpose of which was to explore the transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in selected teacher training colleges of Zimbabwe, I conclude that the vocationally interested pre-service teachers transformed without much effort in comparison to their vocationally disinterested counterparts who realised transformative learning in twists and turns. During the teacher preparation journey, the vocationally disinterested pre-service teachers passed through seven of Mezirow's Transformative Learning Theory stages, while their counterparts only passed through four phases. While a few vocationally disinterested student teachers may not have experienced transformative learning, many of them had. This was summed up by this statement from vocationally disinterested participant S9 at College One during a CD discussion: *"An experience transforms a person. I am now transformed, like Saul on the road to Damascus. My attitude towards the teaching profession has changed because I excelled in different learning activities"*. These words from this participant affirmed the transformative nature of the pre-service teacher's learning experiences and how they had created a positive attitude in the students.

It came out clear in this study that personal experiences of the student teachers' transformative learning included other people through interactive engagement either socially, collaboratively or cooperatively. The research heightened understanding and insight into how the vocationally interested and disinterested pre-service teachers experienced their transformative learning.

## REFERENCES

- Abdi, I., Gagnon, L., Wise, S. and Passmore, G. 2017. Design and Validation of a Survey Questionnaire for the Assessment of Physician Transfusion Medicine Knowledge. *American Society for Clinical Laboratory Science*. 30. 28-33. 10.29074/ascls.30.1.28.
- Abdulai, R. T. and Owusu-Ansah, A. 2014. 'Essential Ingredients of a Good Research Proposal for Undergraduate and Postgraduate Students in the Social Sciences', *SAGE Open*. doi: [10.1177/2158244014548178](https://doi.org/10.1177/2158244014548178)
- Ableser, J., and Moore, C.L. 2018. The role of the teaching and learning center in promoting transformative learning at a metropolitan university. *Metropolitan Universities* 29 (3) Available: <https://doi.org/10.18060/21456> ( Accessed 17 March 2019).
- ACE Learning Guide. 2014. *Education context, policy and professionalism*. School of Education and Development, University of KwaZulu-Natal, 2014.
- Addleman, R.A., Brazo, C. J. and Cevallos, T. 2011. Transformative learning through cultural immersion. *Northwest Journal of Teacher Education*: 9(1), Article 5. Available: <https://doi.org/10.15760/nwjte.2011.9.1.5> (Accessed: 23 February 2017).
- Adler, P. A. and Adler, P. 2002. The reluctant respondent. In Gubrium, J. & Holstein, J. A. (Eds.), *Handbook of interview research: Context and method* (pp. 515–536). Thousand Oaks: Sage.
- Agbakwuru, C. 2009. *School adjustment*. Owerri: Joe Mankpa Publishers.
- Akarohwe, K. 2018. Effects and remedies to cultural shock on the adolescent students. *Sociology International Journal*: 2(4). Available: <https://medcraveonline.com/> DOI: 10.15406/sij.2018.02.00063 (Accessed 15 March 2019).
- Akinade, E.A. 2005. *Dictionary of guidance and counseling*. Ibadan: Olu-akin Publishers
- Akosah-Twumasi, P. Emeto T.I., Lindsay D., Tsey K. and Malau-Aduli, B.S. 2018. A systematic review of factors that influence youths' career choices—the role of culture. *Front. Educ.* 3(58). Available: <https://doi.org/10.3389/feduc.2018.00058> (Accessed: 5 October 2019).
- Alavi, A., Zargham-Boroujeni, A., Yousefy, A. and Bahrami, M. 2017. Altruism, The Values Dimension of Caring Self-Efficacy Concept in Iranian Pediatric Nurses. *Journal of Education and Health Promotion*, 6

- Alkhawaldeh, M., Hyassat, M., Al-Zboon, E. and Ahmad, J. 2017. The role of computer technology in supporting children's learning in Jordanian early years education. *Journal of Research in Childhood Education*. 31(3). Available: <https://doi.org/10.1080/02568543.2017.1319444> ( Accessed: 23 May 2018).
- Allen, L. 2015. Losing face? Photo-anonymisation and visual research integrity. *Visual Studies*, 30(3), 295–308. Available: <https://doi.org/10.1080/1472586X.2015.1016741> (Accessed 7June 2017).
- Alshahrani, S., Ahmed, E. and Ward, R. 2017. The influence of online resources on student–lecturer relationship in higher education: a comparison study. *Journal of Computers in Education*. 4, pages87–106. Available: <https://doi.org/4.10.1007/s40692-017-0083-8>. (Accessed: 6 February 2019)
- Alsup, J. 2005. *Teacher identity discourses. Negotiating personal and professional spaces*. New York: Lawrence Erlbaum Associates Inc.
- Altan, M. Z. 2018. Intercultural sensitivity. A study of pre-service English language teachers. *Journal of Intercultural Communication*, (46):1-17 Available:
- Altun, M. Z. 2017. The role of passion in effective teaching and learning. *International Journal of Social Sciences & Educational Studies*, 3(3), 155-158.
- Álvarez-Álvarez, C. 2016. Can teachers bridge the theory-practice gap? An ethnographic study of a teacher. *US-China Education Review B*. Available: <https://doi.org/5.10.17265/2161-6248/2015.04B.002> (Accessed: 9September 2019).
- Ambiel, R.A.M., Noronha, A.P.P., and Nunes, M.F.O. 2012. Interesses profissionais e personalidade: um aporte para a integração dos construtos. *Avaliação Psicológica*, 11(2), 191-201.
- Ambrose, S., Bridges, M., DiPietro, M., Lovett, M. and Norman, M. 2010. *How learning works: seven research-based principles for smart teaching*. San Francisco: Jossey-Bass.
- Ames, H.M., Glenton, C. and Lewin, S. 2017. *Parents' and informal caregivers' views and experiences of communication about routine childhood vaccination: a synthesis of qualitative evidence*. Cochrane Libr.

Amsterdam, C. 2013. School infrastructure in South Africa: Views and experiences of educators and learners. *Canada International Conference on Education*, 1–5.

Anabo, I., Elexpuru A. I. and Villardón, L. 2019. Revisiting the Belmont report's ethical principles in internet-mediated research: perspectives from disciplinary associations in the social sciences. *Ethics and Information Technology*. 21, 137-149. Available: <https://doi.org/10.1007/s10676-018-9495-z> (Accessed: 27 March 2019).

Anderson, C.A., Leahy, M.J., Delvalle, R., Sherman, S. and Tansey, T. 2014. *Methodological application of multiple case study design using modified consensual qualitative research (cqr) analysis to identify best practices and organizational factors in the public rehabilitation program*. Available: <https://doi.org/10.3233/JVR-140709> (Accessed: 9 May 2019).

Arnold, W.W. 2018. Strengthening college support services to improve student transitioning to careers. *Journal of College Teaching & Learning (TLC)*, 15(1), 5-26. Available: <https://doi.org/10.19030/tlc.v15i1.10198> (Accessed: 15 June 2019).

Asiamah, N., Mensah, H.K., and Oteng-Abayie, E. 2017. General, target and accessible population: demystifying the concepts for effective sampling. *The Qualitative Report*, 22(6), 1607-1621. Available: <https://nsuworks.nova.edu/tqr/vol22/iss6/9> (Accessed: 15 April 2019).

Asif, F. 2013. Philosophizing the concepts "teacher training" and "teacher education. *Semantic Scholar*. Available: <https://www.semanticscholar.org/paper/PHILOSOPHIZING-THE-CONCEPTS-%22TEACHER-TRAINING%22-AND-Asif/27b1ef49df5840d09a02e42b27861d5128c0ab5b> (Accessed: 19 November 2019).

Ashwin, P. 2019. Higher education is about transformation. *University World News-The Global Window on Higher Education*. 13 April.

Aspers, P. and Corte, U. 2019. What is qualitative in qualitative research. *Qualitative Sociology*. 42, 139–160. Available: <https://doi.org/10.1007/s11133-019-9413> (Accessed: 20 April 2019).

Assouline, M. and Meir, E.I. 1987. Meta-analysis of the relationship between congruence and well being measures *Journal of Vocational Behaviour*, 31, 319-332.



- Ataro, G. 2020. Methods, methodological challenges and lesson learned from phenomenological study about OSCE Experience: Overview of paradigm-driven qualitative approach in medical education. *Annals of Medicine and Surgery* 49, 19-23. Available: <https://doi.org/10.1016/j.amsu.2019.11.013> (Accessed:23 April 2018).
- Astin, A. W. 2016. ““Spirituality” and “Religiousness” among American College Students’, *About Campus*, 20(6), pp. 16–22. doi: 10.1002/abc.21222.
- Avis, J. 2009. Transformation or transformism: Engestrom's version of activity theory? *Educational Review*, 61(2), 151-165. Available: <https://doi.org/10.1080/00131910902844754> (Accessed 28 March 2018).
- Ball, G. D. S. 1999. Building a sustainable future through transformation. *Futures*, 31, 251-270.
- Balyer, A. and Özcan,K. 2014. Choosing Teaching Profession as a Career: Students’ Reasons. *International Education Studies*.7.10.5539/ies.7 (5)104.
- Banda, E. 2014. Transformative learning and student empowerment: Zimbabwean graduate students’ immersion into the United States. Unpublished doctoral dissertation. Miami University, Oxford, OH.
- Bandura, A. 1986. *Social foundations of thoughts and action: a social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall
- Banerjee, A. and Chaudhury, S. 2010. Statistics without tears: Populations and samples. *Industrial psychiatry journal*. 19. 60-5. 10.4103/0972-6748.77642.
- Banks, J. A. 2001. Multicultural education: Characteristics and goals. In Banks, J. A. & C. McGee Banks (Eds.), *Multicultural education: Issues & perspectives* (pp. 15-30). New York, NY: John Wiley & Sons Inc
- Barber, M., Mourshed, M and Company, M. 2007. How the World's Best-Performing School Systems Come Out on Top. [http://lst-iiiep.iiiep-unesco.org/cgi-bin/wwwi32.exe/\[in=epidoc1.in\]/?t2000=025763/\(100\)](http://lst-iiiep.iiiep-unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in]/?t2000=025763/(100)). (Accessed 20 June 2020).
- Barrett, P. S., Davies, F., Zhang, Y., Barrett, L. 2015. The impact of classroom design on pupils’ learning: Final results of a holistic, multi-level analysis. *Building and Environment*, 89, 118-133. doi:10.1016/j.buildenv.2015.02.013
- Barth, M., Godemann, J., Rieckmann, M. and Stoltenberg, U. 2007. Developing Key Competencies for Sustainable Development in Higher Education. *International Journal of Sustainability in Higher Education*. 8. 416-430. 10.1108/14676370710823582.

Basri, W., Alandejani, J. and Almadani, F. 2018. ICT Adoption impact on students' academic performance: evidence from Saudi universities. *Education Research International*. 1, 1-9.

Available: <https://doi.org/10.1155/2018/1240197> (Accessed 12 June 2018)

Bastick, T. 2000. Why Teacher Trainees Choose the Teaching Profession: Comparing Trainees in Metropolitan and Developing Countries. *International Review of Education*. 46. 343-349. 10.1023/A:1004090415953.

Baumfield, V. and Butterworth, M., 2007. Creating and translating knowledge about teaching and learning in collaborative school–university research partnerships: an analysis of what is exchanged across the partnerships, by whom and how. *Teachers and Teaching: Theory and practice*, 13(4), 411-427.

Baumgartner, L.M. 2012. Mezirow's theory of transformative learning from 1975 to present. In: E.W. Taylor & P. Cranton (Eds.). *The handbook of transformative learning: Theory, research, and practice* (99-115). San Francisco, CA: Jossey-Bass

Belnaine, M. 2017. Students' conception of learning environment and their approach to learning and its implication on quality education. *Educational Research and Reviews*. Available: <https://doi.org/12.695-703.10.5897/ERR2017.3258> (Accessed 5 May 2017).

Bella, H.L., Gibson, H.T., Tarrant, M.A., Perry L.G. and Stonerd, L. 2014. *Transformational learning through study abroad: US students' reflections on learning about sustainability in the South Pacific*. London: Routledge.

Beltman, S., Glass, C., Dinham, J., Chalk, B. and Nguyen, B. 2015. Drawing identity: beginning pre-service teachers' professional identities. *Issues in Educational Research*, 25(3).

Bennett, D. 2013. The use of learner-generated drawings in the development of music students' teacher identities. *International Journal of Music Education*, 31(1), 53-67. <http://dx.doi.org/10.1177/0255761411434498> (Accessed 13 March 2020).

Bentz, V. M. and Shapiro, J. J. 1998. *Mindful inquiry in social research*. Thousand Oaks, CA: Sage.

Berg, B.L. 2007. *Qualitative research methods for the social sciences*. London: Pearson.

Berger, J. G. 2004. Dancing on the threshold of meaning: Recognizing and understanding the growing edge. *Journal of Transformative Education*, 2, 336-351. doi:10.1177/154134460426769

Bergmann, H., 2003. *Practical subjects in basic education- relevance at last or second rate education? Lessons from 40 years of experience*. Sustainable Development Department. FAO. Available: <http://www.fao.org/3/a-i0760e.pdf> (Accessed: 23 May 2018).

Bergmark, U., Lundström, S., Manderstedt, L. and Palo, A. 2018. Why become a teacher? Student teachers' perceptions of the teaching profession and motives for career choice. *European Journal of Teacher Education*. 1-16. Available: <https://doi.org/10.1080/02619768.2018.1448784> (Accessed 27 June 2019).

Biasin, C. 2018. Transformative Learning: Evolutions of the adult learning theory. *Phronesis*, 7, 5-17.

Bilal, D. 2015. Exploring the effectiveness of library services and resources in academic libraries in Lebanon from users' perspectives..

Blake, J., Sterling, S., and Goodson, I. 2013. Transformative Learning for a Sustainable Future: An Exploration of Pedagogies for Change at an Alternative College. *Sustainability*, 5, 5347-5372.

Block, E. 10 June 2013. Closure of firms is nationwide. Available: <http://www.businessdaily.co.zw/index-id-national-zk-28827.html> (Accessed 24 June 2020).

Boler, M. 1999. *Feeling Power: Emotions and Education*. New York: Routledge.

Bong, M. and Clark, R. 1999. Comparison between self-concept and self-efficacy in academic motivation research. *Educational Psychologist - EDUC PSYCHOL*. 34. 139-153. Available: [10.1207/s15326985ep3403\\_1](https://doi.org/10.1207/s15326985ep3403_1) (Accessed: 26 January 2018).

Borg, S. 2006. *Teacher cognition and language education: research and practice*. London Continuum.

Boru, T. 2018. Chapter Five Research Design and Methodology. Introduction. Available: <https://doi.org/10.13140/RG.2.2.21467.62242> (Accessed: 4 October 2019).

Bowman, N. and Small, J. 2012. Exploring a hidden form of minority status: college students' religious affiliation and well-being. *Journal of College Student Development*, 53, 491–509.

- Boyd, R. D. 1991. *Personal Transformations in Small Groups*. NY: Routledge.
- Boyd, R. D. and Myers J. G. 1988. Transformative education. *International Journal of Lifelong Education*, 7(4), 261-284.
- Braun, V. and Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bridges, A., DiPietro, M., Donlan A.E, Loughlin S. M. and Byrne V. L. 2019. *The fearless teaching framework: a model to synthesize foundational education research for university instructors*. Available: <https://doi.org/10.1002/tia2.20087> (Accessed 24 February 2019).
- Brock, S. 2012. Creating a Learning Climate for the 21<sup>st</sup> Century: Applying Transformative Learning in Teaching Methods in Business Schools. *Transformative Dialogues: Teaching and Learning Journal* ,5(3).
- Brock, S. E. 2010. Measuring the importance of precursor steps to transformative learning. *Adult Education Quarterly: A Journal of Research and Theory*, 60(2), 122-142. Available: <https://doi.org/10.1177/0741713609333084> (Accessed 5 May 2017).
- Brookfield, S. D. 1994. Tales from the dark side: a phenomenography of adult critical reflection. *International Journal of Lifelong Education*, 13(3), 203–216.
- Brookfield, S. D. (2012). *Teaching for critical thinking: Tools and techniques to help students question their assumptions*. San Francisco, CA: Jossey-Bass.
- Brooks, K. A. 2004. Transformational Learning Theory and Implications for Human Resource Development. *Advances in Developing Human Resources*. 6. 211-225.  
10.1177/1523422304263454
- Brown, K. 2004. Leadership for social justice and equity: weaving a transformative framework and pedagogy. *Educational Administration Quarterly*, 40(1), 79-110.
- Brown, P. and Brown, C. S. 2015. Transformative learning theory in gerontology: non-traditional students. *Educational Gerontology*, 41(2), 136–148. Available: <http://dx.doi.org/10.1080/03601277.2014.950492> (Accessed: 15 June 2018).

- Brown, T. 2009. *Change by design: how design thinking transforms organizations and inspires innovation*. New York: Harper Business.
- Bucăța, G. and Rizescu, M. 2017. The role of communication in enhancing work effectiveness of an organization. *Land Forces Academy Review*. 22. 10.1515/raft-2017-0008.
- Bunduki, K. H. and Higgs L.G. 2017. Reimagining education for transformation and social change: a case study of integrated learning at UCBC in the DRC. *South African Journal of Higher Education*, 31(1), 14–28. Available: <http://dx.doi.org/10.20853/31-1-979> (Accessed: 9 July 2018).
- Calleja, C. 2014. Jack Mezirow's conceptualisation of adult transformative learning: a review. *Journal of Adult and Continuing Education*. 20. Available: <https://doi.org/117-136>. 10.7227/JACE.20.1.8 (Accessed: 6 March 2017).
- Candela, A. G. 2019. Exploring the function of member checking. *The Qualitative Report*, 24(3), 619-628.
- Carbonneau, N., Vallerand, R., Fernet, C., Guay, F. 2008. The Role of Passion for Teaching in Intrapersonal and Interpersonal Outcomes. *Journal of Educational Psychology*, 100(4), 977- 987.
- Carey, M.A. and Asbury, J.E. 2012. *Focus group research*. Walnut Creek: Left Coast Press.
- Carrington, S. and Saggars, B. 2008. Service-learning informing the development of an inclusive ethical framework for beginning teachers. *Teaching and Teacher Education*, 24(3), 795-806.
- Carrington, S. and Selva, G. 2010. Critical social theory and transformative learning: evidence in pre-service teachers' service-learning reflection logs. *Higher Education Research & Development*, 29(1), 45-57. Available: <https://doi.org/117-136>. 10.7227/JACE.20.1.8 10.1080/07294360903421384 (Accessed: 15 May 2019).
- Caruana, V. 2011. Pre-service Teachers' Perceptions of their Perspective Transformations: A Case Study. Graduate Theses and Dissertations. Available: <http://dx.doi.org/http://scholarcommons.usf.edu/etd/3034> (Accessed: 17 March 2017).
- Castelli, P. A. 2011. An integrated model for practicing reflective learning. *Academy of Educational Leadership Journal*, 15, 15-30.

