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Creating place-based learning experiences as a curriculum enactment approach:

A case study of selected business studies teachers' practices in Papua New Guinea.

Thesis submitted by John Wanis Tapura in September 2019

for the Degree of Doctor of Philosophy in Education in the

College of Arts, Society and Education (CASE)

James Cook University, Australia

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Type of assistance

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Data collection Data (interviews, document Teacher participants

Other professional

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artefacts and lesson National Department of Education

observations) approving schools to be used

Provincial education advisors

Schools principals approving

teachers to be used

Declaration of ethics

The research presented and reported in this thesis was conducted within the guidelines for research ethics outlined in the National Statement of Ethical Conduct in Human Research (2007), the joint NHMRC/AVCC Statement and Guidelines Practice (1997), the James Cook University Policy on Experimentation Ethics. Standard Practices and Guidelines (2001), and the James Cook University Statements and Guidelines on Research Practices (2001).

The proposed research methodology received clearance from the James Cook University Human Research Ethics Committee (approval number H6573).

John Wanis Tapura	Date

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Abstract

Current Papua New Guinean (PNG) education reform policy encourages teachers to employ place-based learning as a curriculum enactment approach. The intent of the reform policy is to prepare most school leavers for their return to their rural communities, and a minority to pursue further education and training for employment. The current reform efforts are a national curriculum response to the limited tertiary institution opportunities and job scarcity for all PNG citizens, in particular, the school leavers. The intention of the national reform agenda expressed in the national curriculum mandates the views of curriculum as a powerful tool having the potential to change human behaviour, such as encouraging school leavers to embrace rural living rather than urban migration. Achieving this result from curriculum enactment is dependent on a variety of factors; the chief amongst these is the success of the enactment approach employed. In brief, although this place-based approach is an aspiration, is it being and likely to be realised?

The study explored how business studies teachers in PNG perceive and enact the national curriculum goals, policies, and resources in terms of place-based education aspirations. It investigates the reality of their enactment of curriculum and the dilemmas they experience in doing so. Data were generated from five participating teachers in the Western Highlands and Madang provinces through interviews, lesson observation, and document analysis of curriculum artefacts. Within an interpretivist and constructivist paradigm, the case study and hermeneutic phenomenological approaches that were employed situated the researcher amongst the teachers to experience their 'curriculum as autobiography', teacher agency, and teacher beliefs to construct their practices in alignment with the curriculum goals. In brief, the researcher sought to understand how teachers interpret, and enact the curriculum, and, subsequently determine whether this interpretation and enactment are consistent with the reform agenda.

This study found that teachers based their curriculum aims and practices on their lived experiences in and out of school, rather than the intentions of the national curriculum. In terms of translating curriculum policy, teachers were unfamiliar with the national curriculum statement and framework, including place-based learning. The study also found three policies that come into conflict with each other and impede effective curriculum implementation. The three policies are (1) the government Tuition Fee Free (TFF) education policy that increases class enrolments up to 90 students per class contrasting with the (2) enrolment policy of 30 to

40 students per teacher, and that impedes (3) place-based learning approach as an enactment policy. Although there is curriculum as intent articulated in the reform agenda, these are not realised because of over-riding constraints. While the syllabus, teachers' guides provided some reference to place-based learning opportunities, teachers seemed to uphold the practices that have been enculturated into the schools, such as prioritising national examinations, resorting to support textbooks and the decontextualized and teacher-dominated teaching and learning.

The findings of this study highlight the challenges and tensions in enacting curriculum change in PNG, and, yet, reinforces the need to advocate for place-based learning as an appropriate curriculum enactment practice throughout PNG. Curriculum as autobiography, teacher agency, teacher beliefs and the teachers' lived experiences of the 'place' are some important aspects of curriculum implementation with place-based learning considerations that teachers can adopt for improved enacted curriculum practices. Finally, it presents recommendations to support the national government (through its curriculum enactment processes), teachers, schools and teacher education providers in achieving these ambitious, yet admirable and questionably achievable national curriculum goals such as PNG Vision 2050.

Table of contents

Content

Statem	ent of access	i
Statem	ent of sources	ii
Statem	ent on the contribution of others	iii
Declar	ation of ethics	iv
Ackno	wledgments	v
Abstra	ct	vii
Table	of contents	ix
List of	Appendices	xiv
List of	tables	XV
List of	figures	XV
Abbrev	viations	xvii
Chapt	er One: Introduction	1
1.0	Introduction	1
1.1	The education system in PNG.	3
1.2	The researcher.	5
1.3	Aim of the study	8
1.4	The research questions	10
1.5	Significance of the study	12
1.6	Delimitations	13
1.7	Structure of thesis	14
Chapt	er Two: Education in PNG: A literature review	17
2.0	Introduction	17
2.1	Papua New Guinea geography	20
2.2	PNG traditional education - a historical perspective	21
2.3	The colonial administration	23
2.3.1	Education during the colonial era	24
2.3.2	Colonisation of education in PNG, its impact	27
2.3.3	Decolonisation of education in PNG	29
2.4	Socio-economic challenges	29

2.5	PNG policy formulation.	31
2.6	The philosophy of education for PNG	32
2.7	The national curriculum statement.	33
2.8	Sense of a nation and its future - PNG Vision 2050	34
2.9	The national curriculum reform as a response	36
2.10	Conclusion.	37
Chapt	ter Three: Teachers as Contributors of Curriculum: A literature review	39
3.0	Introduction	39
3.1	The problem	42
3.2	Data collection	43
3.3	Curriculum definition	45
3.4	Curriculum theorising.	47
3.4.1	Curriculum theorising during the colonial and post-colonial era	48
3.5	Teacher training in PNG.	49
3.6	The teacher as a contributor of curriculum.	53
3.6.1	Curriculum as autobiography	57
3.6.2	Teacher agency	59
3.6.3	Teachers' beliefs about curriculum	60
3.7	Curriculum implementation	62
3.8	Place-based learning.	65
3.8.1	Place-based learning (PBL) and place-based education (PBE)	66
3.8.2	Studies on place-based education in other countries	70
3.8.3	Studies on place-based education in PNG	73
3.9	Literature findings	74
3.10	Conclusion	75
Chapt	ter Four: Research Methodology	77
4.0	Introduction	77
4.1	Aim of the study	79
4.2	The research questions.	80
4.3	Theoretical framework	81
4.4	Research paradigm	82

4.5	Research paradigm	83
4.6	Research approaches	84
4.7	The interplay of case study and hermeneutic phenomenology	85
4.8	The case of case study	86
4.9	Research methodology	87
4.10	Research methods	87
4.11	The participants	88
4.12	Data analysis	90
4.13	Data validity	95
4.14	Internal validity	96
4.15	External validity	97
4.16	Reliability	97
4.17	Triangulation	98
4.18	Ethics	99
4.19	Limitations	100
4.20	Conclusion.	101
_	ter Five: Teachers' Perspectives of the National Curriculum Research ton one	102
5.0	Introduction	102
5.1	Research site	105
5.1.1	Madang province	106
5.1.2	Western Highlands Province, Mt. Hagen	108
5.2	Data pertaining to research question one	110
5.3	Teacher One's biography	110
5.3.1	Teacher One's data	111
5.3.2	Teacher One's data analysis	111
5.4	Teacher Two's biography and data	113
5.4.1	Teacher Two's data analysis	113
5.5		115
5.5.1	Teacher three's biography and data	115
	Teacher three's biography and data Teacher three's data analysis	115
5.6		