Chad, P. 1995. A Structured Approach to Presenting PhD Theses:notes for candidates and their supervisors Paper presented to the ANZ Doctoral Consortium, University of Sydney, February 1994, with later additions to 18 September 1995.

Charaniya, N. K. 2012. 'Cultural-Spiritual Perspective of Transformative Learning', In Taylor, E.W. and Cranton, P. and Associates, *The Handbook of Transformative Learning: Theory, Research and Practice*, (p.231–244). San Francisco: Jossey Bass

Chen, K.and Chen. T. K. 2013. Two Channels of Learning: Transformative Learning and Creative Learning. 3.

Cherkowski, S. 2012. Teacher commitment in sustainable learning communities: a new 'ancient' story of educational leadership. *Canadian Journal of Education*, 35, 56-68.

Chikoko, V. 2006. Negotiating roles and responsibilities in the context of decentralized school governance: A case study of one cluster of schools in Zimbabwe. (*Unpublished doctoral dissertation*). University of KwaZulu-Natal, Durban, South Africa.

Chireshe, R. and Shumba, A. 2011. Teaching as a Profession in Zimbabwe: Are Teachers Facing a Motivation Crisis?, *Journal of Social Sciences*, 28:2, 113-118, DOI: [10.1080/09718923.2011.11892935](https://doi.org/10.1080/09718923.2011.11892935)

Chiromo, A.S. 2004. Teaching practice supervision at Midlands State University: views from postgraduate diploma in education students. *The Dyke: Journal of the Midlands State University*, 1, 81–89.

Chirume, E. 2018. Instructional leaders and understanding data: the status and prevalence of research and statistics courses in a Midwestern State's educator preparation programs. *American Journal of Educational Research*, 6, 997-1004. Available: <http://dx.doi.org/10.12691/education-6-7-16> (Accessed: 15 April 2019).

Choppo, A. L. 2016. Exploring the value of exposing first year students to an orientation programme. *Post Graduate Projects: Higher Education*. Available: <http://hdl.handle.net/11622/174> (Accessed: 17 June 2018). IIESpacRepository

Christie, M., Carey, M., Robertson, A. and Grainger, P. 2015. Putting transformative learning theory into practice. *Australian Journal of Adult Learning*, 55(1), 9-30.

- Ciobanu, A. 2013. The role of student services in the improving of student experience in higher education. *Procedia - Social and Behavioral Sciences*, 92, 169-173. Available: <http://dx.doi.org/10.1016/j.sbspro.2013.08.654> (Accessed 4 March 2020).
- Ciobanu, N. R. (2017). Integrated education and inclusive education. *Romanian Journal of School Psychology*, 10(20), 35-39.
- Clandinin, D. J., Downey, C. A. and Huber, J. 2009. Attending to changing landscapes: shaping the interwoven identities of teachers and teacher educators. *South Pacific Journal of Teacher Education*, 37(2), 141–154.
- Clapper, T. 2010. Creating the safe learning environment. *PAILAL*, 3, 1-6.
- Clark, M. C. 1991. The restructuring of meaning: an analysis of the impact of context on transformational learning. Unpublished doctoral dissertation. University of Georgia.
- Clark, M. C. 1993. Changing course: initiating the transformational learning process. *Paper presented at the Adult Education Research Conference*, Available: <https://doi.org/10.1002/ace.36719935707> Accessed: 28 October 2018).
- Clark, M. C., and Rossiter, M. 2008. "Narrative Learning in Adulthood." Part of a special issue entitled The third update on adult learning (119):61-70. Available: doi: 10.1002/ace.306. (Accessed: 20 April 2017).
- Clary, D. and Daintith, S. 2010. Raising the bar: setting an agenda for writing improvement in the middle years. *Literacy Learning: the Middle Years, Peer Reviewed Paper* 25(2).
- Clinton, J. and Dawson, G. 2018. Enfranchising the profession through evaluation: a story from Australia. *Teachers and Teaching*, 24(3), 312-327.
- Clouston, T. J. 2018. Transforming learning: teaching compassion and caring values in higher education, *Journal of Further and Higher Education*, 42(7):1015-1024, DOI: [10.1080/0309877X.2017.1332359](https://doi.org/10.1080/0309877X.2017.1332359)
- Cohen, A., Brown, P. and Morales, J. 2014. Student journals: a means of assessing transformative learning in aging related courses. *Gerontology & Geriatrics Education*, 36 (2), 185-203.

- Cohen, L., Manion, L. and Morrison, K. 2011. *Research methods in education*. (7th ed.). London: Routledge.
- Cohen, L., Manion, L. and Morrison, K. ©2018. *Research methods in education*. London and New York: Routledge.
- Collard, S., and Law, M. 1989. The limits of perspective transformation: A critique of Mezirow's theory. *Adult Education Quarterly*, 39, 99-107.
- Collis, J. and Hussey, R. 2009. *Business research: a practical guide for undergraduate and postgraduate students* (3rd ed.), Basingstoke: Palgrave Macmillan.
- Contomanolis, E., Cruzvergara, C.Y., Dey, F. and Steinfeld, T.G. 2015. The future of career services is now. *NACE Journal*, 66 (2), 23-28.
- Cotnoir, C., Paton, S., Peters, L., Pretorius, C. Y. and Smale, L. 2014. The Lasting Impact of Influential Teachers. <http://files.eric.ed.gov/fulltext/ED545623.pdf> (Accessed 16 May 2020).
- Cranton, P. 1994. Self-directed and transformative instructional development. *Journal of Higher Education*, 65(6), 726-744.
- Cranton, P. 2000 (a). Individual differences and transformative learning. In J. Mezirow (ed.). *The handbook of transformative learning: theory, research and practise*. San Francisco, CA: Jossey-Bass, 181-204.
- Cranton, P. 2002(b). Teaching for transformation. *New Directions for Adult and Continuing Education*, 93, 63-72.
- Cranton, P. 2006. *Understanding and promoting transformative learning: a guide for educators of adults* (2<sup>nd</sup> ed). San Francisco, CA: Jossey-Bass.
- Cranton, P. and King K. 2003. “Transformative learning as a professional development goal.” *New Directions for Adult and Continuing Education* 98: 31–37.
- Cranton, P., Stuckey, H. and Taylor, E. W. 2012. Assessing transformative learning outcomes and processes: Paper presented at the 10th International Transformative Learning Conference, San Francisco, CA.



Cranton, P. and Taylor, E. 2012. Transformative learning theory: seeking a more unified theory. In E. Taylor and P. Cranton (eds.), *The handbook of transformative learning: theory, research, and practice*. San Francisco, CA: Jossey-Bass, 3–20.

Creemers, B. and Kyriakides, L. 2015. Process-product research: a cornerstone in educational effectiveness. *Research Journal of Classroom Interaction*, 50(2), 107-119.

Creswell, J. W. 2009. *Educational research: planning, conducting, and evaluating quantitative and qualitative research*. Boston, MA: Edward Brothers.

Creswell, J.W. 2013. *Research design qualitative, quantitative, and mixed methods approaches*. (4<sup>th</sup> ed.), London: SAGE Publications, Inc.

Creswell, J. W. 2014. *Research design: qualitative, quantitative, and mixed methods approaches*. (4<sup>th</sup> ed.), Thousand Oaks, California: SAGE Publications.

Criticos, C., Long, L, Moletsaene, R. and Mthiyane, N. 2002. Getting Practical about Outcomes based Teaching. Cape Town: Oxford University Press.

Cruz, M.B. and Cruz, S. B. B. 2013. The use of internet-based social media as a tool in enhancing student's learning experiences in biological sciences. *Higher Learning Research Communications*, 3 (4).

DOI:[10.18870/hlrc.v3i4.170](https://doi.org/10.18870/hlrc.v3i4.170)

Cubajevaite, G.M. 2015. Transformative Adult Learning in New Social Movement – a Case Study from South Africa. *International Journal of Area Studies*. 10. 10.1515/ijas-2015-0007.

Curran, T. and Standage, M. 2017. Psychological needs and the quality of student engagement in physical education: Teachers as key facilitators. *Journal of Teaching in Physical Education*, 36(3), 262–276. <https://doi.org/10.1123/jtpe.2017-0065> (Accessed 15 May 2018).

Ćwiklicki, M. and Pilch, K. 2020. Multiple case study design: the example of place marketing research. *Place Branding and Public Diplomacy*, 1-13. Available: <https://doi.org/10.1057/s41254-020-00159-2> (Accessed June 2020)

D'Amato, L. G. and Krasny, M. E. 2011. Outdoor adventure education: applying transformative learning theory to understanding instrumental learning and personal growth in environmental

education. *The Journal of Environmental Education*, 42, 237-254. Available:  
<http://dx.doi.org/10.1080/00958964.2011.581313> (Accessed 20 May 2017).

Dakia A. R. 2016. Exploring the Dynamics of Transformative Learning, Social Action, and Web 2.0: The Case of Egyptian Student Activists. *Psychology*.  
<https://www.semanticscholar.org/paper/Exploring-the-Dynamics-of-Transformative-Learning%2C-Radwan/440a3f073d29e3369f2490f5387fe9f4abf4abb4> (Accessed 29 June 2020)

Daloz, L. 1999. *Mentor: guiding the journey of adult learners*. San Francisco: Jossey-Bass.

Daloz, L. 1986. *Effective teaching and mentoring: Realizing the transformational power of adult learning experiences*. San Francisco, CA: Jossey-Bass.

Daloz, L. A. P. 2000. Transformative learning for the common good. In J. Mezirow, and Associates (eds.). *The handbook of transformative learning: theory, research and practice*. San Francisco, CA: Jossey-Bass, 103-124.

Damianakis, T., Barrett, B., Archer-Kuhn, B., Samson, P., Matin, S. and Ahern, C. 2019. Transformative learning in graduate education: masters of social work students define their experiences of personal and professional learning. *Studies in Higher Education*. Available:  
<https://doi.org/10.1080/03075079.2019.1650735> (Accessed 13 July 2020).

Darling-Hammond, L., Flook, L., Cook-Harvey, C.M., Barron, B. and Osher, D. 2020. Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24, 97-140.

Darling-Hammond, L., Hyler, M. E. and Gardner, M. 2017. *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.

David, F. 2018. Standing in the middle: Insider/outsider positionality while conducting qualitative research with opposing military veteran political groups. *SAGE Research Methods Cases Part 2*. doi: 10.4135/9781526437181.

Davis, K., Minckas, N., Bond, V., Clark, C., Colbourn, T., Drabble, S., Hesketh, T., Hill, Z., Morrison, J., Mweemba, O., Osrin, D., Prost, A., Seeley, J., Shahmanesh, M., Spindler, E., Stern, E., Turner, K. and Mannell, J. 2019. Beyond interviews and focus groups: A framework for integrating innovative qualitative methods into randomised controlled trials of complex public health interventions. *Trials*. 20. 329. [10.1186/s13063-019-3439-8](https://doi.org/10.1186/s13063-019-3439-8).

- Davis-Manigaulte, J., Yorks, L. and Kasl, E. 2006. Expressive ways of knowing and transformative learning. In E. W. Taylor (ed.). *Teaching for change: fostering transformative learning in the classroom. New directions of adult and continuing education*, 109. San Francisco, CA: Jossey-Bass, 27-35.
- Day, C. 2004. *A passion for teaching*. London: Routledge Falmer.
- DeCapua, A. and Marshall, H. W. 2016. Reframing the conversation about students with limited or interrupted formal education: from achievement gap to cultural dissonance. *NASSP Bulletin*, 94, 356–370.
- Defazio, J., Jones, J., Tennant, F. and Hook, S.A. 2010. Academic literacy: the importance and impact of writing across the curriculum – a case study. *Journal of the Scholarship of Teaching and Learning*, 10(2), 34 - 47.
- DeJonckheere, M. and Vaughn, L.M. 2019. Semi- structured interviewing in primary care research: a balance of relationship and rigour, *Family Medicine and Community Health*, 7(2), 1-8.
- Denham, S. and Burton, R. 2003. Social and emotional prevention and intervention programming for preschoolers. Available: <https://doi.org/10.1007/978-1-4615-0055-1>. (Accessed: 16 July 2018).
- Denzin, N. K. and Lincoln, Y. S. (eds.). 2018. *The SAGE handbook of qualitative research*. Los Angeles: SAGE.
- Desimone, L. and Stuckey, D. 2014. Sustaining professional development. In. L. Martin, S. Kragler, D. Quatroche and K. Bauserman (eds.). *Handbook of professional development in education: successful models and practices*. New York, NY: Guilford Publications, 467-482.
- Deveci, T. 2014. The transformative learning experiences of learners of English as a foreign language at a university preparatory programme. *Transformative Dialogues* 7 (3), 1-19.
- Dewey, J. 1963. *Experience and education. The kappa delta pi lecture series*. New York: Macmillan.

- Dirkx, J.M. 1998. Transformative learning theory in the practice of adult education: An overview. *PAACE Journal of Lifelong Learning*, 7, 1–14.
- Dirkx, J. M. 2000. After the burning bush: transformative learning as imaginative engagement with everyday experience. In C. A. Wiessner, S. R. Meyer and D. A. Fuller (eds.). *Challenges of practice: transformative learning in action: the proceedings of the Third International Conference on Transformative Learning*, 247-252.
- Dirkx, J. M. 2001. ‘Images, Transformative Learning and the Work of Soul’, *Adult Learning*, 12(3), pp. 15–16. doi: 10.1177/104515950101200306.
- Dirkx, J. M. 2006. Engaging emotions in adult learning: a Jungian perspective on emotion and transformative learning. *New Directions for Adult and Continuing Education*, 15 - 26. Available: <https://doi.org/10.1002/ace.204> (Accessed 23 June 2018).
- Dirkx, J. M. 2012. Nurturing soul work: A Jungian approach to transformative learning. In E. Taylor, P. Cranton, and Associates (eds.). *The Handbook of transformative learning: theory, research and practise*. San Francisco, CA: Jossey-Bass, 116-130.
- Dirkx, J.M. 2012. Self-formation and transformative learning: a response to ‘calling transformative learning into question: some mutinous thoughts by Michael Newman’. *Adult Education Quarterly*. 62, 399-405. Available: <https://doi.org/10.1177/0741713612456420> (Accessed: 23 May 2017).
- Dogan, U. 2015. Student engagement, academic self-efficacy, and academic motivation as predictors of academic performance. *Anthropologist*, 20(3), 553-561. Available: <https://doi.org/10.1080/09720073.2015.11891759> (Accessed: 20 August 2017).
- Donlan, A. E., Loughlin, S. and Byrne, V. L. 2019. The fearless teaching framework: a model to synthesize foundational education research for university instructors. To improve the academy. *Journal of Educational Development*, 38(1), 33-49. Available: <https://doi.org/10.1002/tia2.20087> (Accessed: 22 May 2018).
- Doody, O. and Doody, C. 2015. Conducting a pilot study: case study of a novice researcher. *British Journal of Nursing*, 24, 1074-1078. Available: <https://doi.org/10.12968/bjon.2015.24.21.1074> (Accessed: 25 May 2019).

Dörnyei, Z. 2007. *Research Methods in Applied Linguistics: quantitative, qualitative and mixed methodologies*. Oxford: Oxford University Press.

Drago-Severson, E. 2007. Helping Teachers Learn: Principals as Professional Development Leaders. *Teachers College Record*. 109(1):70-125.

Dweck, C.S. 2000. Self-theories: Their role in motivation, personality and development, essays in social psychology. Florence: Psychology Press, Taylor and Francis Group.

Dyer, J. 2001. 'Library Volunteer and Service Providers: A Prototype for Creating a 'Grace Space', 11th National Library Technicians' Conference, <http://www.alia.org.au/groups/libtnat/conferences/2001/papers/dyer.htm> (Accessed 3 August 2019).

Eady, M.J. and Lockyer, L. 2013. Tools for learning: technology and teaching strategies 2013, 71-89. <https://ro.uow.edu.au/asdpapers/403> (Accessed 30 July 2020).

Eccles, J. S., and Wigfield, A. 2002. Motivational Beliefs, Values, and Goals. *Annual Review of Psychology*, 53, 109-132. <https://doi.org/10.1146/annurev.psych.53.100901.135153> (Accessed 18 March 2017).

Edwards, T. M., and Walker, M. 2019. Enhancing Transformation: The Value of Applying Narrative Therapy Techniques When Engaging in Critical Reflection. *Journal of Transformative Education*, 17(4), 337–352. <https://doi.org/10.1177/1541344619847142> (Accessed 15 June 2018).

Einfalt, J. and Turley, J. 2012. Partnerships for success: A collaborative support model to enhance the first year student experience. *The International Journal of the First Year in Higher Education*. 4. 10.5204/intjfyhe.v4i1.153.

Einfalt, J. and Turley, J. 2009. Engaging first year students in skill development: A three-way collaborative model in action. *Journal of Academic Language and Learning*, 3(2), 106-117.

Eldridge, S., Lancaster, G., Campbell, M., Thabane, L., Hopewell, S., Coleman, C. and Bond, C. 2016. Defining feasibility and pilot studies in preparation for randomised controlled trials: development of a conceptual framework. *PloS One*, 11. Available: <https://doi.org/e0150205>. 10.1371/journal.pone.0150205 (Accessed 25 March 2019).