5.7	Teacher Five's biography and data	118
5.7.1	Teacher Five's data analysis	118
5.8	Summary	119
5.9	Conclusion.	120
Chapt	ter Six: Place-based Learning: Research question two	121
6.0	Introduction	121
6.1	Teacher One's enacted curriculum practices: document analysis artefacts	123
6.1.1	Teacher One's data: lesson observations	128
6.1.2	Teacher One's data: post-lesson observation interview	132
6. 2	Teacher Two's data analysis	134
6.2.1	Teacher Two's data: lesson observation	135
6.2.2	Teacher Two's data: post-lesson observation interview	140
6.3.	Teacher Three's data	142
6.3.1	Teacher Three's data: document analysis artefacts	142
6.3.2	Teacher Three's data: lesson observation	148
6.3.3	Teacher Three's data: post-lesson observation interview	153
6.4	Teacher Four's data	155
6.4.1	Teacher Four's data: document analysis artefacts	156
6.4.2	Teacher Four's data: lesson observation	162
6.4.3	Teacher Four's data: post-lesson observation interview	167
6.5	Teacher Five's data	170
6.5.1	Teacher Five's data: document analysis artefacts	170
6.5.2	Teacher Five's data: lesson observation	173
6.5.3	Teachers Five's data: post lesson observation interview	178
6.6	Conclusion	181
Chapt	ter Seven: Dilemmas of Curriculum Implementation: Research question	
three.		183
7.0	Introduction	183
7.1	Lack of support curriculum materials	185
7.2	Lack of provincial education support in teaching place-based learning	188
7.3	Tension between a big class sizes and curriculum goals	190

7.4	Tensions in aligning assessment and curriculum goals: examinations	193
7.5	Teachers' beliefs and sense of 'worthwhileness' of the place-based learning	
	approach	196
7.6	Summary	199
7.7	Conclusion	199
Chapt	er Eight: Findings and Discussions	201
8.0	Introduction	201
8.1	Teachers' perceptions of the national curriculum goals and place-based	
	learning	203
8.2	Place-based learning as an enacted curriculum practice	205
8.3	Dilemmas in curriculum implementation	209
8.4	Conclusion	213
Chapt	er Nine: Implication, Conclusion and Future Directions	214
9.0	Introduction	214
9.1	The intent of this study and context of study	216
9.2	Contribution to knowledge	217
9.3	Implications for the pre-service teachers	219
9.4	Implications for in-service students	220
9.5	Implications for the researcher as teacher educator	221
9.6	Implications for the National Department of Education and provincial	
	education divisions	222
9.7	Implications for school principals	223
9.8	Summary of the implications	224
9.9	Limitations of the study	225
9.10	Implications for further research.	225
9.11	Conclusion.	226
	References.	228
	Appendices	259

List of the Appendices

Appendix	1	Wanis-Tapura confirmation of candidature results	259
Appendix	2	Wanis-Tapura mid-candidature review results	289
Appendix	3	Wanis-Tapura pre-completion seminar results	291
Appendix	4	James Cook University Human Research Ethics Committee	
		approval number H6573	302
Appendix	5	Letter to PNG Department of Education seeking approval to	
		conduct research in the country	303
Appendix	6	Letter of approval from the PNG education department	304
Appendix	7	Letter to Madang Province seeking approval to use schools for	
		research	305
Appendix	8	Approval letter from Madang	306
Appendix	9	Letter to western Highlands Province seeking approval	307
Appendix	10	Approval letter from WHP	308
Appendix	11	Letter seeking approval from Tusbab Secondary School	309
Appendix	12	Approval letter from Tusbab Secondary School	310
Appendix	13	Letter seeking approval from Good Shepherd Secondary School	311
Appendix	14	Approval letter from Good shepherd Secondary School	312
Appendix	15	Letter seeking approval from Mt. Hagen Secondary School	313
Appendix	16	Approval letter from Mt. Hagen Secondary School	314
Appendix	17	Letter seeking approval from Pabrabuk Secondary School	315
Appendix	18	Approval letter from Pabrabuk Secondary School	316
Appendix	19	Participant consent form (Tusbab as a sample)	317
Appendix	20	Teaching program figure 6.3.1	318
Appendix	21	Data collection guidelines for interviews and lesson observation	322
Appendix	22	Teacher One's interview data	327
Appendix	23	Teacher Two's Interview data	330
Appendix	24	Teacher Three's interview data	336
Appendix	25	Teacher Four's interview data	340
Appendix	26	Teacher Five's interview data	343

List of tables

Chapter Two		
Table 2.0	Early mission and government centres that became teachers'	
	colleges	50
Chapter Four		
Table 4.0	The participants	90
Table 4.1	Alignment of research question and findings chapters	94
Chapter Sever	ı	
Table 7.0	School leaver statistics 2014-2016	196
Chapter Eight	t	
Table 8.0	Class enrollments in three grade nine classes	211
List of figures		
Chapter One		
Figure 1.0	The old education system incepted during the colonial era till 1991	4
Figure 1.1	The current OBE education system as of 1992	4
Figure 1.2	The theoretical framework situating Chapter One in the thesis	16
Chapter Two		
Figure 2.0	The theoretical framework situating Chapter Two in the thesis	19
Figure 2.1	Map of Papua New Guinea	20
Chapter Three		
Figure 3.0	The theoretical framework situating Chapter Three in the thesis	41
Figure 3.1	Call for reintroduction of the Pacific Series	61
Figure 3.2	Call for reintroduction of the Pacific Series	62
Figure 3.3	Making a canoe in Kitava Island, Trobriand Islands, Kula canoe	69
Figure 3.4	Discussing a moka exchange	70
Chapter Four		
Figure 4.0	The theoretical framework situating Chapter Four in the thesis	78
Figure 4.1	An interactive model of research design.	83

Figure 4.2	Basic proceeding of qualitative content analysis in case study research	91
Figure 4.3	A process for doing phenomenological research and data analysis	92
Figure 4.4	Case study data analysis layers	93
Figure 4.5	Triangulation involving multiple data collection methods	98
Chapter Five		
Figure 5.0	National curriculum goals, policy and practice policy documents	
	pertaining to the research questions	103
Figure 5.1	The theoretical framework situating Chapter Five in the thesis	104
Figure 5.2	Map of Madang province	107
Figure 5.3	Map of western Highlands Province.	109
Chapter Six		
Figure 6.0	The theoretical framework situating Chapter Six in the thesis	122
Figure 6.1	A teaching program samples	123
Figure 6.2	A test sample	125
Figure 6.3	. Teaching program or lesson plans of a grade 10 class	143
Figure 6.4	A grade 10 class project	146
Figure 6.5	Teaching program	156
Figure 6.6	Test Sample	159
Figure 6.7	A grade 9 class Assignment	161
Figure 6.8	Teaching program	171
Figure 6.9	Assignment	173
Chapter Seven		
Figure 7.0	The conceptual framework situating Chapter Seven in the thesis	184
Figure 7.1	Overcrowded classroom	192
Chapter Eight		
Figure 8.0	The conceptual framework situating Chapter Eight in the thesis	210
Chapter Nine		
Figure 9.0	Theoretical framework situating Chapter Nine in the thesis	223

Abbreviations

DoE - Department of Education

HDI United Nations Human Development Index

IHD Integral Human Development

JCU - James Cook University

NCS - National Curriculum Statement for PNG

PBE - Place-based Education

PBL- Place-based Learning

PNG - Papua New Guinea

UoG - University of Goroka

WHP - Western Highlands Province

SSCEP - Secondary Schools Community Extension Project

CSAPP - Community School Agriculture Pilot Project

Chapter One

Introduction: Educational Developments in Papua New Guinea

1.0 Introduction

Papua New Guinea (PNG) has a long history of colonisation and has experienced waves of curriculum change, that were initiated during its colonial era. Although most curriculum changes have given little attention to nationalistic aspirations, some curriculum changes have attempted to reflect PNG and its own educational imperatives. For example, Groves, the first Director of Education for the then combined territories of Papua and New Guinea, attempted to implement a curriculum that blended the cultures of PNG with the westernised school curriculum (Crossley, 1994). Groves' philosophy of blending cultures was short-lived for two reasons: (1) the selected Indigenous culture and values as a foundation did not work in a country of over 700 languages and cultural variations; and (2) the teachers who were mostly Australian had no idea of PNG's diverse cultures and way of life (Crossley, 1994). Although debates for a relevant national curriculum continued for several decades, none of these resulted in a curriculum that was completely PNG oriented because foreign stakeholders providing consultancy and other assistance continued to influence the intention and enactment.

Even after independence in 1975, curriculum change debates continued with the intention of developing PNG's own curriculum, namely a PNG curriculum 'autobiography'. Curriculum as autobiography asks and begins to answer, autobiographical questions that require connecting the subjective to the social and vice versa (Pinar, 2004 b). Literally, this means connecting the aspirations of a curriculum to the society and the societal issues during the curriculum construction and enactment process. This implies that PNG views the curriculum as the appropriate tool that, when adequately grounded in practice, will address its social challenges. Correspondingly, this would mean identification of the social challenges PNG encounters and developing a PNG curriculum as a response to such realities. This attests to Pinar's (1995) curriculum theoretical stand that curriculum can help to reshape a country and a country can help reshape its curriculum.

One positive change, over the decades of debate, is the development of a philosophy of education for PNG (Matane, 1986). This philosophy of education calls for a curriculum that is relevant to PNG with emphasis on Integral Human Development (IHD). IHD focuses on

developing a holistic child who would either live in a rural community and participate in the informal sector of the economy or pursue further education and training for employment in the formal sector. After much debating and planning, PNG reformed its education system in 1992. The education reform involved the restructuring of the system as well as reform of the curriculum, and all stakeholders were asked to understand and support its implementation (DoE, 2006; DoE, 2001). This study focused on the curriculum reform, which many people considered as an implementation of the philosophy of education for PNG (DoE, 2003). The Secretary for Education attested to this in the National Curriculum Statement (NCS) as follows:

This [national curriculum] statement written by Papua New Guineans for Papua New Guinea is the first of its kind and represents a major step forward for our country's education system. It demonstrates that we own the curriculum that will truly foster Papua New Guinea's cultures and our national identity. (DoE, 2003, p. ii)

The 1992 education reform enabled PNG to develop its own local curriculum, with specific goals that would foster its culture and national identity. Stemming from the underlying vision of meeting PNG needs through a relevant education system, the major curriculum goal is to prepare some children for their return to the rural communities and prepare others for formal employment or further education and training (DoE, 2003).

The success of achieving the desired curriculum goals depends entirely on the teachers and their curriculum enactment practices. How teachers view these reformed curriculum objectives and align their practices to achieve them is paramount to the enacted curriculum process. In other words, how teachers facilitate the enacted curriculum impacts the achievement of the curriculum goals. Teachers make crucial decisions during the curriculum enactment process that determine the type of learning experiences students engage in and learn. The PNG Department of Education (DoE) encourages today's teachers to teach in 'real-life contexts' to achieve the national curriculum goals. It is believed that when engaging students in real-life learning situations, the culture, and PNG way of life can be revived and secured. This means creating meaningful learning experiences in the real world would encourage students to appreciate and embrace their land, culture, and way of life. These assertions are manifested in several national curriculum policy statements. For example, the 2003 national curriculum statement attests that:

Science is best understood when it is related to real-life situations. It is important to present science, to students with an emphasis on Papua New Guinea settings as well as

local contexts and issues. Teaching in a local context allows students to be aware of how science influences their everyday life, how it can inform personal, community, and government decisions. The skills developed through a study of science will prepare students for continuing studies or entry into the workforce or the community. (DoE, 2003, p. 28)

The concept of teaching and learning in real-life situations advocated in the PNG curriculum documents correspond to place-based learning as a curriculum enactment approach advocated in other countries. Place-based learning as an educational approach uses all aspects of the local environment, including local, cultural, historical, and socio-political situations, and the natural and built environment to integrate a place-based context for teaching and learning (Clark, 2008). Hence, place-based learning is the appropriate approach to prepare for the return of school leavers to their rural communities in PNG. That is, place-based learning, as an educational approach, connects learning to the local environment. In doing so it serves as an antidote to a serious but generally unspoken dilemma which is the "alienation of children and youth from the real-world right outside their homes and classrooms" (Smith & Sobel, 2010, p. viii).

1.1 The education system in PNG

The current education system which underpins this thesis is the outcomes-based education, which was introduced in 1992 as part of a major two-fold education reform, curriculum and structural. The former objective based curriculum was replaced by the outcomes-based curriculum while the 6, 4 and 2 structure was replaced by the 3, 6 and 4 structure as illustrated in figures 1.0 and 1.1 respectively. The former 6, 4 and 2 structure with the objective-based curriculum were used in the country since the introduction of Western formal education during the colonial era till independence in 1975 and continued up till 1992 as depicted in figure 1.0. This education system constituted of six years in community schools, four years in high schools, and two years for the top students in the few national high schools preparing for university or college studies. The prime reason for these changes was that the objective based education was job oriented did not seem to prepare for the return of many school leavers to their rural communities. Hence, the current education reform was intended to help prepare the return of many school leavers to their rural communities as jobs become scarce because of an increasing population and less jobs being available.

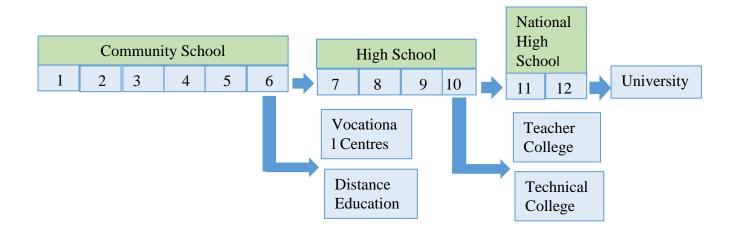


Figure 1.0: The old education system incepted during the colonial era till 1991

Source: PNG Department of Education (2009) Universal Basic Education plan 2010 – 2019.

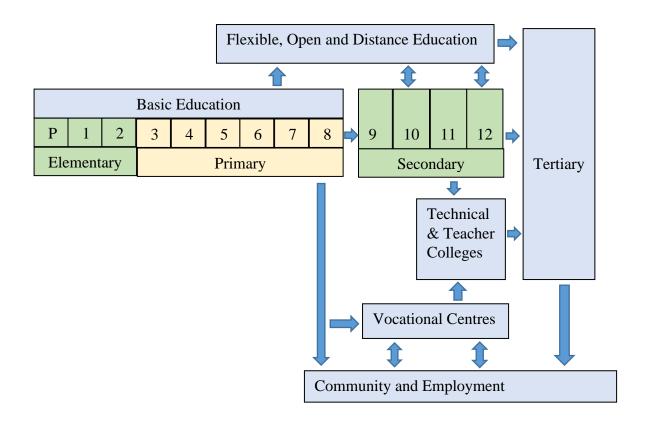


Figure 1.1: The current OBE education system as of 1992

Source: PNG Department of Education (2009) Universal Basic Education plan 2010 – 2019.