Elliott, V. 2018. Thinking about the coding process in qualitative data analysis. *The Qualitative Report*, 23(11), 2850-2861. Available: <https://nsuworks.nova.edu/tqr/vol23/iss11/14> (Accessed: 3 July 2020).

Else, M. 2009. ITAF: how an innovative adult pedagogy illuminates Mezirow's transformational learning theory. Presented at the 8th International Transformational Learning Conference, Bermuda. Available: [trace.tennessee.edu > cgi > viewcontent](http://trace.tennessee.edu/cgi/viewcontent) (Accessed 18 June 2018).

Enis, C. D. 2012. Interviews and focus groups: Research Methods in Physical Education and Youth Sport. London: Routledge.

Enkhtur, A. and Yamamoto, B. 2017. Transformative learning theory and its application in higher education settings : a review paper. *Journal of Osaka University, Human Science*. Available: <https://doi.org/10.18910/60584> (Accessed: 4 May 2018).

Ensign, T. G. 2019. The seed of transformation: a disorientation index. Theses and Dissertations, 1056. Available: <https://digitalcommons.pepperdine.edu/etd/1056> (Accessed: 3 March 2020).

Erikson, E.H. 1968. Identity: Youth and Crisis. New York: Norton.

Eshun, E., Osei-Poku, P. and Graft-Johnson, K. 2013. Schools pupils' perceptions of factors impacting on their creativity development in Ghana. *Journal of Education and Practice*. 4, 144-151.

Fabian, K., Topping, K. and Barron, I. 2018. Using mobile technologies for mathematics: effects on student attitudes and achievement. *Educational Technology Research and Development*. 66. 10.1007/s11423-018-9580-3.

Fadhel K. 2002. Positivist and hermeneutic paradigm, a critical evaluation under their structure of scientific practice, *The Sosland Journal*, 21-28.

Fajet, W., Bello, M., Leftwich, S.A.; Mesler, J.L. and Shaver, A.N. 2005. Pre-service teachers' perceptions in beginning education classes. *Teaching and Teacher Education: An International Journal of Research and Studies*, 21(6), 717-727.

- Fenwick, T. J. 2004. Toward a critical human resource development in theory and practice. *Adult Education Quarterly*, 54(3), 193-209.
- Festinger, L. 1962. Cognitive dissonance. *Scientific American*, 207(4), 93–107. <https://doi.org/10.1038/scientificamerican1062-93>
- Fernández-Río, J. 2016. Student-teacher-content-context: indissoluble ingredients in the teaching-learning process. *Journal of Physical Education, Recreation & Dance*, 87(1), 3-5. Available: <https://doi.org/10.1080/07303084.2016.1110476> (Accessed: 20 April 2020).
- Fetherston, B. and Kelly, R. 2007. Conflict resolution and transformative pedagogy: a grounded theory research project on learning in higher education. *Journal of Transformative Education*, 5(3), 262–285. Available: <https://doi.org/10.1177/1541344607308899> (Accessed 27 March 2017).
- Fettes, M. 2005. Imaginative transformation in teacher education. *Teaching Education*, 16(1), 3-11. Available: <https://doi.org/10.1080/1047621052000341572> (Accessed: 5 June 2017).
- Fetters, M., Guetterman, T., Power, D. and Nease, D. 2016. Split-Session Focus Group Interviews in the Naturalistic Setting of Family Medicine Offices. *The Annals of Family Medicine*. 14. 70-75. 10.1370/afm.1881.
- Filho, W.L., Raath S., Lazzarini, B., Vargas, V.R., de Souza, L., Anholon, R., Quelhas, R. Haddad, O.L.G., Klavins, M. and. Orlovic V.L. 2018. The role of transformation in learning and education for sustainability. Available: <https://doi.org/10.1016/j.jclepro.2018.07.017> (Accessed 10 August 2017).
- Fink, L.D. 2003. *Creating Significant Learning Experiences*. San Francisco, CA: Jossey Bass.
- Fleming, J., Martin, A., Hughes, H. and Zinn, C. 2009. Maximizing work-integrated learning experiences through identifying graduate competencies for employability: a case study of sport studies in higher education. *Asia-Pacific Journal of Cooperative Education*. Available: <https://doi.org/10.189-201> (Accessed: 15 August 2017).
- Flick, U. 2006. *An introduction to qualitative research*. London: SAGE Publication.

Flynn, R. I., Albrecht, L. and Scott, S. 2018. Two Approaches to Focus Group Data Collection for Qualitative Health Research: Maximizing Resources and Data Quality. *International Journal of Qualitative Methods*, 17. 160940691775078. 10.1177/1609406917750781.

Forero, R., Nahidi, S., de Costa, J., Mohsin, M., Fitzgerald, G., Gibson, N., McCarthy, S. and Aboagye-Sarfo, P. 2018. Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine. *BMC Health Services Research*, 18. Available: <https://doi.org/10.1186/s12913-018-2915-2> (Accessed: 23 March 2020).

Formenti, L. and Dirkx, J. 2014. A dialogical reframing. *Journal of Transformative Education*, 12(2), 123–133. <https://doi.org/10.1177/1541344614554508> (Accessed: 25 February 2020).

Forté, K.S. and Blouin, D. 2016. Fostering transformative learning in an online ESL professional development program for K-12 teachers. *The Qualitative Report*, 21(4), 781-797. Available: <https://nsuworks.nova.edu/tqr/> (Accessed: 10 April 2017).

Franz, N. 2010. Catalyzing Employee Change with Transformative Learning. *Human Resource Development Quarterly*, 21(1), 113-118. doi:10.1002/hrdq.20033

Freeman, A. 2015. Single moms and welfare woes: a higher education dilemma. *Atlantic*. Available: <http://www.theatlantic.com/author/amanda-freeman/> (Accessed: 20 November 2018).

Freeman, C. C. 2015. *Transformational learning in a first year Western Australian Bachelor of Education primary course*. Available: <https://ro.ecu.edu.au/theses/1629> (Accessed: 25 November 2018).

Freire, P. 1970. *Pedagogy of the oppressed*. Middlesex: Penguin.

Freire, P. 2000. *Pedagogy of the oppressed*. New York: Continuum International Publishing Group.

Freiberg, H. J. and Driscoll, A. 2000. *Universal teaching strategies*. Boston, MA, Allyn and Bacon.

Fried, R. 2001. *The Passionate Teacher: A Practical Guide*. Boston: Beacon Press



- Friedman, I. 2016. Being a teacher: altruistic and narcissistic expectations of pre-service teachers. *Teachers and Teaching: theory and practice*. Available: <http://dx.doi.org/10.1080/13540602.2016.1158469> (Accessed: 23 October 2018).
- Fry, H., Ketteridge, S. and Marshal, S. 2008. *A handbook for teaching and learning in higher education*. New York and London: Routledge.
- Frymier, A.B. and Houser, M.L. 2016. The Role of Oral Participation in Student Engagement, *Communication Education*, 65:1, 83-104, DOI: [10.1080/03634523.2015.1066019](https://doi.org/10.1080/03634523.2015.1066019)
- Fullerton, J. R. 2010. Transformative learning in college students: a mixed methods study. Public access theses and dissertations from the College of Education and Human Sciences, 65. Available: <https://digitalcommons.unl.edu/cehsdiss/65> (Accessed 20 June 2017).
- Furlong, M. 2013. *Implementing the incredible years parenting programme in disadvantaged settings in Ireland: A process evaluation* (PhD dissertation). Ireland: National University of Ireland Maynooth. Retrieved from <http://eprints.nuim.ie/4518/> (Accessed 27 May 2019).
- Gambrell, J.A. 2016. Beyond personal transformation: engaging students as agents of social change. *Journal of Multicultural Affairs*, 1(2), 1-34. Available: <https://scholarworks.sfasu.edu/jma/vol1/iss2/2> (Accessed May 2018).
- Garibay, J. C. 2015. STEM students' social agency and views on working for social change: are STEM disciplines developing socially and civically responsible students? *Journal of Research in Science Teaching*, 52(5), 610–632.
- Gatley, J. 2020. Can the new Welsh curriculum achieve its purposes? *BERA, The Curriculum Journal*. Available: <https://doi.org/10.1002/curj.26> (Accessed 20 May 2020).
- Gauntlett, D. 2007. *Creative explorations: new approaches to identities and audiences*. London: Routledge.
- Gellin, A. 2003. The Effect of Undergraduate Student Involvement on Critical Thinking: A Meta-Analysis of the Literature 1991-2000. *Journal of College Student Development*. 44. 10.1353/csd.2003.0066.
- Gentles, S., Charles, C., Ploeg, J. and McKibbin, K. 2015. Sampling in qualitative research: insights from an overview of the methods literature. *The Qualitative Report*, 20, 1772-1789.

Gillies, R.M. and Boyle, M. 2011. Teachers' reflections of cooperative learning (CL): a two-year follow-up. *Teaching Education*, 22(1), 63-78.

Giotopoulos, G. and Pavlakis, M. 2018. Enhancing empathy in transformative learning contexts. *Italian Transformative Learning Network, Third Biennial Conference Milan, Italy*.

Glanzer, P. L., Carpenter, J. A., & Lantinga, N. 2011. Looking for God in the university: Examining trends in Christian higher education. *Higher Education*, 61(6), 721–755. doi: 10.1007/s10734-010-9359-x

Glisczinski, D. J. 2007. Transformative higher education: a meaningful degree of understanding. *Journal of Transformative Education*, 5(4), 317-328.

Goleman, D. 1997. *Emotional intelligence*. New York, NY: Bantam Books, Inc.

Goodwin, D., Mays, N. and Pope, C. 2019. Ethical Issues in Qualitative Research. <https://doi.org/10.1002/9781119410867.ch3> (Accessed 18 June 2020).

González-Sanmamed, M., Sangrà, A. and Muñoz-Carril P.C. 2017. We can, we know how. But do we want to? Teaching attitudes towards ICT based on the level of technology integration in schools. *Technology, Pedagogy and Education*, 26(5), 633-647. Available: <https://doi.org/10.1080/1475939X.2017.1313775> (Accessed 30 April 2018).

Goss, H., C., T. Cuddihy and Michaud-Tomson, L. 2010. Wellness in higher education: a transformative framework for health-related disciplines. *Asia-Pacific Journal of Health, Sport and Physical Education*, 1(2), 29-36. Available: <http://dx.doi.org/10.1080/18377122.2010.9730329> (Accessed 2 June 2018).

Gouthro, P. A. 2002. Book Reviews. *Adult Education Quarterly*, 53(1), 69–70. Available: <https://doi.org/10.1177/074171302237210> (Accessed 15 June 2018).

Government of Zimbabwe. International Organization for Migration (IOM). 2019. *Zimbabwe develops national migration policy*. Available: <https://reliefweb.int/report/zimbabwe/government-zimbabwe-develops-national-migration-policy> [Press release] 29 March (Accessed: 24 June 2020).

Grant-Vallone, E., Reid, K., Umali, C. and Pohlert, E. 2003. An analysis of the effects of self-esteem, social support, and participation in student support services on students' adjustment and

commitment to college. *Journal of College Student Retention: Research, Theory and Practice*, 5, 255-274. Available: <https://doi.org/10.2190/C0T7-YX50-F71V-00CW> (Accessed 30 April 2020).

Gravett, S. and Petersen, N. 2009. Promoting dialogic teaching among higher education faculty in South Africa. In J. Mezirow, E. W. Taylor and Associates (eds.). *Transformative Learning in Practice*, 100-110. San Francisco: Jossey-Bass

Gray, D. E. 2006. Executive coaching: towards a dynamic affiance of psychotherapy and transformative learning processes. *Management Learning*, 37(4), 475-497. Available: <https://doi.org/10.1177/1350507606070221> (Accessed: 26 May 2019).

Gray, D.E. 2007. Towards a systemic model of coaching supervision: some lessons from psychotherapeutic and counselling models. *Organisational Behaviour, HRM and Health Care Management*, 42. Available: <https://doi.org/10.1080/00050060701648191> (Accessed:25 August 2019).

Green, L. 2012. Transformative learning: A passage through the liminal zone. In Bainbridge, A., West, L. (Eds.), *Minding a gap: Psychoanalysis and education*. London, England: Karnac.

Green, L. and Malkki, K. 2017. Relationship conflict as disorienting dilemma: an experiential prototype for transformation. *Journal of Transformative Learning*, (4)2, 69-83.

Grundmeyer, T. A. 2012. A qualitative study of the perceptions of first year college students regarding technology and college readiness. IOWA State University Repository. Graduate Theses and Dissertations. 12599. <https://lib.dr.iastate.edu/etd/12599> (Accessed 23 February 2021).

Güdel, K., Heitzmann, A. and Müller, A. 2019. Self-efficacy and (vocational) interest in technology and design: an empirical study in seventh and eighth-grade classrooms. *Int J Technol Des Educ*, 29, 1053–1081. Available: <https://doi.org/10.1007/s10798-018-9475-y> (Accessed 30 April 2020).

Guillen-Gamez, F. Lugones, A., Fernández, M. and Guillén, F. 2019. ICT use by pre-service foreign languages teachers according to gender, age and motivation. *Cogent Education*. Available: <https://doi.org/10.1080/2331186X.2019.1574693> (Accessed 24 April 2019).

- Guthrie, J. 2004. Teaching for literacy engagement. *Journal of Literacy Research*, 36, 1-30. Available: [https://doi.org/10.1207/s15548430jlr3601\\_2](https://doi.org/10.1207/s15548430jlr3601_2). (Accessed: 23 June 2017).
- Habermas, J. 1984. *The theory of communicative action. Vol. 1: Reason and the rationalization of society* (T. McCaathy, Trans.). Boston: Beacon.
- Habermas, J. 1984. The theory of communicative action. Vol. 1: Reason and the rationalization of society (T. McCaathy, Trans.). Boston: Beacon.
- Halpern, D. F. 2010. Creativity in college classroom. In R. A. Beghetto and J. C. Kaufman (eds.). *Nurturing creativity in the classroom*. New York, NY: Cambridge University Press, 380-393.
- Halupa, C. 2017. Are students and faculty ready for transformative learning? Available: [https://doi.org/10.1007/978-3-319-17727-4\\_70-1](https://doi.org/10.1007/978-3-319-17727-4_70-1) (Accessed 15 March 2018).
- Hammar-Chiriach, E. 2014. Group work as an incentive for learning – students' experiences of group work. *Front. Psychol.* 5, 558. Available: <https://doi.org/10.3389/fpsyg.2014.00558> (Accessed: 17 November 2020).
- Hannafin, M.J., Hannafin, K.M., Land, S. and Oliver, K. 1997. Grounded practice and the design of constructivist learning environments. *Educational Technology Research and Development*, 45(3), 101–117.
- Hansen, D.T. 1995. *The call to teach*. New York: Teachers College Press.
- Hargreaves, A. 1997. *Rethinking educational change with heart and mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Hargreaves, A. and Goodson, I. 2006. Educational change over time? The sustainability and non-sustainability of three decades of secondary school change and continuity. *Educational Administration Quarterly*, 42(1), 3-41.
- Hargreaves, A. and Fullan, M. 2012. *Professional capital: transforming teaching in every school*. New York, NY: Teachers College Press.
- Harvey, D. 2015. *Seventeen contradictions and the end of capitalism*. Oxford, England: Oxford University Press.

- Hassel, S. and Ridout, N. 2018. An investigation of first-year students' and lecturers' expectations of university education. *Frontiers in Psychology*, Available: DOI: 10.3389/fpsyg.2017.02218 (Accessed 28 March 2020).
- Hassi, A. 2016. Effectiveness of early entrepreneurship education at the primary school level: Evidence from a field research in Morocco. *Citizenship, Social and Economics Education*, 15(2), 83–103. Available: <https://doi.org/10.1177/2047173416650448> (Accessed 18 May 2018).
- Haworth, N.G. and Jones, L.K. 2019. Student and new graduate perception of hospital versus institutional clinic for clinical educational experience. *The Journal of Chiropractic Education*. 33(2):125-132]. Available: DOI: 10.7899/jce-18-13 (Accessed: 26 April 2020)
- Henderson, J. 2012. Transformative learning: Four activities that set the stage. Fostering a climate conducive to transformative learning| *Faculty Focus*, 17(January), pp. 1-5.
- Hesse-Biber, S. and Leavy, P. 2011. *The Practice of Qualitative Research*. Thousand Oaks: SAGE Publications.
- Hicks, F. D. 2001. Critical Thinking: Toward a Nursing Science Perspective. *Nursing Science Quarterly*, 14(1), 14–21. <https://doi.org/10.1177/089431840101400106> (Accessed 20 May 2020)
- Hidalgo, S., Koebernik, M. and Williams, K. 2018. Transformational learning in higher education settings: a case study of “teaching teachers to teach”. *International Journal of Education*. Available: <https://doi.org/10.20.10.5296/ije.v10i4.13750> (Accessed: 18 May 2017).
- Hillman, J. 1989. The poetic basis of mind. In T. Moore (ed.). *A blue fire: selected writings by James Hillman*. New York: Harper & Row, 15-35.
- Hirst, W. and Echterhoff, G. 2012. Remembering in conversations: the social sharing and reshaping of memories. *Annual Review of Psychology*, 63, 55–79. Available: <http://dx.doi.org/10.1146/annurev-psych-120710-100340> (Accessed: 28 May 2018).
- Hjeltnes, A., Binder, P. Moltu, C. and Dundas, I. 2015. Facing the fear of failure: an explorative qualitative study of client experiences in a mindfulness-based stress reduction program for university students with academic evaluation anxiety. *International Journal of Qualitative*

*Studies on Health and Well-being*. Available: <https://doi.org/10.27990.10.3402/qhw.v10.27990> (Accessed: 30 November 2019).

Hodge, S. 2019. Transformative learning for knowledge: from meaning perspectives to threshold concepts. *Journal of Transformative Education*, 17(2), 133–153. Available: <https://doi.org/10.1177/1541344618770030> (Accessed: 30 May 2017).

Hodges, D. and Burchell, N. 2003. Business graduate competencies: employers' views on importance and performance. *Asia-Pacific J Coop Edu.*, 4.