However, after more than twenty years of implementing the outcomes-based education the government based on numerous resistances by teachers and parents is now planning to introduce another 1, 6, 4 and 2 structural reform with a standard-based curriculum. The Education Minister Mr. Joseph Yopiyopi told a crowd at the K2.5 million science and IT lab opening ceremony at Aiyura National High School in Eastern Highlands Province that his department was planning to do away with the current outcome-based education (OBE) curriculum and return to the old standard based curriculum (SBC) system (Tambie, 2019). The standard based curriculum is already rolled out in elementary and primary schools as of January 2020. Children going through this system are to spend one year in elementary schools doing Preparatory, six years in primary schools for grade 1 to 6, four years in high school for grade 7 to 10, and two years in national high schools for grades 11 and 12. It is similar to the old education system except the inclusion of one-year preparatory class rather than the three-year elementary program. Both the current OBE and the SBE system have a primary goal, that is to prepare majority of the school leavers for rural living given the limited job opportunities available.

The key issue that this study focused on was whether PNG business studies teachers were creating place-based learning experiences in response to the mandated national curriculum policies. The curriculum imperatives focus on preparing most of the school leavers for their return to their rural communities and the few with an academic orientation for further education. Related to this key issue were the following research questions: (1) How do business studies teachers perceive the PNG national curriculum goals pertinent to the business studies curricular? (2) Do they align the curriculum intent with the local environment to create meaningful place-based learning experiences for the students? If so, (3) how do they address dilemmas they encounter during the curriculum enactment process? These central issues are encapsulated in the research questions used in the study. The researcher asserts that these curriculum issues are important for PNG because the learning experiences that teachers create and employ in the enacted curriculum will be the only avenue to help develop holistically educated children PNG desires.

1.2 The researcher

The researcher is passionate about teaching, as well as the role of teachers and their curriculum enactment practices, which collectively affect human resource development in PNG,

and that motivated this study. The researcher is a PNG national with ten years of classroom teaching experience and nine years of teacher supervision and education supervisory experience, constituting a total of nineteen years of primary school experience at multi-system levels in PNG. Further, the researcher spent another three years teaching in a high school and seven years of lecturing Curriculum Studies and Teacher Education courses at the University of Goroka (UoG) in PNG. The researcher's highest educational qualification is a Masters in Education, majoring in Teaching and Teacher Education, from the University of Goroka in PNG.

The curriculum issues first came to the researcher's attention when teaching in primary schools in a supervisory role as a senior teacher. During the nine years of supervising junior teachers, the researcher noticed that teachers had divergent views of what the curriculum entails. Many teachers feared to modify the curriculum in any way to suit the local environment, so they adhered to it strictly. Lam (2007) also noted teachers lacking the courage or confidence to develop a place-based or school-centered curriculum suitable for their students and their local environment. The teachers that Lam (2007) observed, like many teachers the researcher noted in PNG, assumed that their primary role was to 'cover' the prescribed textbook content in preparation for national examinations. Student learning and the achievement of the desired curriculum goals were suppressed. In other words, whether students 'learned' authentically from the curriculum or not, was not important to such teachers. They viewed satisfying the curriculum requirements such as preparing for a national examination to be more important than preparing students for sustainable living later in life. This practice is prevalent because textbooks according to Lam (2007) are designed to cover examination requirements, which teachers follow strictly to ensure their student meet the performance benchmarks expected.

During the many years of teaching at various levels of the education system, the researcher came to realise that the scenario Lam (2007) noted seemed to be prevalent all over PNG. Teachers seemed to be spending more time and other resources covering the curriculum in preparation for the grade 10 and 12 national examinations. However, approximately 20 percent of the students pursue further education and training for possible employment. Most students, about 80 percent, had no choice so they exited the formal education system after grades 10 or 12. These school leavers came to realise that the knowledge acquired during the preparation for national examinations is of no use post school. For example, the researcher overheard two students talking to each other outside the office in the high school one afternoon during a weekend. One student asked his friend, "how will x plus y (x+y) apply to me when I leave school after grade 10? What will I use x plus y for in my village when I leave school?" This student had

insight into the kind of education he was receiving which placed emphasis in preparing for examinations. The student knew that he would be part of the increasing number of school levers after completing grade 10. The student realised that the education system was not preparing him for village life but bombarding him with mathematical formulas that would be of no value in his village life if he were not able to pass the examinations. The researcher realised that schools were not preparing students adequately to face life in their rural communities according to the PNG curriculum intent. The curriculum intent is to prepare the majority of the school leavers for their return to the rural areas and prepare the few to pursue further education (DoE, 2003) yet, the classroom practices are giving little evidence of these dual imperatives.

Teaching in a high school for three years with a primary teaching background provided the researcher with more insight into curriculum practices and issues. For example, the curriculum practices experienced in primary schools were also prevalent in high schools. These practices included the teachers' divergent views of curriculum imperatives with little attention to adjusting the curriculum to the local context and spending most of each teachers' time and resources on preparing for the national examinations.

The curriculum issues and pedagogical practices encountered when teaching became more obvious while studying at UoG from 2003 to 2006. Pre-service student teachers and inservice teachers the researcher taught expressed similar sentiments pertaining to curriculum enactment practices during tutorial discussions while studying at UoG. Moreover, the researcher's experiences and dilemmas in curriculum and pedagogy were consolidated during the seven years of teaching at the UoG from 2008 to 2014. The researcher realised that many teachers throughout the country did not know how to implement the reformed curriculum as revealed by the students. This became evident from tutorial discussions and essay assignments submitted by students enrolled in the Bachelor of Education in-service program at UoG. Apart from teaching the in-service teachers, the researcher also taught pre-service teachers in curriculum studies and teacher education courses.

Unlike the pre-service teacher trainees with no teaching experience, the in-service students were practicing teachers with a lot of teaching experience from all over the country. This meant that the issues they raised portrayed a nationwide dilemma, especially in curriculum implementation. This concern was shared by Dr Asuku Openg, who also taught at UoG, and who declared publicly in her paper presented at the National Education Conference at the University

of Goroka that "most teachers did not understand the curriculum they were teaching in the classroom" (Waima, 2013, The National News-Paper).

The researcher as a teacher and teacher educator developed a high interest in what students learn from the curriculum enactment process. Teaching and learning are a teacher-learner interaction process within which the formal curriculum is developed principally for the teacher. Grossman and Thompson (2008) to that effect endorsed that:

A curriculum is more for teachers than pupils because if it cannot change, move, perturb and inform teachers, then it will have no effect on those whom they teach. It must be first and foremost a curriculum for teachers. If it has any effect on pupils, it will have it by virtue of having an effect on teachers first. (p. 2015 cited in Bruner, 1977)

Thus, what students learn from the curriculum depends on how thoroughly teachers understand the curriculum and implement it effectively.

The PNG teachers' curriculum enactment practices are important to the researcher. Effective curriculum enactment practices, particularly the employment of place-based learning, have the potential to contribute towards PNG's efforts in achieving the national curriculum goals. Therefore, it was "critical to examine and understand how teachers approach the curriculum. For example, some teachers adopt a fidelity approach by focusing solely on content transmission; while others, follow an adaptation approach through undertaking curriculum adjustments" (Shawer, 2010, p. 173). The curriculum decisions that teachers make during curriculum enactment in order to create place-based learning experiences is very important as these learning experiences have the potential to affect the learners for life.