Hoggan, C. 2016. Transformative learning as a metatheory: definition, criteria, and typology. *Adult Education Quarterly*, 66, 57-75.

Hoggan, C., Malkki, K. and Finnegan, F. 2017. Developing the theory of perspective transformation: Continuity, intersubjectivity, and emancipatory praxis. *Adult Education Quarterly*, 67(1), 48-64. Available: <https://doi.org/10.1177/0741713616674076> (Accessed 27 May 2017).

Hoidn, S. 2017. *Student-Centered Learning Environments in Higher Education Classrooms*. New York, NY: Palgrave Macmillan.

Holland, J. L. 1997. *Making vocational choices: a theory of vocational personalities and work environments* (3<sup>rd</sup> ed.). Odessa, FL: Psychological Assessment Resources.

Holtzman, J.M., Elliot, N., Biber, C.L. and Sanders, R.M. 2005. Computerized assessment of dental student writing skills. *Journal of Dental Education*, 69, 285-295.

Hove, M. and Ndawana, E. 2019. Education provision in the midst of a crisis: the Zimbabwean experience after 1999. *Journal of Peace Education*, 16(2), 215-246. Available: <https://doi.org/10.1080/17400201.2019.1627663> (Accessed: 3 March 2020).

Huber, J., Murphy, M. and Clandinin, D. J. 2003. Creating communities of cultural imagination: negotiating a curriculum of diversity. *Curriculum Inquiry*, 33, 343 - 362. Available: <https://doi.org/10.1046/j.1467-873X.2003.00269.x> (Accessed 27 August 2017).

- Hunter, A. 2008. Transformative learning in international education. In: V. Savicki (eds.). *Developing intercultural competence and transformation: theory, research, and application in international education*. Sterling, VA: Stylus Publishers.
- Hutchison, D. 2004. *A natural history of place in education*. New York: Teachers College Press.
- Ibrahim, A. and Ibrahim, S. 2014. Position of the teaching profession in Nigeria and its effects on potential business teachers in the country. *Journal of Education and Practice*, 5(5), 88 – 92.
- Ikamari, L. 2005. The effect of education on the timing of marriage in Kenya. *Demographic Research*. Available: <https://doi.org/12.1-28.10.4054/DemRes.2005.12.1> (Accessed: 29 August 2018).
- Ikupa, M., Amanda, B., Nadira, S. and Wilfried, A. 2017. Who wants to become a teacher? Typology of student-teachers' commitment to teaching, *Journal of Education for Teaching*, 43(4), 444-457. Available: <https://doi.org/10.1080/02607476.2017.1296562> (Accessed: 6 April 2018).
- Illeris, K. (2003). Workplace Learning and Learning Theory. *Journal of Workplace Learning*, 15, 167-178. <http://dx.doi.org/10.1108/13665620310474615> (Accessed 2 June 2017).
- Illeris K. 2009. *Contemporary theories of learning: learning theorists -- in their own words Volume 40. Routledge explorations in economic history*. London: Routledge
- Illeris, K. 2007. *How we learn. Learning and non-learning in school and beyond*. New York: Routledge. Available: <https://doi.org/10.4324/9780203939895> (Accessed: 30 March 2017).
- Illeris, K. 2014. Transformative Learning and Identity. *Journal of Transformative Education*, 12(2), 148-163. Available: <https://doi.org/10.1177/1541344614548423> (Accessed 6 May 2017).
- Inglis, T. 1997. Empowerment and emancipation. *Adult Education Quarterly*, 48(1), 1-15.
- Iqbal, S. M. J., Nabi, A., Muneer, S. and Anuar, M. 2013. Impact of training on expectation of employee and employer: A comparative study. *Information Management and Business Review*, 5, 601-607.
- Isopahkala-Bouret, U. (2008). Transformative Learning in Managerial Role Transitions. *Studies in continuing education*, 30(1), 69-84. doi:10.1080/01580370701841556

Jarvis, P. 2005. *International dictionary of adult and continuing education*. New York: Taylor & Francis.

Jesson, J. and Newman, M. 2004. 'Radical adult education and learning', in Foley, G. (ed.), *Dimensions of adult learning: adult education and training in a global era*, Crows Nest, NSW: Allen & Unwin: 251–264.

Johansson, C. 2008. An Integrative Model for Transformative Learning. *Adult Education Research Conference*. Available: <https://newprairiepress.org/aerc/2008/papers/32> (Accessed:15 March 2017).

Johnson-Bailey, J., and Alfred, M. 2006. Transformational teaching and the practices of black women adult educators. *New Directions for Adult and Continuing Education*, 109, 49-58.

Johnson, D.W. and Johnson, R.T., 2004. Implementing the "teaching students to be peacemakers program". *Theory into Practice*, 43(1), 68-79.

Johnson, J., Adkins, D. and Chauvin, S. 2020. A Review of the Quality Indicators of Rigor in Qualitative Research. *American journal of pharmaceutical education*, 84, 7120. Available: <https://doi.org/10.5688/ajpe7120> (Accessed: 4 February 2020).

Johnson, D., Johnson, R. and Smith, Karl. 1998. Cooperative Learning Returns To College What Evidence Is There That It Works? *Change*. 30. 26-35. 10.1080/00091389809602629.

Jonassen, D. and Reeves, T. 1996. Learning with technology: Using computers as cognitive tools. In D. Jonassen (Ed.), *Handbook of research educational on educational communications and technology* (pp. 693-719). New York: Macmillan.

Jones, P. 2015. Transformative Learning Theory: Addressing New Challenges in Social Work Education. 10.1007/978-3-642-55352-3\_12.

Jones, P. and Miles, D. 2018. Transformative learning in international student exchange: a critical perspective. *Advances in Social Work and Welfare Education*, 19(2), 47–60.

Kalu, F. 2018. *Student engagement in the classroom*. Available: <http://connections.ucalgaryblogs.ca/2018/03/22/student-engagement-in-the-classroom/28> (Accessed 5 July 2020).



- Kang, D.J., Cho, S. 2017. Lost in travel or a different conception? (Mis-)appropriation of transformative learning theory in the Republic of Korea. *Asia Pacific Educ. Rev*, 18, 163–174. Available: <https://doi.org/10.1007/s12564-017-9481-x> (Accessed: 24 May 2020).
- Kangira, J. (2019). Lessons from a teacher training programme that transformed education in Zimbabwe. Available: [neweralive.na>posts 29-10-2508:09:53](https://neweralive.na/posts/29-10-2508/09:53) (Accessed: 3 March 2020).
- Kanyongo, Y. 2005. Zimbabwe’s education system reforms: successes and challenges. *International Education Journal* 6(1), 65-74.
- Kariwo, M., Gounko, T. and Nungu, M. 2014. *A comparative analysis of higher education systems: issues, challenges and dilemmas*. Available: <https://doi.org/10.1007/978-94-6209-533-5> (Accessed: 29 April 2017).
- Kassan, A., Nutter, S., Green, A. R., Arthur, N., Russell-Mayhew, S. and Sesma-Vasquez, M. 2020. Capturing the Shadow and Light of Researcher Positionality: A Picture-Prompted Poly-Ethnography. *International Journal of Qualitative Methods Volume* 19: 1–12.
- Kasl, E. and Yorks, L. 2016. Do I really know you? Do you really know Me? Empathy amid diversity in differing learning contexts. *Adult Education Quarterly*, 66(1), 3-20.
- Keengwe, J., & Jung-Jin, K. (2013). A triangular prism model: Using activity theory to examine online learning communities. *Education Information Technologies*, 18(1), 85-93.
- Kegan, R. 2009. What ‘form’ transforms? A constructive-developmental approach to transformative learning. In K. Illeris (ed.). *Contemporary theories of learning: learning theorists - In their own words*. London & New York : Routledge Taylor and Francis Group, 35–52.
- Kennedy, W.B. 1990. Integrating personal and social ideologies. In J. Mezirow and Associates (eds.). *Fostering critical reflection in adulthood: a guide to transformative and emancipatory learning*. San Francisco, CA: Jossey-Bass, 99-115.
- Khoo, H. W. 2018. A transformative learning approach to teaching management skills in medical education. *Academic Medicine*, 93(4), 516-517. Available: <https://doi.org/10.1097/ACM.0000000000002115> (Accessed: 12 June 2019).

- Kim, H. and Cho, Y. 2014. Pre-service teachers' motivation, sense of teaching efficacy and expectation of reality shock. *Asia-Pacific Journal of Teacher Education*, 42(1), 67-81. Available: <https://doi.org/10.1080/1359866X.2013.855999> (Accessed 20 July 2018).
- Kim, S. 2013. A study on perspective transformation and moral development. *Journal of Lifelong Education*, 19(2), 97–132.
- Kim, Y. Y. 1998. *Communication and Cultural Adaptation*. Philadelphia: Multilingual Matters.
- King, K. 2002. Educational technology professional development as transformative learning opportunities. *Computers & Education*. 39. 283-297. 10.1016/S0360-1315(02)00073-8.
- King, K. P. 2005. *Bringing transformative learning to life*. Krieger: Malabar Fl.
- King, J. H. and Anderson, S. M. 2004. Therapeutic implications of pharmacotherapy: current trends and ethical issues. *Journal of Counseling and Development*, 82, 329-336. Available: <https://doi.org/10.1002/j.1556-6678.2004.tb00318.x> (Accessed: 16 March 2020).
- King, K. P. 2004. Transformative learning. In S. Farmer & S. Stein (Eds.). *Connotative learning*. (pp. 195-206). Washington DC: IACET.
- King, N. 2004. Using templates in the thematic analysis of text. In C. Cassell and G. Symon (eds.). *Essential guide to qualitative methods in organizational research*. London: Sage, 257–270.
- Kirkham, J.A., Smith, J.A., and Havsteen-Franklin, D. 2015. Painting pain: an interpretative phenomenological analysis of representations of living with chronic pain. *Health Psychology*, 34(4), 398–406. Available: <https://doi.org/10.1037/hea0000139> (Accessed 25 February 2020).
- Kitchenham, A. 2008. The evolution of John Mezirow's transformative learning theory. *Journal of Transformative Education*, 6(2), 104-123. Available: <https://doi.org/10.1177/1541344608322678> (Accessed 19 January 2017).
- Kivunja, C. and Kuyini, A. B. 2017. Understanding and Applying Research Paradigms in Educational Contexts. *International Journal of Higher Education*. 6. 26. 10.5430/ijhe.v6n5p26.
- Koehler, M. J. 2011. *TPACK – Technological pedagogical and content knowledge*. Available: <http://www.tpck.org/> (Accessed 9 August 2020).

- Korstjens, I. and Moser, A. 2018. Series: practical guidance to qualitative research. Part 4: Trustworthiness and publishing, *European Journal of General Practice*, 24(1), 120-124. Available: <https://doi.org/10.1080/13814788.2017.1375092> (Accessed: 20 April 2020).
- Krapp, A. 2003. Interest and human development-An educational-psychological perspective. *British Journal of Educational Psychology* (Monograph Series II, Part 2), 57-84.
- Kruegar, R. and Casey, M. A. 2014. Focus groups: a practical guide for applied research. Available: [https://books.google.co.zw/books/about/Focus\\_Groups.html?hl=fr&id=APtDBAAQBAJ&redir\\_esc=y](https://books.google.co.zw/books/about/Focus_Groups.html?hl=fr&id=APtDBAAQBAJ&redir_esc=y) (Accessed 27 May 2019).
- Kuhn, T. S. 1962. *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.
- Kumer, P. 2019. Focus Groups as a Tool for Conducting Participatory Research: A Case Study of Small-Scale Forest Management in Slovenia Participatory Research and Planning in Practice pp 207-220.
- Kumi-Yeboah, A. 2014. Transformative learning experiences of international graduate students from Africa. *Journal of International Students*, 4(2), 109-125. Available: <http://jistudents.org/> (Accessed: 5 July 2020).
- Kusumawardhani, P. 2017. Does teacher certification program lead to better quality teachers? Evidence from Indonesia. *Education Economics*, 1-29. Available: <https://doi.org/10.1080/09645292.2017.1329405> (Accessed: 28 November 2018).
- Läänemets, U. and Rostovtseva, M. 2015. Developing supportive learning environments. *Journal of Psychology Research*, 5. Available: <https://doi.org/10.17265/2159-5542/2015.01.004> (Accessed: 3 May 2018).
- Lammers, W. and Murphy, J. 2002. A Profile of Teaching Techniques Used in the University Classroom A Descriptive Profile of a US Public University. *Active Learning in Higher Education*. 3. 54-67. 10.1177/1469787402003001005

Langan, D., Sheese, R. and Davidson, D. 2009. Constructive teaching and learning: collaboration in a sociology classroom. In: J. Mezirow, E. W. Taylor and Associates (eds.). *Transformative Learning in Practice*. San Francisco: Jossey-Bass, 46-56.

Lave, J. and Wenger, E. 1991. Learning in doing: Social, cognitive, and computational perspectives. *Situated learning: Legitimate peripheral participation*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511815355> (Accessed 23 September 2019)

Lavin, A., Davies, T. and Carr, D. 2010. The impact of instructor attire on student perceptions of faculty credibility and their own resultant behavior. *American Journal of Business Education (AJBE)*, 3. Available: <https://doi.org/10.19030/ajbe.v3i6.442> (Accessed: 19 April 2020).

Lee, S. W. 2018. Pulling back the curtain: revealing the cumulative importance of high-performing, highly qualified teachers on students' educational outcome. *Educational Evaluation and Policy Analysis*, 40(3), 359-381. Available: <https://doi.org/10.3102/0162373718769379> (Accessed: 5 June 2019).

Lempriere, D. 2020. What is the difference between a PhD thesis literature review and theory framework? The PhD Proofreaders. 15 September.

Lent, R.W., Brown, S.D., Nota, L. and Soresi, S. 2003. Testing social cognitive interest and choice hypotheses across Holland types in Italian high school students. *Journal of Vocational Behavior*, 62, 101-118. Available: [https://doi.org/10.1016/S0001-8791\(02\)00057-X](https://doi.org/10.1016/S0001-8791(02)00057-X) (Accessed 29 August 2019).

Levin, B.B. 2002. Dilemma-based cases written by pre-service elementary teachers: An analysis of process and content. *Teaching Education*, 13(2), 203-218.

Lin L. 2017. Cultural Flows and Pedagogical Dilemmas: Teaching with Collaborative Learning in the Chinese HE EFL Context, 40(I) <https://doi.org/10.1515/cjal-2017-0002> (Accessed 18 June 2020).

Lin, J. 2018. From self-cultivation to social transformation: the Confucian embodied pathways and educational implications. In Y. Liu and W. Ma (eds.). *Confucianism reconsidered: insights for American and Chinese education in the twenty first century*. Albany: State University of New York Press, 169-182.

Lincoln, Y. S. and Guba, E. 2013. *The constructivist credo*. Walnut Creek, CA: Left Coast Press.

- Lindeman, E.C. 1926. The meaning of adult education. New York: New Republic.
- Liu, W., Li, X. and Zou, Y. 2019. The Formation of Teachers' Intrinsic Motivation in Professional Development. *Integrative Psychological and Behavioral Science*. 53. 10.1007/s12124-018-9465-3.
- Lysychkina, I., Hildenbrand, A. and Reid-Martinez, A. 2016. Adult learning principles and transformative learning in teaching gender. In: PfPC SSRWG and EDWG (eds.). *Handbook on teaching gender in the military*. Geneva: DCAF and PfPC.
- Londsdorf, K. 2018. *Mugabe's gone, but Zimbabwe still has a serious cash shortage*. Available: <https://www.npr.org/2018/07/28/632986144/mugabes-gone-but-zimbabwe-still-has-a-serious-cash-shortage> (Accessed 23 November 2019).
- Low, K. S. D., Yoon, M., Roberts, B. W. and Rounds, J. 2005. The stability of vocational interests from early adolescence to middle adulthood: a quantitative review of longitudinal studies. *Psychological Bulletin*, 131, 713–737.
- Machingura, V. 2006. Women's Access To Teacher Education In Zimbabwe: A Gender Profile. *In The Zimbabwe Bulletin of Teacher Education- Department of Teacher Education University of Zimbabwe*. 13(2).
- Magaya, M. G. 2017. Head of Agricultural Education Department,--. Min of Higher and Tertiary Education, Science and Technology Development. Zimbabwe.
- Mahere, S.M. 2014. A study of ethics and professionalism in Zimbabwe's education system. *Zimbabwe Journal of Educational Research*, 26(3).
- Makwinja, V. 2017. Rethinking education in Botswana: a need to overhaul the Botswana education system. *Journal of International Education Research (JIER)*, 13(45). Available: <https://doi.org/10.19030/jier.v13i2.10075> (Accessed: 13 June 2019).
- Malkki, K. 2010. Rethinking disorienting dilemmas within real-life crises: the role of reflection in negotiating emotionally chaotic experiences. *Adult Education Quarterly*, 62, 207-229.
- Mälkki, K. 2011. Theorizing the Nature of Reflection. University of Helsinki, Institute of Behavioural Sciences. *Studies in Educational Sciences* 238. Doctoral dissertation.

- Mälkki, K. and Green, L. 2014. Navigational aids: the phenomenology of transformative learning. *Journal of Transformative Education*, 12(1), 5-24. Available: <https://doi.org/10.1177/1541344614541171> (Accessed 4 September 2017).
- Mälkki, K. and Lindblom-Ylänne, S. 2012. From reflection to action? Barriers and bridges between higher education teachers' thoughts and actions. *Studies in Higher Education*. 37. 33-50. 10.1080/03075079.2010.492500.
- Manungo, W. 2017. Government spruces up civil service: CSC to retire 65-year-old workers in January 2018. *Sunday News*, 31 December.
- Mapolisa, T. and Tshabalala, T. 2013. Attitudes of teachers towards the policy of teaching practical/vocational subjects, *International Journal of Asian Social Science*, 3(11): 2267-2278.
- Marchand, G., Nardi, N., Reynolds, D. and Pamoukov, S. 2015. The impact of the classroom built environment on student perceptions and learning. *Journal of Environmental Psychology*. Available: <https://doi.org/10.1016/j.jenvp.2014.06.009> (Accessed: 3 July 2019).
- Mark, F. 2005. Imaginative transformation in teacher education, *Teaching Education*, 16:1, 3-11, DOI: 10.1080/1047621052000341572
- Marques, W. A., Maruyama, Ú. G. R. and Maciel, M. S. D. 2013. *Abordagens educacionais para a inovação: estudo sobre a perspectiva dos estudantes de ensino técnico sobre inovação na educação tecnológica. disponível em:* Available: [http://www.academia.edu/download/33663532/4.CNEG\\_2013\\_PIBIC\\_EM\\_T13\\_0655\\_3350.pdf](http://www.academia.edu/download/33663532/4.CNEG_2013_PIBIC_EM_T13_0655_3350.pdf) (Accessed: 6 April 2020).
- Mavhunga, P.J., Mavundutse, O. and Mamvuto, A. 2008. Professional studies: the Zimbabwe teacher education curriculum burden bearer? *Zimbabwe Bulletin of Teacher Education*, 15(1), 93-109.
- McEwen, L., Strachan, G. and Lynch, K. 2010. 'Shock and awe' or 'reflection and change': stakeholder perceptions of transformative learning in higher education. *Learning and Teaching in Higher Education*, 5, 34-55
- McGonigal, K. 2005. Teaching for transformation: from learning theory to teaching strategies. *Speaking of Teaching*, 14(2).

- McLeod, S. 2018. What is the zone of proximal development? *Simply psychology*. Available: <https://www.simplypsychology.org/vygotsky.html> (Accessed 15 October 2018).
- McQueen, L. and Zimmerman, L. 2006. Using the Interpretive Narrative Research Method in Interdisciplinary Research Projects. *The Journal of nursing education*. 45. 475-8. 10.3928/01484834-20061101-09.
- McRae, N. 2015. Exploring conditions for transformative learning in work-integrated education. *Special Issue*, 16(2), 137-144.
- McVeigh, B.J. 2002. *Japanese higher education as myth*. New York: East Gate Books.
- Meens, E.E.M. and Bakx, A. W.E.A. 2019. Student teachers' motives for participating in the teacher training program: a qualitative comparison between continuing students and switch students, *European Journal of Teacher Education*, 42:5, 650-674, DOI: [10.1080/02619768.2019.1652900](https://doi.org/10.1080/02619768.2019.1652900)
- Mendenhall, M. E., Osland, J., Bird, A., Oddou, G. R., Stevens, M. J., Maznevski, M. and Stahl, G. K. (Eds.). 2018. *Global leadership: Research, practice, and development* (3rd Ed.) New York, NY: Routledge.
- Merriam, S. B. 2004. The role of cognitive development in Mezirow's transformational theory. *Adult Education Quarterly*, 55(1), 60-68. Available: <https://doi.org/10.1177/0741713604268891> (Accessed: 30 November 2017).
- Merriam, S. B. and Caffarella, R. S. 1999. *Learning in adulthood: a comprehensive guide* (2nd ed.). San Francisco: Jossey-Bass.
- Merriam, S.B., Caffarella, R.S., Baumgartner, L.M. 2007. *Learning in Adulthood: A Comprehensive Guide* (3rd Edition). San Francisco CA: Jossey – Bass
- Merriam, S. B. and Kim, S. 2012. Studying transformative learning: what methodology? In: E. W. Taylor and P. Cranton (eds.). *Handbook of transformative learning: theory, research, and practice*. San Francisco: Jossey-Bass, 56-72.
- Merriam, S. B., and Ntseane, G. 2008. Transformational Learning in Botswana: How Culture Shapes the Process. *Adult Education Quarterly*, 58(3), 183–197. <https://doi.org/10.1177/0741713608314087> (Accessed 19 August 2019).

- Meyer, J. H. F. and Land, R. 2003. Threshold concepts and troublesome knowledge: linkages to thinking and practising within the disciplines. In: C. Rust (ed.). *Improving student learning: theory and practice-ten years on*. Oxford, England: Centre for Staff and Learning Development, 412-424.
- Meyers, S. 2008. Using Transformative Pedagogy When Teaching Online. *College Teaching*. 56. 219-224. 10.3200/CTCH.56.4.219-224.
- Mezirow, J. 1978. Perspective transformation. *Adult Education*, 28(2), 100-110. Available: <https://doi.org/10.1177/074171367802800202> (Accessed: 13 January 2017).
- Mezirow, J. 1981. A critical theory of adult learning and education. *Adult Education*, 32(1), 3-24. Available: <https://doi.org/10.1177/074171368103200101> (Accessed: 12 February 2017).
- Mezirow, J. 1991. *Transformative dimensions of adult learning*. San Francisco: Jossey-Bass.
- Mezirow, J. 1996. A critical theory of adult learning and education. *Adult Education Quarterly*, 32(3).
- Mezirow, J. 1996. Contemporary paradigms of learning. *Adult Education Quarterly*, 46(3), 158-172.
- Mezirow, J. 1997. Transformative learning and social action: a response to Inglis. *Adult Education Quarterly*, 49(1), 70-72.
- Mezirow, J. 2000. *Learning as transformation: critical perspectives on a theory in progress*. San Francisco: Jossey-Bass.
- Mezirow, J. 2003. Transformative learning as discourse. *Journal of Transformative Education*, 1(1), 58- 63. Available: <https://doi.org/10.1177/1541344603252172> (Accessed 17April 2017).
- Mezirow, J. 2012. Learning to think like an adult: core concepts of transformative learning theory. In E. W. Taylor and P. Cranton (eds.). *Handbook of transformative learning: theory, research, and practice*. San Francisco: Jossey-Bass, 73-96.
- Mezirow, J. and Taylor, E. W, 2009. *Transformative learning in practice*. San Francisco: Jossey-Bass.
- Miller, J. P. 2002. Learning from a spiritual perspective. In: E. O'Sullivan, A. Morrell and M.A.



- Ministry of Education, Sport and Culture. 2013. Harare.
- Mkumbo, K. 2012. Teachers' commitment to, and experiences of, the teaching profession in Tanzania: findings of focus group research. *International Education Studies*, 5. Available: <https://doi.org/10.5539/ies.v5n3p222> (Accessed 23 February 2017).
- Mlambo, A. S. 2017. 'From an Industrial Powerhouse to a Nation of Vendors: Over Two Decades of Economic Decline and Deindustrialization in Zimbabwe 1990–2015', *Journal of Developing Societies*, 33(1), pp. 99–125. doi: 10.1177/0169796X17694518.
- Mngomezulu, S., Dhunpath, R. and Munro, R. 2017. Does financial assistance undermine academic success? Experiences of 'at risk' students in a South African university. *Journal of Education*, 68. Available: <http://joe.ukzn.ac.za> (Accessed: 30 April 2020).
- Modipane, M. C. 2011. Initial experiences of first entering students at the university of Limpopo: implications for coping with academic work/studies. *South African Journal of Higher Education*, 25(8), 1592–1607.
- Moghadam, B. Z., Ordibeheshti, K. M., Esmaeili, M. and Salsali, M. 2017. Motherhood challenges and well-being along with the studentship role among Iranian women: a qualitative study. *International Journal of Qualitative Studies on Health and Well-being*, 12(1), 1335168. Available: <https://doi.org/10.1080/17482631.2017.1335168> (Accessed: 16 March 2019).
- Moore, T. 1992. *Care of the soul: a guide for cultivating depth and sacredness in everyday life*. New York: Harper Collins.
- Morgan, C., Isaac, J. D. and Sansone, C. 2001. The role of interest in understanding the career choices of female and male college students. *Sex Roles: A Journal of Research*, 44(5-6), 295–320. Available: <https://doi.org/10.1023/A:1010929600004> (Accessed: 13 June 2020).
- Morris, M. A. 2003. A meta-analytic investigation of vocational interest-based job fit, and its relationship to job satisfaction, performance, and turnover. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 64(5-B).
- Moses, I., Berry, A. Saab, N. and Admiraal, W. 2017. Who wants to become a teacher? Typology of student-teachers' commitment to teaching. *Journal of Education for Teaching: International Research and Pedagogy*. 43. 444-457. 10.1080/02607476.2017.1296562.

- Moser, A. and Korstjens, I. 2018. Series: practical guidance to qualitative research. Part 3: sampling, data collection and analysis. *Eur J Gen Pract*, 24(1), 9-18. Available: <https://doi.org/10.1080/13814788.2017.1375091> (Accessed 20 September 2019).
- Moules, N. J., Venturato, L., Laing, C. M., and Field, J. C. 2017. Is it really “yesterday’s war”? What Gadamer has to say about what gets counted. *Journal of Applied Hermeneutics*, Article 1. <http://hdl.handle.net/10515/sys5sj1b80>
- Moyer, J. M. and Sinclair, A. J. 2020. Learning for sustainability: considering pathways to transformation. *Adult Education Quarterly*. 39(2), 99-107. Available: <https://doi.org/10.1177/0001848189039002004> (Accessed: 14 April 2020).
- Moyo, N. 2014. Seke Teachers’ College accused of ‘taxing’ jobseekers. *Nehanda Radio* 3 June 2014.
- Mtika, P. and Gates, P. 2011. What do secondary trainee teachers say about teaching as a profession of their "choice" in Malawi. *Teaching and Teacher Education*, 27(2), 424-433. Available: <https://doi.org/10.1016/j.tate.2010.09.012> (Accessed: 20 July 2017).
- Mubika, A.K. and Bukaliya, R. 2011. Education for all: issues and challenges: the case of Zimbabwe. *International Journal of Social Sciences and Education*, 1(4).
- Mukaihata T. 2018. Correlation between job security as motivation and career maturity among Japanese nursing students. *Journal of Rural Medicine: JRM*. 13(2), 168-171. Available: <https://doi.org/10.2185/jrm.2961> (Accessed: 27 March 2020).
- Mukeredzi, T. G. 2009. Exploring professional development experiences of the professionally unqualified teachers in rural secondary schools. (Unpublished doctoral dissertation). University of KwaZulu-Natal, Pietermaritzburg, South Africa.
- Mukeredzi, T. G. 2015. Creating space for pre-service teacher professional development during practicum: a teacher educator’s self-study. *Australian Journal of Teacher Education*, 40(2). Available: <http://dx.doi.org/10.14221/ajte.2015v40n2> (Accessed: 2 October 2018).
- Mukeredzi, T. G. 2016(a). The “journey to becoming”: pre-service teachers’ experiences and understandings of rural school practicum in a South African context. *Global Education Review*, 3(1), 88-107.

Mukeredzi, T. G. and Nyachowe, M. S. 2018. The content and evolution of practical theories of teaching: experiences of professionally unqualified teachers in rural Zimbabwe secondary schools. *SAGE Open*. Available: <https://doi.org/10.1177/2158244018785410> (Accessed: 25 February 2019).

Mukeredzi, T. G. 2016(b). The nature of professional learning needs of rural secondary school teachers: voices of professionally unqualified teachers in rural Zimbabwe. *SAGE Open*, 6, 1–12. Available: <https://doi.org/10.1177/2158244016643142> (Accessed: 13 January 2017).

Mukeredzi, T. G., Bertram, C. and Mthiyane, N. 2015. Becoming professionally qualified: the school-based mentoring experiences of part-time PGCE students. *South African Journal of Education*, 35. Available: <https://doi.org/10.15700/saje.v35n2a1057> (Accessed: 20 March 2017).

Munangagwa, C. L. 2009. The economic decline of Zimbabwe. *Gettysburg Economic Review*, 3(1).

Available at: <https://cupola.gettysburg.edu/ger/vol3/iss1/9> (Accessed: 24 June 2020).

Murerwa, H. 2004. National Report on the development of education: Ministries of Education, Sport and Culture and Higher and Tertiary Education: Zimbabwe. Paper presented at the 47th Session of the International Conference on Education, Geneva, Switzerland.

Mushwatu, Z. 2017. Higher education in a failed economy- Students at risk. Available: <https://www.universityworldnews.com/post.php?story=20170228080437123> (Accessed: 24 June 2020).

Ndirangu, M. and Udoto, M. 2011. Quality of learning facilities and learning environment: challenges for teaching and learning in Kenya's public universities. *Quality Assurance in Education*, 19, 208-223. Available: <https://doi.org/10.1108/09684881111158036> (Accessed: 13 March 2020).

Nazia, A. and Muhd, O. 2019. Students' interests in technical and vocational education and training (TVET) Program: a systematic review. *Conference: ICERP2019*, Palm Garden Putrajaya, Malaysia.

Neils, M. N. 2020. Transformative pedagogy for entry level PPL. *Edu. Sci*, 10(1), 6. Available: <https://doi.org/10.3390/educsci100010006> (Accessed: 2 May 2020).

Ngene, B., Quadri, A., Tenebe, I. and Bamigboye, B. 2018. Assessment of student's classroom learning outcome: influence of environmental factors. *Conference: EDULEARN18-10th annual International Conference on Education and New Learning Technologies*. Palma de Mallorca (Spain). Available: DOI: 10.21125/edulearn.2018.0906 (Accessed: 3 May 2020).

Ngene, B., Quadri, A., Bamigboye, G. and Tenebe, I. 2018. Nigerian educational system: in the pursuit of right physical environment for learning.  
Available: <https://doi.org/10.21125/edulearn.2018.0914> (Accessed: 9 April 2020).

Nieuwenhuis, J. 2016. Qualitative research designs and data-gathering techniques. In: K. Maree (ed.). *First steps in research*. Pretoria: Van Schaik Publishers, 72-100.

Noble, H. and Smith, J. 2015. Issues of validity and reliability in qualitative research. *Evidence Based Nursing*, 18 (2), 34-35.

Nogueiras, G., Iborra, A. and Kunnen, E. 2018. Experiencing Transformative learning in a Counselling Masters' course: a process-oriented case study with a focus on the emotional experience. *Journal of Transformative Education*.  
Available: <https://doi.org/10.1177/1541344618774022> (Accessed: 27 October 2018).

Nolan, A. and Molla T. 2018. Teacher professional learning through pedagogy of discomfort, *Reflective Practice*, 19:6, 721-735, DOI: [10.1080/14623943.2018.1538961](https://doi.org/10.1080/14623943.2018.1538961)

Nuang chalem, P. and Prachagool, V. 2010. Promoting transformative learning of pre-service teachers through contemplative practices. 6(1).

Nyamwange, J. 2016. Influence of students' interest on career choice among first year university students in public and private universities in Kisii County, Kenya. *J. Educ. Pract*, 7(7).

Nyström, A.S., Jackson, C. and Karlsson, M.S. 2019. What counts as success? Constructions of achievement in prestigious higher education programmes, *Research Papers in Education*, 34(4), 465-482 Available: <https://doi.org/10.1080/02671522.2018.1452964> (Accessed: 27 March 2020).

Nyumba, T.O., Wilson, K.A., Derrick, C.J. and Mukherjee, N. 2018. The use of focus group discussion methodology: insights from two decades of application in conservation. *Methods in Ecology and Evolution*, 9, 20-32.

Nziramasa, C.T. 1999. Report of the Zimbabwe Presidential Commission of Inquiry into Education and Training. Harare, Zimbabwe: Government Printers. Available: <http://ir.uz.ac.zw/handle/10646/1191> (Accessed 24 June 2020).

OECD Teachers' Professional Learning (TPL) Study-Design and Implementation. 2019. ([www.oecdteacherready.org](http://www.oecdteacherready.org)) <http://www.oecd.org/education/school-resources-review/TPL-Study-Design-and-Implementation-Plan.pdf> (Accessed 10 August 2020).

Olakulehin, F.K. 2007. Information and Communication technologies in teacher training and professional development in Nigeria. *Turkish Online Journal of Distance Education*, 8(1), 133-142

Oliveira, S. M. 2018. Trends in academic library space: from book boxes to learning commons. *Open Information Science*, 2, 59-74. <https://doi.org/10.1515/opis-2018-0005> (Accessed: 27 March 2019).

Oltmann, S. 2016. Qualitative Interviews: A Methodological Discussion of the Interviewer and Respondent Contexts. Forum: *Qualitative Social Research*. 17.

Onosu, O. G. 2020. Cultural immersion: a trigger for transformative learning. *Soc. Sci.*, 9(2), 20. Available: <https://doi.org/10.3390/socsci9020020> (Accessed: 24 June 2020).

O'Sullivan, E. 2012. Deep transformation: Forging a planetary worldview. In E. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research and practice* (pp. 162–177). San Francisco: Jossey-Bass

O' Sullivan, E.1999. *Transformative Learning: Educational visionfor the 21<sup>st</sup> century*. London: Zed Books.

O'Sullivan, M. 2006. Lesson observation and quality in primary education as contextual teaching and learning processes. *International Journal of Educational Development - INT J EDUC DEV*. 26. 246-260. 10.1016/j.ijedudev.2005.07.016.

Palis, A., and Quiros, P. 2014. Adult Learning Principles and Presentation Pearls. *Middle East African journal of ophthalmology*. 21. 114-122. 10.4103/0974-9233.129748.

Palmer, J. M. and van Wyk, M. M. 2013. Exploring pre-service teachers' views regarding teaching for transformation: a proposed autonomous-transformative framework for higher education institutions. *Mediterranean Journal of Social Sciences*, 4(13), 463. Available: <https://www.richtmann.org/journal/index.php/mjss/article/view/1537> (Accessed: 3 July 2020).

Pappas, C. 2016. The transformative Learning Theory: What e-Learning Professionals should know. <https://elearningindustry.com/transformative-learning-theory-what-elearning-professionals-should-know>. (Accessed 23 January 2019).

Papastamatis, A. and Panitsides, E. A. 2014. Transformative learning: advocating for a holistic approach. *Review of European Studies*, 6(4), 74–81.

Park, I. (2005). Teacher commitment and its effects on student achievement in American high schools. *Educational Research and Evaluation*. 11. 461-485. 10.1080/13803610500146269.

Parrott, W.G. and Schulkin, J. 1993. Neuropsychology and cognitive nature of emotions. *Cognition and Emotions*, 7, 43-59.