1.3 Aim of the study

This study aimed to explore how business studies teachers enact the curriculum in alignment with the local environment using the place-based learning approach to accomplish the overarching curriculum goal. The PNG national curriculum goal is twofold: (1) the preparation of most school leavers for their return to their rural communities; and (2) the preparation of the few with academia capabilities to pursue further education and training for formal employment (DoE, 2003). The intention of this overarching goal is to help PNG realise Vision 2050, to be a smart, wise, fair, healthy and happy society ranked amongst the top 50 countries by the United Nations Human Development Index (HDI) by 2050 (Vision, P. N. G. 2050, 2009).

The underlying tool to help PNG realise its Vision 2050 is an educated population. Central to producing an educated workforce is the teacher's curriculum enactment practices. It is through the teacher alone that the curriculum intent reaches the students in the form of learning activities. Clark (2008) suggested place-based learning, which uses all aspects of the local environment in teaching and learning, is the appropriate curriculum enactment approach to help achieve such a curriculum goal. Therefore, the study explored how teachers align the curriculum with the local environment to create meaningful place-based learning experiences for student engagement during the curriculum enactment process.

Curricula are usually designed with the assumption that teachers will understand the content and relate it to the environment for context and resources during implementation. However, several studies in education noted that the implemented curricular does not always reflect what curriculum designers intended (Orafi & Borg, 2009; O'Sullivan, 2004; Smith & Southerland, 2007). The study, therefore, explored how teachers aligned the curriculum intent with the local environment to create learning activities that are place-based for the enacted curriculum. Teachers play crucial roles in preparing young people, not only to face the future with confidence but also to build their environment with purpose and responsibility to sustain their livelihood (The Secretariat, UNESCO, 1998).

PNG's prime goal is human capital development because the country's developmental aspirations are anchored in an educated human resource (Vision PNG 2050, 2009). In line with this aspiration, this study investigated curriculum implementation, paying attention to the teachers' creation of place-based learning experiences in alignment with the local environment. The following questions ultimately reduced to three research questions were the underlying guides for the study. Are PNG teachers aware that the place-based learning concept is expressed as teaching in real-life situations in the curriculum documents (DoE, 2007; DoE, 2006; DoE, 2003), allowing them to attempt implementing it? Do teachers modify the curriculum to suit the local context? Do they create place-based learning experiences for student engagement? Are teachers able to overcome difficulties they experience during curriculum implementation? This study embarked to seek answers for these types of questions.

The elements of an education system, such as schools, curriculum materials, and teachers, function primarily to develop the human resource. The only way for students to develop is through active participation in the learning experiences facilitated by the teacher. Thus, when students and teachers interact in school classrooms, it is generally assumed that teaching and

learning is progressing. However, how much students gain from the curriculum depends very much on how teachers perceive the curriculum, what learning activities they prepare, and how they facilitate the student learning activities. Many possible factors can impede teaching and learning. Some of these factors may include student behaviour, lack of infrastructure and resources, teacher absenteeism, unavailability of curriculum materials, poor teacher training, and/or lack of understanding of the curriculum goals and appropriate strategies for implementation. With attention to these factors, this study focused more deeply on understanding the teachers' beliefs and actions in creating place-based learning experiences as a curriculum enactment approach.

Curriculum implementation, according to Barton, Garvis, and Ryan (2014) and Ewing (2010), is an extremely complex and challenging process. It is even more challenging when implementing a centrally developed curriculum. That is because it is impractical to feature individual geographical settings of all the schools where the curriculum is intended to be implemented. Thus, Print (1988) suggested that teachers should modify a centrally developed curriculum to match the local environment and create place-based learning experiences. PNG has a centralised curriculum development process, and how teachers adopt Print's (1988) suggestion to enact the curriculum was worth exploring in this study. PNG's latest outcomes-based curriculum reform caused a lot of confusion amongst many teachers during its implementation. Such confusions led to widespread resistance by teachers in implementing the curriculum (Haip, 2013). Many teachers also resigned due to confusions in implementing the outcomes-based curriculum being imposed. These indicators implied the existence of problems in implementing the reformed curriculum that needed investigation. Hence, this study was designed to investigate such issues surrounding the enacted curriculum practices of business studies teachers, with the aim of improving their future curriculum practices.

1.4 The research questions

Research questions usually compound with the research topic to underpin the research problem and guide the research process. The generated data in response to the research questions collectively provide workable solutions to the research problem that is encapsulated in the research questions. Research questions are narrow, specific, challenging questions attempting to address an issue, or a problem that is answered as a conclusion, based on the analysis and interpretation of the generated data as evidence (Lipowski, 2008). Moreover, research questions

also reflect the theoretical and methodological framework employed in the study. This qualitative study employed the hermeneutic phenomenology and case study approaches. Research questions in qualitative studies according to Agee (2009): "need to articulate what a researcher wants to know about the intentions and perspectives of those involved in social interactions" (p. 432). It was the teachers' curriculum perspectives and intentions, and the teacher-student interaction during the enacted curriculum that the researcher intended to explore in the context of this study. Moreover, theory inextricably links to research questions, either by shaping them initially, or suggesting new questions as the study progresses (Agee, 2009).

Hermeneutic phenomenology is the art of interpreting and constructing the meaning of a phenomenon by studying the lived experiences of those involved to gain a deeper understanding of the nature of everyday experiences in a phenomenon (Denzin, & Lincoln, 2011; Friesen, Henriksson, & Saevi, 2012). Hermeneutic phenomenology aims to provide an understanding of the lived experiences of those involved by interpreting the stories they tell. The most basic approach to gain a deeper understanding of the participants' lived experiences is to narrate one's own experiences while listening to their narratives (Lindseth & Norberg, 2004). Regarding research questions in studies employing the hermeneutic phenomenology approach, the phenomenological study should seek to answer questions, such as "what, why, who, how, with whom, to whom and for whom" (Lindseth & Norberg, 2004, p. 149). With the intention of capturing an in-depth understanding of the business studies teachers' lived experiences in curriculum enactment practices, the 'what', 'who', 'how' and 'why' questions dominated the interview sessions.

The case study theory was also used in conjunction with the hermeneutic phenomenology approach in this study. The case study approach, as a research theory, generates an in-depth, multi-faceted understanding of complex issues in real-life contexts (Crowe, Huby, Cresswell, Robertson, & Sheikh, 2011), such as place-based learning in this study. When developing research questions in qualitative studies, Creswell and Clark (2004) suggested the use of good qualitative research questions beginning with "how" and "what", to generate data and "explore, identify, or describe" what happened (p. 4). Research questions usually begin with an overarching question. "A clearly stated overarching question can give direction for the study design and collection of data, and offer the potential for developing new, more specific questions during data collection and analysis" (Agee, 2009, p. 435). Hence, the overarching research question for this study is: What are the practising business studies teachers' perceptions of the overarching PNG national curriculum goals and their enactment strategies in achieving them.

This overarching question encapsulates the research problem and is supported by subsidiary questions to generate data within the study parameters.

Subsidiary questions are used to narrow the broader focus of the overarching question and provide directions to specific data (Agee, 2009). Hence, the following subsidiary questions were used in support of the overarching question and the theories that guided this study:

- 1. What are the practising business studies teachers' perceptions of the place-based learning concept and its relatedness to the PNG's National Curriculum goals?
- 2. How do teachers enact the teacher curricular intent informed by the prescribed curriculum in alignment with the local context, with attention to place-based learning?
- 3. What dilemmas (if any) do business studies teachers experience when implementing a centrally developed curriculum in a country of diverse cultures, values, languages and even the geographical settings?