Pascarella, E. and Terenzini, P. 1983. Predicting voluntary freshman year persistence/withdrawal behaviour in a residential university: A path analytic validation of Tinto's model. *Journal of Educational Psychology*, 75, 215-226 doi10.1037/0022-0663.75.2.215

Pather, S., Norodien-Fataar, N., Cupido, X. and Mkonto, N. 2017. First year students' experience of access and engagement at a university of technology. *Journal of Education*, 69.

Patton, M. 2015. *Qualitative research and evaluation methods*. (4<sup>th</sup> ed.). Thousand Oaks, CA.: Sage Publications.

Paul, L. A. 2014. *Transformative experience*. Oxford: Oxford University Press.

Paul, R. W., and Elder, L. 2000. Critical thinking handbook: Basic theory and instructional structures. Retrieved November 3, 2005, from <http://www.criticalthinking.org/resources/articles/the-role-of-questions.shtml>. (Accessed 18 March 2020)

Pavlakis, M. 2017. Developing competent adult educators in learning organizations. PhD thesis. Patras: Hellenic Open University.

Pearson, M. L., Albon, S. P. and Hubball, H. 2015. Case study methodology: flexibility, rigour, and ethical considerations for the scholarship of teaching and learning. *The Canadian Journal for*

*the Scholarship of Teaching and Learning*, 6(3). Available: <https://doi.org/10.5206/cjsotl-rcacea.2015.3.12> (Accessed: 15 April 2019).

Peer, K. S. 2017. Perspective transformation: a mechanism to assist in the acceptance of contemporary education reform in athletic training. *Athletic Training Education Journal*, 12(2), 73-80.

Perry, L., Stoner, L. and Tarrant, M. 2016. More than a vacation: Short-term study abroad as a critically reflective, transformative learning experience. *Creative Education*, 3, 679–683.

Phillips, E. 2019. *IC? I see! Developing learners' intercultural competence-Sedl*. American Institute for Research. LOTE CED Communiqué, Issue 3. Austin, TX: LOTE Center for Educator Development.

Phillips, P. A. and Smith, L.R. 1992. The effect of teacher dress on student perceptions. *Educational Resources Information Center (ERIC)* Po33944 pp.1-27.

Piercy, G. 2013. Transformative learning theory and spirituality: a whole-person approach. Theoretical, review & reflection articles. *Journal of Instructional Research*, 2.

Pilonieta, P., Hathaway, J., Medina, A. and Casto, A. 2019. The Impact of explicit comprehension strategy instruction on first- and second-grade at-risk students. *Journal of Education*, 199(3), 128–141. Available: <https://doi.org/10.1177/0022057419854346> (Accessed: 24 March 2019).

Pop, M. M., and Turner, J. E. 2009. “To Be or Not to Be ... a Teacher? Exploring Levels of Commitment Related to Perceptions of Teaching among Students Enrolled in a Teacher Education Program.” *Teachers and Teaching* 15 (6): 683–700. doi:10.1080/13540600903357017

Preston, J. P., Ogenchuk, M.J. and Nsiah J.K. 2014. Peer mentorship and transformational learning: PhD student experiences. *Canadian Journal of Higher Education*, 44(1), 52-68.

Quinney, L., Dwyer, T. and Chapman, Y. 2016. Who, where, and how of interviewing peers: implications for a phenomenological study. *SAGE Open*, 6.  
Available: <https://doi.org/10.1177/2158244016659688> (Accessed: 27 April 2017).

Radwan, D.A. 2016. Exploring the dynamics of transformative learning, social action, and Web 2.0: the case of Egyptian student activists. *Spectrum Research Repository*, Available: [https://spectrum.library.concordia.ca/981554/1/Radwan\\_MA\\_F2016.pdf](https://spectrum.library.concordia.ca/981554/1/Radwan_MA_F2016.pdf) (Accessed: 28 November 2018).

Rahi, S. 2017. Research design and methods: a systematic review of research paradigms, sampling issues and instruments development. *Int J Econ Manag Sci*, 6, 403. Available: <https://doi.org/10.4172/2162-6359.1000403> (Accessed 6 April 2019).

Rahman, M. M. and Hoque, A.K. 2017. Transformative learning: a concept and powerful vision for adult educators. *AKMCC*, 8(2), 128-131.

Raikou, N. and Karalis, T. 2016. Adult education and higher education - a focus on transformative learning in universities. *International Education & Research Journal [IERJ]*, 2(4), 19-22.

Raikou, N. 2018. Orientations on disorienting dilemma: towards an integral conceptualization between theory and practice. In *Proceedings of the 3<sup>rd</sup> Conference of ESREA'S Network Interrogating Transformative Processes in Learning and Education: 'Contemporary Dilemmas and Learning for Transformation'*. Milan, Italy: ESREA and Italian Transformative Learning Network.

Rainie, L., and Anderson, J. 2017. The future of jobs and jobs training. Pew Research Center. Retrieved from <http://www.pewinternet.org/2017/05/03/the-future-of-jobs-and-jobs-training/> (Accessed 20 March 2019).

Rarieya, J. 2005. Reflective dialogue: what's in it for teachers? A Pakistan case. *Journal of In-service Education*. 31. 313-336. 10.1080/13674580500200362.

Rashid, H. 2010. Public private partnership (PPP) in education: a comparative study between Bangladesh and Pakistan. *Rajagiri Journal of Social Developmen*, 4(1).

Razak, A., Darmawan, N., Gusti, I. and Keeves, J. 2009. *Teacher commitment*. Available: [https://doi.org/10.1007/978-0-387-73317-3\\_22](https://doi.org/10.1007/978-0-387-73317-3_22) (Accessed 4 June 2018).



- Reeves, T. and Lowenhaupt, R. 2016. Teachers as leaders: pre-service teachers' aspirations and motivations. *Teaching and Teacher Education*, 57. Available: <https://doi.org/176-187>. 10.1016/j.tate.2016.03.011 (Accessed 3 February 20170).
- Reeve, J. and Jang, H. 2006. What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology*, 98, 209-218.
- Regan, P.M. 2002. Civil Wars and Foreign Powers: Outside Intervention in Intrastate Conflict. Ann Arbor: Univ. Mich. Press
- Republic of South Africa (RSA) 2000. *Adult Basic Education and Training Act, 2000 (Act No. 52 of 2000)*. Pretoria: Government Printers.
- Rijlaarsdam, G. and Groenendijk, T. 2013. Learning to be creative. The effects of observational learning on students' design products and processes. *Learning and Instruction*. 28. 35-47. 10.1016/j.learninstruc.2013.05.001.
- Riyad, S. 2004. Centering Spirituality in the Academy: Toward a Transformative Way of Teaching and Learning. *Journal of Transformative Education*. 2. 294-312. 10.1177/1541344604268330.
- Roberts, J. 2011. Video diaries: A tool to investigate sustainability-related learning in threshold spaces. *Environmental Education Research*, 17(5), 675–688.
- Roberts, K., Dowell, A. and Nie, J.B. 2019. Attempting rigour and replicability in thematic analysis of qualitative research data: a case study of codebook development. *BMC Medical Research Methodology*, 19. Available: <https://doi.org/10.1186/s12874-019-0707-y> (Accessed: 19 March 2020).
- Robinson, P. 2004. Meditation: its role in transformative learning and in the fostering of an integrative vision for higher education. *Journal of Transformative Education*, 2(2), 107–119. Available: <https://doi.org/10.1177/1541344603262317> (Accessed: 13 May 2019).
- Roe, A. and Lunneborg, P. W. 1990. Personality development and career choice. In: D. Brown and L. Brooks (eds.). *The Jossey-Bass management series and the Jossey-Bass social and behavioral science series. Career choice and development: Applying contemporary theories to practice*. San Francisco: Jossey-Bass, 68–101.

Rogoff, B., Callanan, M., Gutierrez, K. and Erickson, F. 2016. The organization of informal learning, *ERIC* 40(1), 356-401. Available: <https://doi.org/10.3102/0091732X16680994> (Accessed: 12 December 2018).

Rollman, S. A. (1980). Some effect of teachers' styles of dress. (Report No.CSOS-502-885). Harrisonburg, VA: James Madison University. (*ERIC Document Reproduction Service No. ED 184 191*)

Roness, D. and Smith, K. 2010. Stability in motivation during teacher education. *Journal of Education for Teaching*, 36(2), 169–185.

Ross, A., Dlungwane, T. and Van Wyk, J. 2019. Using poster presentation to assess large classes: a case study of a first-year undergraduate module at a South African university. *BMC Med Educ*, 19, 432. Available: <https://doi.org/10.1186/s12909-019-1863-9> (Accessed: 16 July 2019).

Roth, W. M and Lee, Y. J. 2007. Vygotsky's neglected legacy: cultural-historical activity theory. *Review of Educational Research*, 77, 186-232.

Ryan, G. 2018. Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*, 25(4), 41-49.

Ryan, R.M. and Deci, E.L. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am Psychol*. 55(1): 68–78. PMID:11392867

Sahi, S.K. 2017. Psychological biases of individual investors and financial satisfaction. *Journal of Consumer Behaviour*, 16(6), 511-535.

Sakinofsky, P., Amigo, M. and Janks, A. 2018. green sprouts: transformative learning in learning through participation (LTP). *Educational Research for Social Change*, 7(2), 132- 145. Available: <http://dx.doi.org/10.17159/2221-4070/2018/v7i2a9> 2020-04-20 (Accessed: 5 September 2018).

Samkange, W. 2013. Training teachers at a distance: perceptions and challenges of open and distance learning (ODL) in teacher education the Zimbabwean experience. *The Turkish Online Journal of Distance Education*, 14, 222-234.

Sangra, A. and Gonzalez-Sanmamed, M. 2016. The role of information and communication technologies in improving teaching and learning processes in primary and secondary

schools', *Research in Learning Technology* 18(3), 207–

220. <https://doi.org/10.1080/09687769.2010.529108> (Accessed 12 March 2020).

Santalucia, S. and Johnson, C. R. 2010. Transformative learning: facilitating growth and change through fieldwork. *OT Practice*, 15(19), CE1-CE7.

Santiago Ortiz-Correa, J., Resende Fihlo, M. and Dinar, A. 2015. Impact of access to water and sanitation services on educational attainment. *Water Resources and Economics*.

<http://dx.doi.org/10.1016/j.wre.2015.11.002> 2212-4284/& 2015 (Accessed 26 June 2020).

Saragih, A.E.S.S. 2017. Development of learning devices based on contextual teaching and learning model based on the context of Aceh cultural to improve mathematical representation and self-efficacy ability of SMAN 1 Peureulak Students. *Development*, 8(27).

Sari L.K., De Backer, F. and Lombaerts, K. 2018. Pre-service teachers' resilience towards school children's problems in remote areas. 9th ICEEPSY 2018 International Conference on Education and Educational Psychology.

Saunders, M., Lewis, P. and Thornbill, A. 2012. Research Methods for Business Studies. Chapter 4. Understanding research philosophy and approaches to theory development. In book: Research Methods for Business Students, 128-171.

Savickas, M. L. 1999. Examining the personal meaning of inventoried interests during career counseling. *Journal of Career Assessment*, 3(2), 188-201.

Available: <https://doi.org/10.1177/106907279500300206> (Accessed: 27 July 2018).

Sayed, Y. and McDonald, Z. 2017. 'Motivation to become a Foundation Phase teacher in South Africa', *South African Journal of Childhood Education* 7(1), a548. <https://doi.org/10.4102/sajce.v7i1.548> Accessed 17 March 2017.

Sayılan, F. 2009. Jack Mezirow ve Dönüştürücü Öğrenme Kuramı Yetişkin Eğitimi kuramdan uygulamaya. İstanbul:Kalkedon. Available:

[https://epale.ec.europa.eu/sites/default/files/transformative\\_learning\\_theory\\_and\\_transformation\\_in\\_adult\\_education.pdf](https://epale.ec.europa.eu/sites/default/files/transformative_learning_theory_and_transformation_in_adult_education.pdf) (Accessed: 24 March 2017).

Schank, R.C. 1999. Dynamic memory revisited. Cambridge: Cambridge University Press.

Schelfhout, S., Wille, B., Fonteyne, L. Roels, E. De Fruyt, F. and Duyck, W. 2019. The effects of vocational interest on study results: student person – environment fit and program interest

diversity. *PLoS ONE* 14(4): e0214618. Available: <https://doi.org/10.1371/journal.pone.0214618> (Accessed 20 April 2020).

Schmader, T. and Sedikides, C. 2018. State Authenticity as Fit to Environment: The Implications of Social Identity for Fit, Authenticity, and Self-Segregation. *Personality and Social Psychology Review*. 22(3), 228-259.

Schön, D.A. 1987. *Educating the reflective practitioner*, San Francisco: Jossey-Bass

Schoo, A., Lawn, S., Rudnik, E. and Litt, C. 2015. Teaching health science students foundation motivational interviewing skills: use of motivational interviewing treatment integrity and self-reflection to approach transformative learning. *BMC Medical Education*, 15.  
Available: <https://doi.org/10.1186/s12909-015-0512-1> (Accessed: 3 June 2018).

Sebastian, R., and Bristol, D. 2008. Formal or informal? The impact of style of dress and forms of address on business students' perceptions of professors. *Journal of Education for Business*, March/April, 196-201

Seidman, I. 1998. *Interviewing as qualitative research: a guide for researchers in education and social sciences*. New York, NY: New York Teachers' College Press.

Seidman, I. 2013. *Interviewing as qualitative research: a guide for researchers in education and the social sciences*. Thousand Oaks, CA: Sage.

Serdyukov, P. 2017. Innovation in education: what works, what doesn't, and what to do about it? *Journal of Research in Innovative Teaching & Learning*, 10(1), 4- 33.

Sengupta, P. 2013. Potential health impacts of hard water. *International Journal of Preventive Medicine*, 4(8), 866–875.

Senyshyn, R. M. 2018. Teaching for transformation: converting the intercultural experience of pre-service teachers into intercultural learning, *Intercultural Education*, 29, 2, 163-184, Available: <https://doi.org/10.1080/14675986.2018.1429791> (Accessed: 16 August 2019).

Serin, H. 2017. The role of passion in learning and teaching. *International Journal of Social Sciences & Educational Studies*, 4(1), 60-64.

Shah, J. B. and Paudel, N. P. 2018. An Analysis of Intrinsic and Extrinsic Factors of Teacher Motivation at Surkhet. *Journal of Educational System* 2(3): 25-31 ISSN 2637-5877.

Shandomo, H.M. 2010. The role of critical reflection in teacher education. *School–University Partnerships*, 4, 101–113.

Sharan, B., Merriam, E. and Tisdell, J. 2015. Qualitative Research. A Guide to Design and Implementation. 4<sup>th</sup> Edition. San Fransco: Jossey-Bass.

Shava, G., Gunhidzirai, C. and Shava, E. 2016. Exploring the Experiences of Young Adults Emerging from Child-headed Households in Alice, South Africa. *Journal of Human Ecology*. 55. 92-103. 10.1080/09709274.2016.11907013

Shelton, J. 2011. Education innovation: what it is and why we need more of it. Education Week, Sputnik post, September 28, available at: [http://blogs.edweek.org/edweek/sputnik/2011/09/education\\_innovation\\_what\\_it\\_is\\_and\\_why\\_we\\_need\\_more\\_of\\_it.html](http://blogs.edweek.org/edweek/sputnik/2011/09/education_innovation_what_it_is_and_why_we_need_more_of_it.html) (Accessed: 16 September 2017).

Shernoff, D. J., Kelly, S., Tonks, S. M., Anderson, B., Cavanagh, R. F., Sinha, S. and Abdi, B. 2016. Student engagement as a function of environmental complexity in high school classrooms. *Learning and Instruction*, 43, 52–60. Available: <https://doi.org/10.1016/j.learninstruc.2015.12.003> (Accessed 25 August 2018).

Sihotang, L., Setiawan, D. and Saragi, D. 2017. The effect of learning strategy and self - confidence toward student's learning outcomes in elementary school. *IOSR Journal of Research & Method in Education*, 7(4), 65-72.

Simm, D. and Marvell, A. 2015. Gaining a “sense of place” Students’ affective experiences of place leading to transformative learning on international fieldwork. *Journal of Geography in Higher Education*. 10.1080/03098265.2015.1084608.

Singleton, J. 2015. Head, heart and hands model for transformative learning: place as context for changing sustainability values. *Journal of Sustainability Education*, 9, 1-16.

Slimbach, Richard. 2017. *Balancing the benefits: the art of intervention*. Sterling: Stylus.

Snyder, C., DeJoy, J. and Oppenlander, J. 2017. Mapping the transformative journey of graduate students. *International HETL Review*, 7. Available: <https://www.hetl.org/mapping-the-transformative-journey-of-graduate-students> (Accessed: 26 June 2019).

Snyder, C. 2008. grabbing hold of a moving target: identifying and measuring the transformative learning process. *Journal of Transformative Education*, 6, 159-181.  
Available: <https://doi.org/10.1177/1541344608327813> (Accessed: 30 November 2018).

Soedirgo, J., and Glas, A. 2020. Toward Active Reflexivity: Positionality and Practice in the Production of Knowledge. *Political Science and Politics*. 53(3):527-531.  
<https://www.cambridge.org/core/journals/ps-political-science-and-politics> (Accessed 23 February 2021)  
[doi.org/10.1017/S1049096519002233](https://doi.org/10.1017/S1049096519002233)

Sordello, R. 1992. Facing the world with soul: the re-imagination of modern life. New York: Harper Perennial.

South, J. 2016. What do we mean when we say transformative learning experiences powered by technology? The Office of Educational Technology (OET). Available:  
<https://medium.com/@OfficeofEdTech/what-do-we-mean-when-we-say-transformative-learning-experiences-powered-by-technology-d6fd1af9e257> (Accessed: 27 July 2020).

Sprow Forte, K., and Blouin, D. 2016. Fostering Transformative Learning in an Online ESL Professional Development Program for K-12 Teachers. *The Qualitative Report*, 21(4), 781-797.  
Retrieved from <https://nsuworks.nova.edu/tqr/vol21/iss4/12> (Accessed 13 May 2018).

Stafford, K. J. 2017. "Student affairs approaches to religion and spirituality in U.S. public higher education" . Electronic Theses and Dissertations. 362. <https://scholarworks.uni.edu/etd/362> (Accessed 20 June 2020).

Stake, R.E. 2006. *Multiple case study analysis*. The Guilford Press, New York.

Starace, F., Mungai, F., Sarti, E. and Addabbo, T. 2017. Self-reported unemployment status and recession: an analysis on the Italian population with and without mental health problems. *PLoS ONE*, 12(4), e0174135.

Stewart, D.W. 2018. Focus groups. In: B. B. Frey (ed.). *The SAGE encyclopaedia of educational research, measurement, and evaluation*, 2, 687–692.

- Stewart, D. W. and Shamdasani, P. N. 2015. Focus groups: Theory and practice (Vol. 20). Los Angeles, Calif: SAGE.
- Steyn, G. M. 2017. Transformative learning through teacher collaboration: a case study, *Koers – Bulletin for Christian Scholarship*, 82(1), Available at <https://doi.org/10.19108/KOERS.82.1.222> (Accessed: 15 May 2018).
- Stover, C. M. 2016. Reflection Promotes Transformation in a Service Learning Course. *Metropolitan Universities*, 27(1), 25-43.
- Stranger, H. and Gibson H.J. 2017. An investigation of experiential and transformative learning in study abroad programs. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 29, 85-100.
- Stuckey, H. L., Taylor, E. W. and Cranton, P. 2013. Developing a survey of transformative learning outcomes and processes based on theoretical principles. *Journal of Transformative Education*, 11, 211–228.
- Surmiak, A. 2018. Confidentiality in qualitative research involving vulnerable participants: researchers' perspectives. *Forum Qualitative Sozialforschung*, 19, art.12.
- Sutcher, L., Darling-Hammond, L., and Carver-Thomas, D. 2016. *A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.* Palo Alto, CA: Learning Policy Institute.
- Swanson, P. B. 2012. The congruence of vocational interests and the workplace environment: reducing the language teacher shortage. *World Languages and Cultures Faculty Publications*, 23. Available: [https://scholarworks.gsu.edu/mcl\\_facpub/23](https://scholarworks.gsu.edu/mcl_facpub/23) (Accessed 3 May 2020).
- Swartz, A.L. and Tisdell, E.J. 2012. Wisdom, complexity, and adult education: emerging theory and meanings for practice. *Adult Education Research Conference*. Available: <https://newprairiepress.org/aerc/2012/papers/45> (Accessed: 30 December 2017).
- Sweeder, R. D. and Jeffery, K. A. 2013. A comprehensive general chemistry demonstration. *Journal of Chemical Education*, 90(1), 96-98 .
- Tahiri, A. 2010. Fostering transformative learning: the role of professors and students at the university of Prishtina., *Interchange* 41(2), 141-159. Available: <https://doi.org/10.1007/s10780-01-9121-4> (Accessed 28 July 2019).

- Tamashiro, R. 2018. Planetary consciousness, witnessing the inhuman and transformative learning: insights from peace pilgrimage oral histories and auto-ethnographies. *Religions*, 9(5), 148. Available: <https://doi.org/10.3390/rel9050148> (Accessed: 2 February 2019).
- Tarrant, M. A. 2010. A conceptual framework for exploring the role of studies abroad in nurturing global citizenship. *Journal of Studies in International Education*, 14(5), 433-451.
- Tarrant, M.A., Rubin D. L. and Stoner L. 2014. The added value of study abroad: fostering a global citizenry. *Journal of Studies in International Education*, 18, 141–61.
- Tarusikirwa, M. 2016. Understanding the barriers to collaborative research: experiences of some academics at the Zimbabwe Open University. *American Journal of Education and Learning*, 2, 132-139. Available: <https://doi.org/10.20448/804.2.2.132.139> (Accessed: 13 March 2017).
- Tawfik, A., Sánchez, L. and Saparova, D. 2014. The effects of case libraries in supporting collaborative problem-solving in an online learning environment. *Technology, Knowledge, and Learning*, 19(3), 337-358.
- Taylor, E.W. 1997. Building Upon the Theoretical Debate: A Critical Review of the Empirical Studies of Mezirow's Transformative Learning Theory. *Adult Education Quarterly*. 48(1):34-59. doi:10.1177/074171369704800104
- Taylor, E. W. 1998. The theory and practice of transformative learning: a critical review (Information Series No. 374) Columbus, OH: ERIC Publications.
- Taylor, E. W. 2007. An update of transformative learning theory; A critical review of the empirical research (1999-2005). *International Journal of Lifelong Education*, 26(2), 173-191.
- Taylor, E. W. 2008. Transformative learning theory. New directions for adult and continuing education, (119), 5-15. Available: <https://doi.org/10.1002/ace.301> (Accessed: 18 July 2018).
- Taylor, E. W. 2009. Fostering transformative learning. In J. Mezirow and E. W. Taylor (with Associates) (eds.). *Transformative learning in practice: insights from community, workplace, and higher education*. San Francisco, CA: Jossey-Bass, 3-17.
- Taylor, E. W. 2017. *Transformative learning theory*. Available: [https://doi.org/10.1007/978-94-6300-797-9\\_2](https://doi.org/10.1007/978-94-6300-797-9_2) (Accessed 29 January 2017).



- Taylor, E. W. and Cranton, P. 2013. A theory in progress? Issues in transformative learning theory. *European Journal for Research on the Education and Learning of Adults*, 4, 35-47. Available: <https://doi.org/10.3384/rela.2000-7426.rela5000> (Accessed: 23 February 2017).
- Taylor, E. W. and Laros, A. 2014. Researching the practice of fostering transformative learning: lessons learned from the study of andragogy. *Journal of Transformative Education*, 12(2), 134–147. Available: <https://doi.org/10.1177/1541344614548589> (Accessed 18 January 2017).
- Taylor, E.W. and Snyder, M.J. 2012. A Critical Review of Research on Transformative Learning Theory, 2006-2010. in E.W. Taylor, P. Cranton and Associates (eds.) *The Handbook of Transformative Learning: Theory, Research, and Practice*, San Francisco, CA: Jossey-Bass, 37-55.
- Taylor, E. W. and Snyder, M. 2012. A critical review of research on transformative learning theory, 2006-2010. In E. Taylor & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice* (pp. 37-55). San Francisco, CA: Jossey-Bass.
- Taylor, K. and Elias, D. 2012. Transformative learning: a developmental perspective. In E. W. Taylor and P. Cranton (eds.). *The handbook of transformative learning: theory, research, and practice*. San Francisco: Jossey-Bass, 147-162.
- Teherani, A., Martimianakis, M., Stenfors, T., Wadhwa, A. and Varpio, L. 2015. Choosing a qualitative research approach. *Journal of Graduate Medical Education*, 7, 669-670. Available: <https://doi.org/10.4300/JGME-D-15-00414.1> (Accessed: 4 April 2018).
- Terzuolo, E.R. 2018. Intercultural development in study abroad: influence of student and program characteristics. *International Journal of Intercultural Relations*, 65, 86-95. <https://doi.org/10.1016/j.ijintrel.2018.05.001> (Accessed: 2 April 2020).
- Tess, P. 2013. The role of social media in higher education classes (real and virtual) – A literature review. *Computers in Human Behaviour*, 29, A60–A68. Available: <https://doi.org/10.1016/j.chb.2012.12.032> (Accessed: 10 March 2018).
- Thebe, V. 2018. Youth, agriculture and land reform in Zimbabwe: experiences from a communal area and resettlement scheme in semi-arid Matabeleland, Zimbabwe. *African Studies*, 1-18. Available: <https://doi.org/10.1080/00020184.2018.1466516> (Accessed 16 April 2018).

- Thebe, V. 2018. Youth, agriculture and land reform in Zimbabwe: Experiences from a communal area and resettlement scheme in semi-arid Matabeleland, Zimbabwe. *African Studies*. 1-18. 10.1080/00020184.2018.1466516.
- Theron, L., Mitchell, C., Smith, A. and Stuart, J. 2011. *Picturing Research: drawing as visual methodology*. Available: <https://doi.org/10.1007/978-94-6091-596-3> (Accessed: 15 February 2017).
- Thorne, S. 2000. Data analysis in qualitative research. *Evidence Based Nursing*, 3, 68-70. Available: <https://doi.org/10.1136/ebn.3.3.68> (Accessed: 27 May 2019).
- Tien, D.T.K., Namasivayam, S.N. and Ponniah, L. S. 2019. A review of transformative learning theory with regards to its potential application in engineering education. AIP Conference Proceedings 2137, 050001 (2019). Available: <https://doi.org/10.1063/1.5121003> (Accessed: 3 March 2020).
- Timperley, H. 2011. *Realizing the power of professional learning*. Berkshire, UK: Open University Press.
- Tinto, V. 2003. Learning better together: the impact of learning communities on student success. *Higher Education Monograph Series*. New York: Syracuse University.
- Tisdell, E. J. 2012. Themes and variations of transformational learning: interdisciplinary perspectives on forms that transform. In: E. W. Taylor and P. Cranton (eds.). *The handbook of transformative learning: theory, research, and practice*. San Francisco, CA: Jossey-Bass, 21-36.
- Tofade, T., Elsner, J. and Haines, S. 2013. Best Practice Strategies for Effective Use of Questions as a Teaching Tool. *American journal of pharmaceutical education*. 77. 155. 10.5688/ajpe777155. Available: <https://doi.org/10.5688/ajpe777155> (Accessed 19 May 2019).
- Topkaya, E.Z. and Uztosun, M.S. 2012. Choosing Teaching as a Career: Motivations of Pre-service English Teachers in Turkey. *Journal of Language Teaching and Research*, 3, 126-134.
- Toropova A., Myrberg, E. and Johansson, S. 2020. Teacher job satisfaction: the importance of school working conditions and teacher characteristics, *Educational Review*, Available: <https://doi.org/10.1080/00131911.2019.1705247> (Accessed 18 April 2020).

Tran, L. T. 2012. Transformative learning and international students' negotiation of tertiary education. In: M. Blythman and S. Sovic. (eds.). *International students negotiating higher education: critical perspectives*. London: Routledge, 124-141.

Trilokekar, R. D. and Kukar, P. 2011. Disorienting experiences during study abroad: Reflections of pre-service teacher candidates. *Teaching and Teacher Education* 27: 1141–50.

Trussell, D. E. 2014. Dancing in the margins: Reflections on social justice and research identities. *Journal of Leisure Research*, 46(3), 342–352.  
<https://doi.org/10.1080/00222216.2014.11950330>

Tschannen-Moran, M., Hoy, A. and Hoy, Wayne. 1998. Teacher Efficacy: Its Meaning and Measure. *Review of Educational Research* - REV EDUC RES. 68. 202-248.  
10.3102/00346543068002202.

Turley, R. N. L. and Wodtke, G. 2010. College residence and academic performance: who benefits from living on campus? *Urban Education*, 45(4), 506–532. Available:  
<https://doi.org/10.1177/0042085910372351> (Accessed: 15 April 2019).

Underwood, J. D. M. 2006. *Academic dishonesty in tests and examinations*. London: Qualifications and Curriculum Authority.

UNESCO. 2014. Education for all global monitoring report 2014: teaching and learning: achieving quality for all. Reliefweb. Available: <https://reliefweb.int/report/world/education-all-global-monitoring-report-2014-teaching-and-learning-achieving-quality-all> (Accessed 27 March 2020).

UNESCO.1996. Learning: The Treasure Within pp.146-147.

Utley, J. and Showalter, B. 2007. Preservice elementary teachers' visual images of themselves as mathematics teachers. *Focus on Learning Problems in Mathematics*, 29(3), 1-14.

United Nations Office for the Coordination of Humanitarian Affairs (OCHA). 2019. Global Humanitarian Overview. Available:<https://www.unocha.org> (Accessed 12 June 2020).

Van Ruler B. 2018. Communication Theory: An Underrated Pillar on Which Strategic Communication Rests, *International Journal of Strategic Communication*, 12:4, 367-381, DOI: [10.1080/1553118X.2018.1452240](https://doi.org/10.1080/1553118X.2018.1452240)

Van Iddekinge, C., Roth, P., Putka, D. and Lanivich, S. 2011. Are you interested? A meta-analysis of relations between vocational interests and employee performance and turnover. *The Journal of Applied Psychology*, 96, 1167-94. Available: <https://doi.org/10.1037/a0024343> (Accessed: 20 June 2017).

Varpio, L., Martimianakis, M. and Mylopoulos, M. 2015. Qualitative research methodologies: embracing methodological borrowing, shifting and importing. Available: <https://doi.org/10.1002/9781118838983.ch21> (Accessed 3 June 2018).

Vuban, J. A. and Etal, E. A. 2018. Educational policy borrowing in the Cameroonian higher education system: a debatable paradigm from stakeholders' perspectives. *Forum for International Research in Education*, 4(3), 77-94.

Wambu, G., Hutchison, B. and Pietrantonio, Z. 2017. Career decision-making and college and career access among recent African immigrant students. *J. College Access*, 3(17). Available: <https://scholarworks.wmich.edu/jca/vol3/iss2/6> (Accessed: 20 March 2020).

Wansink, J. 2007. Transformative learning in online courses (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (AAT 13259579).

Watt, H. M. and Richardson, P. W. 2008. Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers. *Learning and Instruction*, 18(5), 408-428.

Weber, S. 2008. Using visual images in research. In J. G. Knowles and A. L. Cole (eds.). *Handbook of the arts in qualitative research: perspectives, methodologies, examples, and issues*. London: Sage, 41-54.

West, L., Fleming, T. and Finnegan, F. 2013. Connecting Bourdieu, Winnicott, and Honneth: Understanding the experiences of non-traditional learners through an interdisciplinary lens. *Studies in the Education of Adults*, 45, 119-134.

Whalen, S. P. 2002. Report of the evaluation of the Polk Bros. Foundation's Full Service Schools Initiative: Executive summary. Chicago, IL: University of Chicago, Chapin Hall Center for Children.

- White, S. K. and Nitkin, M. R. 2014. Creating a transformational learning experience: immersing students in an intensive interdisciplinary learning environment. *International Journal for the Scholarship of Teaching and Learning*, 8(2), Article 3. Available: <https://doi.org/10.20429/ijstol.2014.080203> (Accessed 6 June 2017).
- Wigfield, A., Tonks, S. and Klauda, S. 2016. Expectancy-value theory. *Routledge Handbooks on-line* Available: <https://www.routledgehandbooks.com/doi/10.4324/9781315773384.ch4> (Accessed: 7 January 2017).
- Wiggins, G. 2011. Creative learning. In: J. Sefton-Green, P. Thomson, K. Jones and L. Bresler (eds.). *The Routledge international handbook of creative learning*. New York, NY: Routledge, 320-331.
- Wille, B., De Fruyt, F. and Feys, M. 2010. Vocational interests and big five traits as predictors of job instability. *Journal of Vocational Behaviour*, 76(3), 547-558.
- Williams, D., Wavell, C. and Coles, L. 2001. Impact of school library services on achievement and learning: Critical literature review of the impact of school library services on achievement and learning to inform the work of the DfES Task Group set up to implement actions contained in the Government's response to 'Empowering the Learning Community'. Aberdeen: Robert Gordon University.
- Williams, J., Bryan, J., Morrison, S. and Scott, T. 2017. Protective Factors and Processes Contributing to the Academic Success of Students Living in Poverty: Implications for Counselors. *Journal of Multicultural Counseling and Development*. 45. 183-200. 10.1002/jmcd.12073
- William, W. A. 2018. Strengthening college support services to improve transitioning to careers. *Journal of College Teaching and Learning*, 15(1), 5-26.
- Willingham, W.W; Pollack, J. M. Lewis, C. (2002): Grades and test scores: accounting for observed differences. *J Educ Meas*. 39(1):1-37.
- Wilson, B. 2014. *A share in the future: review of indigenous education in the Northern Territory*. Darwin: Department of Education, Northern Territory.

- Wilson, D.M., Summers, L. and Wright, J. 2020. "Faculty support and student engagement in undergraduate engineering", *Journal of Research in Innovative Teaching & Learning*, Vol. 13 No. 1, pp. 83-101. <https://doi.org/10.1108/JRIT-02-2020-0011>
- Wolhuter, C., Walt, H., Potgieter, F. M. and Thapelo L.M. 2011. What inspires South African student teachers for their future profession? *South African Journal of Education*, 32, 178-190. Available: <https://doi.org/10.15700/saje.v32n2a570> (Accessed: 7 July 2018).
- Woodrow, K. and Caruana, V. 2017. Pre-service teachers' perspective transformations as social change agents. *Journal of Transformative Education*, 15(1), 37–58. Available: <https://doi.org/10.1177/1541344616655887> (Accessed: 5 April 2018).
- World Bank. 2012. "Lebanon, Good Jobs Needed: The Role of Macro, Investment, Education, Labor and Social Protection Policies ("Miles")". *Human Development Department*, MNA. World Bank, Washington DC.
- Wu, H., Garza, E.V. and Guzman, N. 2015. International Student's Challenge and Adjustment to College. *Education Research International*, 2015, 1-9.
- Yan Lo-Philip, S. W., Carroll, C., Tan, T. L., Ann, O. Y., Tan, Y. H. and Seow, S. H. (2015). Transforming educational practices: Cultural learning for short-term sojourners. *International Journal of Intercultural Relations*, 49, 223-234. <https://doi.org/10.1016/j.ijintrel.2015.10.006> (Accessed 20 February 2018).
- Yin, R. K. 2003. *Case study research: design and methods*. Thousand Oaks, CA: Sage.
- Yin, R. K. 2009. *Case study research: design and methods* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- Yin, R. K. 2014. *Case study research design and methods* (5<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- Yong, Z., and Yue, Y. 2007. Causes for burnout among secondary and elementary school teachers and preventive strategies. *Chinese Education and Society*, 40, 78-85. Availability: <http://dx.doi.org/10.2753/CED1061-1932400508> (Accessed: 14 July 2018).
- Yorks, L. and Kasl, E. 2002. Toward a theory and practice for whole-person learning: reconceptualising experience and the role of affect. *Adult Education Quarterly*, 25(3), 176–192.
- Young, L. P. 2009. Imagine creating rubrics that develop creativity. *English Journal*, 99(2), 74-79.