These questions helped gain an in-depth understanding of the classroom realities in teaching and learning.

1.5 Significance of the study

The underlying curriculum aspiration of PNG is to develop a holistically educated child through a basic relevant education. The holistic child development or Integral Human Development (IHD) theory popularised by the Philosophy of Education for PNG (Matane, 1986) is the first of the five National Directive Goals enshrined in the constitution of PNG. The Integral Human Development goal is of importance for the education of children because it lays the foundation to achieve other goals in life (Matane, 1986). This premise is further attested by Pinar's (1995) belief that curriculum can reshape a whole country. Alvior (2014) drew attention to the economic nature of curriculum, stating that a country's economy can improve the people's way of life through curriculum. The PNG government aims to minimise rural-urban migration of school leavers by encouraging rural living through an education that is basic and relevant to PNG, which would help improve and reshape the economy. That is why, the NCS encourages teachers to teach using real-life situations and provide learning activities that are relevant to the local environment (DoE, 2003).

Place-based learning is the process of using the local community and environment as a starting point to teach concepts in language, mathematics, social studies, science and

other subjects across the curriculum. Emphasising hands-on real-world learning experiences, this approach to education increases academic achievements, helps students develop stronger ties to their community, enhances students' appreciation for the natural world, and creates a heightened commitment to serving as active, contributing citizens. (Smith & Sobel, 2010, p. 23 cited in Sobel, 2004, p. 7)

The demand is on the teachers to be creative in reconceptualising a centralised developed curriculum, aligned with the local context to prepare and facilitate student-learning activities that are place-based in real life situations.

Teachers are the sole agents transforming curriculum text into student learning activities. "Curriculum theorists understand that curriculum experiences may be shaped by teachers but are responded to by students in their own ways depending on their attention, motivation, and inclination to engage in planned activities" (Chau, 2013, p. 3). Therefore, the teachers' ability to comprehend curriculum goals as well as the corresponding text, and effectively use the local environment to teach meaningful lessons is crucial. The success or failure of achieving curriculum goals depends largely on how teachers implement the curriculum. The Department of Education (2008) expressed concerns about curriculum implementation in PNG that:

an equally important challenge for the [education] system than the development of the curriculum is whether or not the teachers are able to understand and teach it. There are suggestions that in some parts of the country, and not necessarily only the most remote parts, it is not being implemented at all. (p. 28)

It is therefore significant that teachers' curriculum enactment practices were investigated to identify impediments that obstructed the curriculum implementation process. The findings will be used to help improve future curriculum implementation practices to achieve the national curriculum goals.

1.6 Delimitations

Delimitations, unlike the limitations, are those factors which Baron (2008) believes affect the study but researchers generally have some degree of control. Pajares (2007) in concurrence adds that delimitations address how a study should be narrowed in scope; that is, how it is bounded or how the parameters have been defined (Pajares, 2007). Moreover, delimitations

create the avenue for researchers "to explain the things that you (the researchers) are not doing and why you (the researchers) have chosen not to do them" (Pajares, 2007, p. 7).

There are many areas of the curriculum process, that require investigation, but the pivotal focus area of this study was the curriculum enactment process. With the PNG government's advocacy in providing a basic relevant education, and the mandating of place-based learning as a curriculum policy, the specific area of focus was to explore how teachers create place-based learning experiences to promote student learning and address natural imperatives. There have been studies conducted on curriculum implementation in PNG such as "Investigating the implementation process of a curriculum: A case study from Papua New Guinea" (Joskin, 2013), Investigating National Curriculum Implementation in Papua New Guinea (PNG)" (Kekeya, 2013), and The Failure of Progressive Classroom Reform: Lessons from the Curriculum Reform Implementation Project in Papua New Guinea (Guthrie, 2012). However, there is a dearth of studies done in area of Pace-based learning as a curriculum implementation approach. The absence of research on a specific area of curriculum in PNG motivated this researcher to explore a wider population engaged in the curriculum enactment processes. However, given financial and time constraints, a limited sub-sample population was used which covered four schools in two provinces of two regions. These included a rural and urban school in the Western Highlands Province of the Highlands region, and a rural and urban school in the Madang Province on the coast of the Momase region. If this study had sufficient funding and the time needed, the headteachers would have been included to investigate how the handle the curriculum materials and the related policy documents that are issued to each school free of charge.

1.7 Structure of thesis

This thesis consists of nine chapters. Chapter One has introduced the education developments and curriculum changes in the education system of PNG. It then discussed the researcher's experiences in curriculum to put the research topic into perspective. The chapter then introduced the research questions as influenced by the theoretical framework and justified the significance of the study. The limitations of the study were then discussed next and the chapter closed with the outline of the thesis.

Chapter Two forms part of the literature review focusing on the geographical location of PNG, its historical settings, traditional society, its education system, socio-economic challenges in the present times, sense of nation, and its future. These issues influence the national

curriculum, its design, development, policy and practices as a response to the emerging socioeconomic challenges in the 21st century.

Chapter Three continues the literature review and discusses teachers as contributors to the curriculum. Curriculum definition, theory, and practices during the colonial and post-colonial eras are discussed with attention to place-based learning. The chapter concludes with a summary and the literature review parameters.

Chapter Four discusses the research methodology and methods employed in the study. It begins by revisiting the aim of the study and the research questions. It then discusses the theoretical framework, research design, data quality control mechanisms, research ethics, and limitations of the study.

Chapter Five begins the data analyses of this study. It revisits the research questions and goes on to provide background information on the participants. The chapter then analyses the data pertinent to research question one, by considering each of the participant's responses.

Chapters Six and Seven consider research questions 2 and 3, respectively. These chapters consider each participant's responses.

Chapter Eight presents the discussions pertinent to the processed data provided in chapters Five, Six, and Seven. It focuses on the curriculum theories and practices as they became prevalent during the literature review and data analysis process.

Chapter Nine highlights the implications of curriculum practices, drawn from the major findings presented in Chapter Eight, and concludes the thesis with a summary.

Figure 1.0 identifies where each chapter of the thesis situates illustrating their cohesiveness in addressing the research questions.

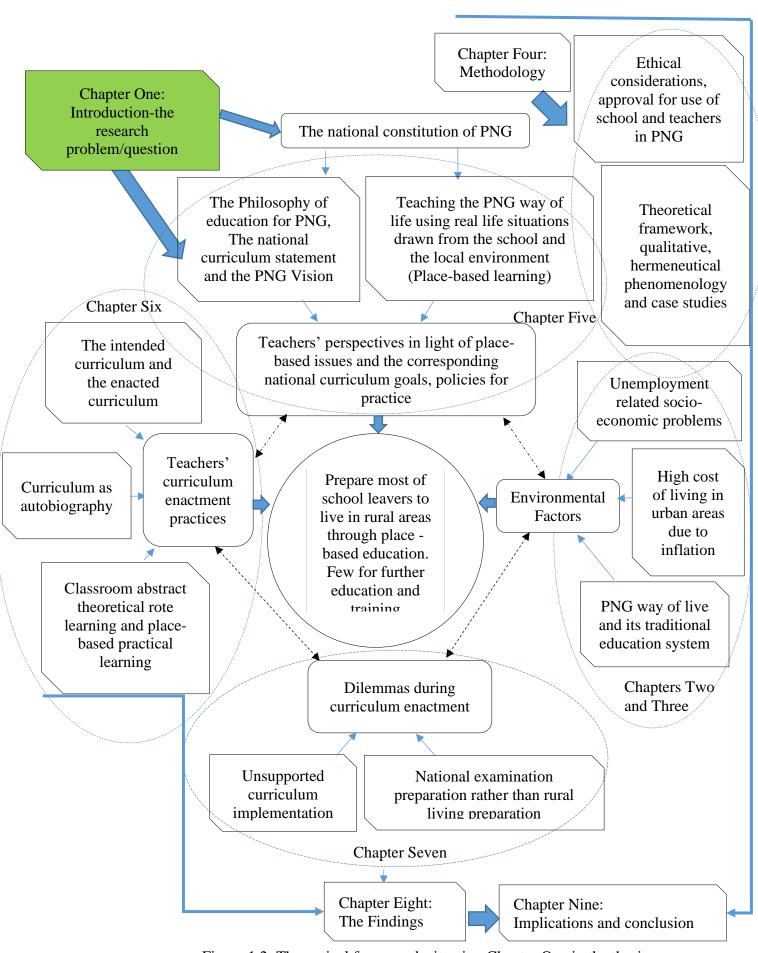


Figure 1.2: Theoretical framework situating Chapter One in the thesis.

Chapter Two

Education in PNG: A literature review

2.0 Introduction

Education is the bedrock for the development of any country. It is a fundamental response to unemployment related socio-economic challenges, which deters progress in developing countries such as PNG. PNG's economic challenges are exacerbated by the country's "very high rates of population growth" (Hedditch & Manuel, 2010, p. v). This results in a huge number of school leavers migrating into urban areas every year searching for employment in the formal sector. However, there are not enough jobs to accommodate the increasing number of students leaving school each year. One thing that many school leavers do not understand is that people can sustain their livelihood in a rural village, as it had always been during the pre-colonial era. More than 80 percent of the population without formal employment continue to live in rural communities today: the source of sustainability is the local environment. This happens because PNG uses a dual economy where modern or formal cash economies based on mining formal employment and mining of gold, silver, copper, nickel, petroleum and natural gas productions dominate the urban areas (Hedditch & Manuel, 2010). In contrast, a traditional or less/non-cash informal economy based on fishing, forestry, palm oil, copra, cocoa, and vanilla including subsistence farming exists in the rural areas of PNG (Hedditch & Manuel, 2010). Hence, jobs in the formal sector, which many people believe to be an easy way of earning an income, are very limited, while small business activities in the informal sector have no limits for opportunity, although many people see it as a lot of hard work.

The government believes that the type of education provided before 1992 failed in preparing the school leavers adequately to participate in either the formal or the informal sectors of the economy. PNG believed that the previous education system adopted during the colonial era did not address Integral Human Development which is the first of the five national goals enshrined in the national constitution (Matane, 1986). IHD is a concept of holistic child development which, according to Matane (1986) is to develop a child mentally, socially, and spiritually as a foundation to realise the other four national goals.

PNG therefore aspires to produce an adequately and holistically educated human resource through a basic relevant education that would allow each citizen either to participate in the formal or the informal sectors of the economy. A country's progress as a nation, as John F. Kennedy (1917-1963) once noted, is dependent on the progress in education because the human mind is a

fundamental resource (DellaMattera, 2010). PNG's progress, therefore, depends on a vibrant quality education delivered in schools through a thoughtful curriculum, based on learning outcomes and mediated through well-prepared skillful teachers (UNICEF, 2000). Curriculum to that effect, is regarded as the heart of education, which plays a vital role in reshaping a whole country as well as improving its economy (Alvior, 2015; Pinar, 1995).

PNG aspires to provide a basic relevant education embedded in the country's traditions, cultures, and values that are part of life in the traditional economy. These features are broadly encompassed in the curriculum intending to immerse students in place-based learning experiences in the context of their local environment. Place-based learning is a concept that encourages hands-on learning experiences in the real world using local resources, providing students with an opportunity to gain a deeper understanding of the local place where they live (Bartholomaeus, 2013; Sobel, 2004; Gruenewald, 2003). Place-based learning encourages school leavers to appreciate and embrace rural living, and finally return to their rural communities after leaving school. Preparing school leavers to return to their rural communities is a National Department of Education (DoE) plan (DoE, 2003; DoE; 2001; National Education Plan 1995-2004). The plan aims to encourage rural living while discouraging rural-urban migration, which will minimise unemployment, and related socio-economic challenges experienced in urban areas. The only way this education plan, or any other educational aspiration, can be implemented is through the curriculum and the teachers' curriculum enactment practices. The curriculum goals and policies are the key factors that guide the teachers' curriculum enactment practices to prepare school leavers for their return to their rural communities.

This chapter focuses on the education system of PNG, as a response to its socio-economic challenges. The chapter begins with PNG's geographical location to set the background of the study. It then looks at PNG's traditional education with emphasis on place-based learning, the early colonial era, and the introduction of the Western education as a historical background. The discussion then highlights the country's past and present economic challenges. It then discusses the current curriculum reform, its policies and other related government policies as a response to these socio-economic challenges. The chapter ends with a summary. Figure 2.0 illustrates the position of Chapter Two in relation to the other chapters of the thesis.

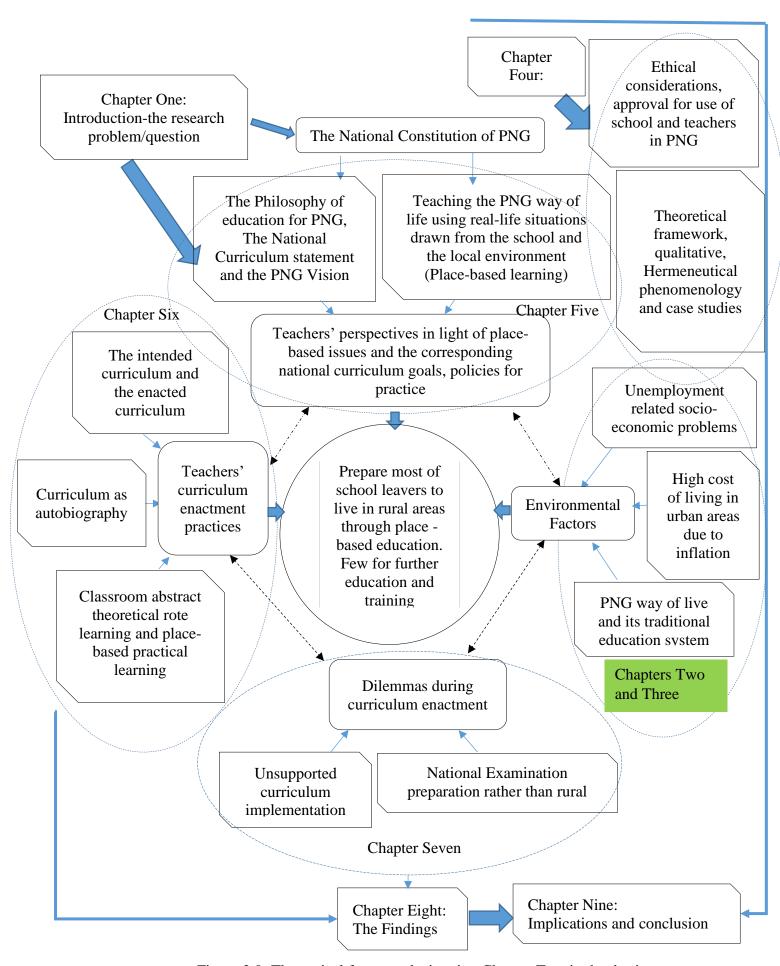


Figure 2.0: Theoretical framework situating Chapter Two in the thesis

2.1 PNG geography

PNG is an island country that lies to the north of Australia. It is the largest island country in the Pacific and the second largest in the world (Hezel, 2012; Rena, 2011). PNG comprises of about six hundred smaller islands that lie between the Coral Sea and the South Pacific Ocean, occupying about 462,840 square kilometers of land and water off the Southeast Asia coast (Rena, 2011). PNG is a country of diverse geography, categorised into more than forty distinct geographical and biodiverse areas, and generally divided into four large and distinct regions, which are the Highlands, the south or the Papuan coast, the north or the Momase coast, and the Islands (Rogers, Bleakly, & Ola, 2011).