Zafran, H. 2020. A narrative phenomenological approach to transformative learning: lessons from occupational therapy reasoning in educational practice. *American Journal of Occupational Therapy*, 74(1):7401347010p1 DOI: 10.5014/ajot.2020.033100 (Accessed: 28 February 2018).

Zare, P. and Othman, M. 2015. Students' perceptions toward using classroom debate to develop critical thinking and oral communication ability. *Asian Social Science*, 11.

Available: <https://doi.org/10.5539/ass.v11n9p158> (Accessed: 20 April 2020).

ZCBC Education Commission. 2016. ZCBC Education Policy Guidelines and Regulations for Catholic Schools. Zimbabwe Catholic Bishops' Conference.

Available: [https://books.google.co.zw/books/about/ZCBC\\_Education\\_Policy\\_Guidelines\\_and\\_Reg.html?id=wo23vQEACAAJ&redir\\_esc=y](https://books.google.co.zw/books/about/ZCBC_Education_Policy_Guidelines_and_Reg.html?id=wo23vQEACAAJ&redir_esc=y) (Accessed 14 April 2019).

Zembere, M. 2018. African democratic citizenship education revisited. *UJAH Unizik Journal of Arts and Humanities* 21(1), 54-70 Available: DOI: 10.4314/ujah.v21i1.3 (Accessed 2 November 2019).

Zembylas, M. 2003. Emotions and teacher identity: a post structural perspective. *Teachers and Teaching: Theory and Practice*, 9(3), 213-238.

Ziegler, K. C. 2019. Transformational learning experiences; changing relationships and comfort zones. *MAED* Available:

[https://ourspace.uregina.ca/bitstream/handle/10294/8828/Ziegler\\_Kelly\\_MAED\\_Spring2019.pdf](https://ourspace.uregina.ca/bitstream/handle/10294/8828/Ziegler_Kelly_MAED_Spring2019.pdf) (Accessed: 10 April 2020).

Zimbabwe. 2019. *Labour Act [Chapter 28:1]* Harare: Government Printers.

Zimbabwe. 1987. *Education Act [25:4]* Available: <https://zimlil.org/zw/legislation/act/1987/5> (Accessed 26 June 2017).

Zimbabwe. 1982. *Zimbabwe Legal Age of Majority 15/1982 General Law Amendment Act*. Harare: Government Printers.

Zimbabwe. 2006. *Public Service Standards of Dress*. Circular Number 10 of 2006. Available: <http://www.psc.gov.zw/circulars/10of2006.pdf> (Accessed 27 March 2018).

Zhou, Y., Jindal-Snape, D., Topping, K. and Todman, J. 2008. Theoretical models of culture shock and adaptation in international students in higher education. *Studies in Higher Education*, 33(1), 63–75. Available: <https://doi.org/10.1080/03075070701794833> (Accessed 26 March 2018).

Zhu, G. 2019. Student teachers' emotions, dilemmas and professional identity formation amid the teaching practicums. *The Asia-Pacific Education Researcher* 27(2) Available DOI: 10.1007/s40299-018-0404-3 (Accessed: 7 March 2018).

Zhu, W. Z. 1992. Confucius and traditional Chinese education: an assessment. In: R. Hayhoe (ed.). *Education and modernization: the Chinese experience*. New York: Pergamon Press, 3-22.

Zlatić, L. and Bjekić, D. 2012. Communication Competence vs. Personality Traits, 16th European Conference on Personality Psychology, Trieste, July 10-14, 2012, in: L. Di Bias, A. Carnaghi, D. Ferrante & V. Piccoli, V. (eds.): Book of abstracts, PO2-41, 231. <http://www.theoffice.it/ecp16>.( Accessed 13 July 2020).

Zweifel, C. and Van Wezemael, J. 2010. Drawing and Visualisation Research -Drawing as a qualitative research tool an approach to field work from a social complexity perspective. TRACEY: Drawing and Visualisation Research, 1–16. Retrieved from <https://www.lboro.ac.uk/microsites/sota/tracey/journal/edu/2012/PDF/ChristinaZweifelTRACEY-Journal-DK-2012.pdf> (Accessed 6 May 2017).

Zvobgo, R. J. 2007. *Contextualising the curriculum: the Zimbabwean experience*. Harare: College Press.



## APPENDICES

### Appendix A: Request for permission to conduct research



Letter to Ministry and Consent  
The Permanent Secretary  
Ministry of Higher and Tertiary, Science and Technology Development  
New Government Complex, 6<sup>th</sup> Floor Block F  
Corner 4<sup>th</sup> Street & S. Machel, Harare  
14 June 2017

Dear Sir/ Madam

#### REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a student pursuing a PhD study through Durban University of Technology. I am writing to seek permission to carry out a research at Bondolfi Teachers' College. The title of my study is "Exploring transformative learning experiences of pre-service teachers in Zimbabwean Teacher Education- A case study." The purpose of this research is to understand whether or not the pre-service teachers who join teaching as a last resort experience transformative learning by the time they reach third year of teacher training. I intend to interview 36 pre-service teachers. I will also conduct focus group discussions with 12 of the pre-service teachers, and 6 lecturers. The findings will be availed to the Ministry of Higher and Tertiary Science and Technology Development. For more information, you may contact my supervisor whose contact detail is below:

Tabitha Grace Mukeredzi, PhD  
Adult, Community and Post Graduate Education Unit  
DUT Indumiso/ Midlands Campus  
15 JF Sithole Road,  
Imbali 3201  
Pietermaritzburg

Yours faithfully

Esnati Macharaga

## Appendix B: Permission letter for data collection from Ministry of Primary and Tertiary Education

**Our Ref.: E/7/6**

18 July 2017

Mrs. Esnati Macharaga  
Bondolfi Teachers College  
P O Box 300  
**Masvingo**

---

**RE: RESEARCH ON "TRANSFORMATIVE LEARNING EXPERIENCES OF PRE-SERVICE TEACHERS IN TEACHER TRAINING COLLEGES IN ZIMBABWE: IMPLICATIONS FOR TEACHER PREPARATIONS": MINISTRY OF HIGHER AND TERTIARY EDUCATION, SCIENCE AND TECHNOLOGY DEVELOPMENT**

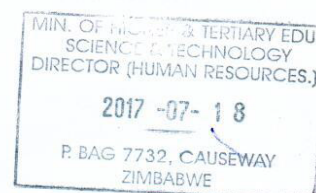
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Reference is made to your, letter in which you requested for permission to carry out a research on **"TRANSFORMATIVE LEARNING EXPERIENCES OF PRE-SERVICE TEACHERS IN TEACHER TRAINING COLLEGES IN ZIMBABWE: IMPLICATIONS FOR TEACHER PREPARATIONS"**

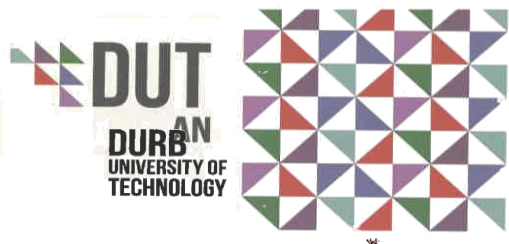
Accordingly, please be advised that the Head of Ministry has granted permission for you to carry out the research in this Ministry's Institutions only.

It is hoped that your research will benefit the Ministry and it would be appreciated if you could supply the office of the Permanent Secretary with a final copy of your study, as the findings would be relevant to the Ministry's strategic planning process.

*P. Mavhondo*  
**Acting Deputy Director – Human Resources**  
**For: PERMANENT SECRETARY**  
*/sm*



## Appendix C: University ethical clearance certificate



Institutional Research Ethics Committee  
Research and Postgraduate Support Directorate  
2<sup>nd</sup> Floor, Berwyn Court  
Gate 1, Steve Biko Campus  
Durban University of Technology

P O Box 1334, Durban, South Africa, 4001

Tel: 031 373 2375  
Email: lavishad@dut.ac.za  
[http://www.dut.ac.za/research/institutional\\_research\\_ethics](http://www.dut.ac.za/research/institutional_research_ethics)

[www.dut.ac.za](http://www.dut.ac.za)

18 June 2018

IREC Reference Number: **REC 9/18**

Mrs E Macharaga  
44 Bondolfi Teachers' College  
P.O. Box 300  
Masvingo

Dear Mrs Macharaga

**Exploring transformative learning experiences of vocationally interested and disinterested pre-service teachers in teacher training colleges in Zimbabwe.**

The Institutional Research Ethics Committee acknowledges receipt of your final data collection tool for review.

We are pleased to inform you that the data collection tool has been approved. Kindly ensure that participants used for the pilot study are not part of the main study.

In addition, the IREC acknowledges receipt of your gatekeeper permission letter.

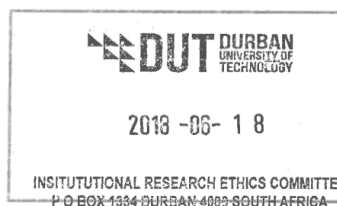
Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely,

Professor J K Adam  
Chairperson: IREC



## Appendix D: Research request letter for Bondolfi teachers' college



Letter to the Roman Catholic Diocese

The Education Secretary  
Masvingo Diocese  
Bishop's House P.O. Box 1400  
Masvingo  
14 June 2017

The Very Reverend Father Walter Nyatsanza

**RE: REQUEST FOR PERMISSION TO CARRY OUT A RESEARCH AT BONDOLFI TEACHERS' COLLEGE**

I am a student pursuing a PhD study through Durban University of Technology. I am writing to seek permission to carry out a research at Bondolfi Teachers' College. The title of my study is "Exploring transformative learning experiences of pre-service teachers in Zimbabwean Teacher Education- A case study." The purpose of this research is to understand whether or not the pre-service teachers who join teaching as a last resort experience transformative learning by the time they reach third year of teacher training. I intend to interview 36 pre-service teachers. I will also hold focus group discussions with 12 of the pre-service teachers, and 6 lecturers. The findings will be availed to the Ministry of Higher Education, Bondolfi Teachers' college and any participants who may wish to read them. For more information, you may contact my supervisor whose contact detail is below:

Tabitha Grace Mukeredzi, PhD  
Adult, Community and Post Graduate Education Unit  
DUT Indumiso/ Midlands Campus  
15 JF Sithole Road,  
Imbali 3201  
Pietermaritzburg

Yours faithfully

Esnati Macharaga

## Appendix E: Request letter for data collection for principals



Letter to Principals

The Principal  
Bondolfi Teachers' College  
P. O. Box 300  
Bondolfi  
Masvingo  
14 June 2017

Dear Sir

### REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a student pursuing a PhD study through Durban University of Technology. I am writing to seek permission to carry out a research at Bondolfi Teachers' College. The title of my study is "Exploring transformative learning experiences of pre-service teachers in Zimbabwean Teacher Education- A case study." The purpose of this research is to understand whether or not the pre-service teachers who join teaching as a last resort experience transformative learning by the time they reach third year of teacher training. I intend to interview 36 pre-service teachers. I will also hold focus group discussions with 12 of the pre-service teachers, and 6 lecturers. The findings will be availed to Bondolfi Teachers' College. For more information, you may contact my supervisor whose contact detail is below:

Tabitha Grace Mukeredzi, PhD  
Adult, Community and Post Graduate Education Unit  
DUT Indumiso/ Midlands Campus  
15 JF Sithole Road,  
Imbali 3201  
Pietermaritzburg

Yours faithfully

Esnati Macharaga

## **Appendix F: Letter of information to participants and consent form**



Title of the research study: Transformative learning experiences of pre-service teachers in teacher training colleges in Zimbabwe: Implications for teacher training programmes.

Principal investigator/ Researcher: Esnati Macharaga

(+263 773 058 224)

esnatimacharaga@gmail.com

Supervisor

(+267 762 995 974)

Dr Tabitha Grace Mukeredzi: PhD

TabithaM@dut.ac.za

Co-Supervisor

(+267 734 657 609)

Prof Julia Preece: PhD

JuliaP@dut.ac.za

### **Brief introduction and purpose of this study**

The purpose of this study is to understand whether or not the pre-service teachers who join teaching as a last resort experience transformative learning by the time they reach third year of teacher training. This study will inform reviews, reconsiderations and decisions on teacher training processes and programmes.

You have been chosen because of your relevance and suitability to the research under study.

### **Outline of the Procedure**

If you choose to be part of the study, you will be required to take part in an interview which will take part at your institution and will last for about 30 minutes to one hour. Your participation is voluntary. If you decide to take part you are still free to withdraw at any time and without giving

reason. Withdrawal from the study will not have any negative consequences for anyone choosing to do this.

I will audio record the discussions with your permission and will also jot down some notes. I will also ask you to draw your learning journey during teacher training.

### **Risks or Discomforts to the Participant**

You will experience no risks or discomforts since interviews will be audio recorded only when permission has been granted by you.

### **Benefits (to the participants and to the researcher)**

The findings will help me to make recommendations for improved teacher training programmes. The final research report will be made available at the Durban University of Technology, Ministry of Higher and Tertiary Science and Technology Development (Zimbabwe), Responsible Authority Roman Catholic Diocese of Masvingo and Bondolfi Teachers' College. The results of this study may also be presented at a conference and published in a journal.

### **Reason/s why participants may be withdrawn from the study**

You may choose to withdraw from the study without any prejudice.

### **Remuneration**

You will not be paid for participating in the study.

### **Costs of the study**

You are not expected to cover any costs towards the study. All the costs will be met by the researcher.

### **Confidentiality**

No real names will be used in the report unless it is out of your permission. All data will be kept with the highest degree of confidentiality. Pseudo names will be used and all the information will be kept under lock and key.

### **Research related injury**

There will be no research related injury to yourself as a result of the study.

Persons to contact in the event of any problems or queries

Supervisor: Dr Tabitha Grace Mukeredzi PhD

(+267 762 995 974)

TabithaM@dut.ac.za

Researcher Tel: +263 773 058 224 Email: [esnachimacharaga@gmail.com](mailto:esnachimacharaga@gmail.com)



Consent Form

**Statement of Agreement to Participate in the Research Study:**

I hereby confirm that I have been informed by the researcher, about the nature, conduct, benefits and risks of this study – Research Ethics Clearance Number:

I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.

I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.

In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.

I may, at any stage, without prejudice, withdraw my consent and participation in the study.

I have had sufficient opportunity to ask questions (of my own free will) declare myself prepared to participate in the study.



I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

I have agreed to have the interview tape recorded.

I have agreed to the use of pseudonym.

-----

Full Name of Participant	Date	Time	Signature/Right
Thumbprint			

I ..... herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

.....

Full Name of Researcher	Date	Signature
-------------------------	------	-----------

Persons to contact in the event of any problems or queries

Supervisor: Dr Tabitha Grace Mukeredzi PhD

(+267 762 995 974)

TabithaM@dut.ac.za

Researcher Tel: +263 773 058 224 Email: [esnachimacharaga@gmail.com](mailto:esnachimacharaga@gmail.com)

## Appendix G: Data generation schedule: Questionnaire



### Questionnaire

#### Gender

Male	
Female	

#### Age

Range	Please tick
Below 18 years	
18-25 years	
26 – 30 years	
31 – 35 years	
Over 35 years	

#### Highest Academic Qualification

Qualification	✓Please tick
O level	
A level	

When did you pass O level?-----

Year of Study

Year	✓ Please tick
First	
Second	
Third	

Do you have any teaching experiences Yes ☐ No ☐

If yes how many years? \_\_\_\_\_

Have you always wanted to be a teacher? Yes/ No

If no, tell why you decided to join teaching.

Did you apply to other professions before coming for teaching? \_\_\_\_\_

If you were given a choice among many professions, would you choose teaching? Yes/ No

Please briefly explain why. \_\_\_\_\_

## Appendix H: Data generation schedule: Focus group discussion



### Focus group discussion

Tell me how you became a teacher.

What motivated you to join the teaching career?

What are your expectations of the career?

Tell me about how you felt when you started teacher training.

Is this different from the way you feel now?

Tell me about your learning experiences on the course.

What are the new things that you have learnt during the course?

Tell me how the learning experiences have influenced your thinking about the course.

Tell me how you feel now about being a teacher.

Do you have anything else you want to tell about changes that you have experienced?

## Appendix I: Data generation schedule: Face to face interview



Face-to-face interview

Please tell me about your education history. Probing

What have you been doing since you left school?

Why did you join the teaching career?

Tell me about your experiences in the college.

Probing

a. What are the ways in which you learn on the course?

b. Which methods do you value while learning on the course?

Tell me about your learning experiences in the college.

Probing

a. What are the changes that you have experienced that are associated with your training?

b. Tell me about the new things that you have learnt during your training.

Tell me about your interactions with peers, lecturers, and management in the college.

Probing

Which ways of communication do you think support your learning?

Why do you think every teacher be competent in the use of ICTs?

Have your learning experiences influenced your thinking about teaching in any way? Please tell me more.

Tell me about any other activities that you are involved in during the teacher training years.

Thinking about teaching are there any things that have changed from the time you came to college up to now?

In your opinion do you think you are now ready to go into the field to teach? Please tell me more.

## Appendix J: Data generation schedule: Continuum drawings and discussions



### Continuum drawings and discussions

Draw your transformative learning journey from the day you started the training programme, highlighting the landmarks along the way; the disappointments and joys, your expectations, the learning experiences, the changes that occurred and how you now you feel as compared to the first days.

## Appendix K: Language Editor Certificate



Pauline Fogg  
54 Grundel Road  
Carrington Heights  
Durban  
4001  
074 782 5234

14 October 2020

### *Letter of Editing*

This report serves to state that the dissertation submitted by Esnati Macharaga titled “Exploring transformative learning experiences of the vocationally interested and vocationally disinterested pre-service teachers in teacher training colleges in Zimbabwe” has been edited.

The dissertation was edited for errors in syntax, grammar, punctuation and the in-text referencing system used.

The edit will be regarded as complete once the necessary changes have been effected and all of the comments addressed.

Thank-you for your business.

Pauline Fogg