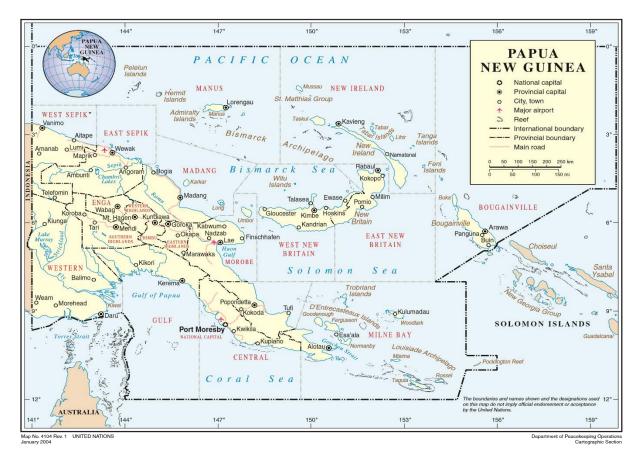


Figure 2.1: Map of PNG.

Source: http://www.un.org/Depts/Cartographic/map/profile/papua.pdf.

PNG lies "between the equator and 12 degrees south and from 141 to 160 degrees east" (Barr, 2000, p. ix). This geographical position from the equator enables PNG to experience high annual rainfall. PNG's tropical climate seasoned with a monsoonal rainy season usually between November and April is significant for the southern part of the country, but year-round rain is

normally experienced in the highlands and small islands (Barr, 2000). The tropical climate has developed tropical forests, savanna grasslands, and swamps in certain areas of PNG. Though PNG is only an island, it contains approximately half of the third largest area of tropical rainforest in the world and is one of the most biodiverse and ecologically distinct forested regions (Brooks et al., 2006; Shearman, Mackey, Bryan, & Lokes, 2009).

PNG has a long history of human occupation. Human remains found in PNG attests to human occupancy dating back to about 50,000 years ago (PNG Tourism Promotion Authority, 2015). Archaeological evidence also suggests humans first reached PNG at least 60,000 years ago from Asia (Wheeler & Murray, 1993). The people had been living in their own confined world (PNG) without the slightest idea of the global community until discovered. Antonio d'Abreu, a Portuguese sailor, first sighted the New Guinea Island in 1512 (Wheeler & Murray, 1993). However, a Dutch East Indies Company made the first definite European sighting in 1526, claimed sovereignty over the unexplored New Guinea Island in 1660, and remained for more than a century (Wheeler & Murray, 1993).

Early traders were later joined by the missionaries and patrol officers who regarded the people of PNG to be living in a "primitive" society (Trebilcock, 1983, p. 191). This was also the opinion of the first Australian patrol officers who ventured into the highlands noting that the people "had a rich primitive life where they felt that they were superb and the center of the universe" (Nelson, 1982, pp. 128-129). Though the people were perceived to be primitives through the Western eye, they had developed a rich traditional education system, which sustained their livelihood for generations.

2.2 PNG traditional education - a historical perspective

The Indigenous traditional education system is embedded in PNG's spiritual belief systems, cultures, values, skills, and knowledge, and enabled the people to sustain their livelihood for centuries. The skills, knowledge, and values necessary for life were transmitted from generation to generation through the traditional education system. The successful transmission of knowledge is owed to the use of place-based learning in the traditional education system: a real-life teaching and learning situation. The place-based learning approach became deeply rooted in the people because of its daily occurrence. Professor Guthrie (2015), who spent many years working with PNG education, wrote:

Actually, traditional Papua New Guinean societies contained several long-recognised types of education, and still do. One type is *informal education*, through which much knowledge is passed, usually from an older person to a younger one within the family or clan, but also among peers, and often through storytelling. A second type of education is *non-formal education*, where knowledge is passed from experts in a particular field – gardening, fishing or tribal warfare, for example – to others who are learning these skills on the job (McLaughlin, 1994). A third and less well-recognised type in traditional societies is *formal education*. (p. 35)

The PNG traditional education, underpinned by belief systems, rituals, and initiations of the Indigenous people and continues to this day, is for survival (Kekeya, 2014; Matane, 1986). Survival in the traditional society context meant to have food, shelter, clothing, and security, the latter for defending against tribal rivalry over land, which was very common. Land, women, and pigs continue to be the main triggers of tribal violence these days because they link to the value system of the Huli people, as well as the rest of PNG; and minor disputes may evolve into full-scale tribal wars, as they did during the pre-colonial era if not properly mediated (Kopi, Hinton, & Robinson, 2010). Learning to fight, therefore, became a compulsory component of the traditional curriculum. A good example is the Sambia culture, where:

All boys are forcibly initiated; there is seldom any choice in the participation in this initiatory process. The boys must learn to perceive their own unbending masculinity as their protection against the inconstant world. Men undergo a process of initiation for a span of ten years, while women do not partake in any form of initiation. The purpose of the initiation is to be truly masculine. (Burke, 2011, p. 14)

Those who failed to master the necessary skills, knowledge, and values had problems in their lives. For example, girls in the Bundi area were expected to learn the traits of womanhood and become assets to the new family they would establish with their future husbands (Fitz-Patrick & Kimbuna, 1983). A woman's task in the Bundi culture:

... is to work hard to promote her husband so that he can take his place as a leader in the community. If a woman tries to influence her husband too much or if she does not work hard, he may beat her; if this fails to secure her compliance he may divorce her. Her behaviour towards husband must manifest her respect for him and must serve to support and promote him. (Fitz-Patrick & Kimbuna, 1983, pp. 47-75)

Some people faced the consequences for not meeting the cultural expectations, such as the Bundi women, because they failed to acquire the necessary knowledge during childhood. The necessary skills and knowledge for life were the PNG traditional education imperatives, which had to be learnt during childhood from their parents. For example:

During the initial stages, girls (in the Bundi society) learn mainly by watching and imitating their mothers, but later they help in the house and garden. Most of the hard-manual work is performed by women. Carrying heavy loads, often as much as thirty kilograms, is one of the main tasks. The girls learn to carry from an early age and develop the strength to perform this task. (Fitz-Patrick & Kimbuna, 1983, p. 51)

The heavy loads that women carried were sweet potatoes for feeding their families and pigs they may be rearing. Young girls were continuously reminded to raise fat pigs for their husbands to be respected and recognised by other people as one who is good at raising pigs (Fitz-Patrick & Kimbuna, 1983).

Those who did not acquire ample knowledge to work for their survival lived poor lives. Poor, defined in this context, is those who possessed no material wealth such as pigs, shells, and food. In contrast, those who did acquire the necessary skills, knowledge, and values lived successful lives with wealth. They were even able to defend themselves and their land or depended on their allies if they were a small group. The smaller groups usually hired allies to help in tribal warfare against their rivals and later paid their allies with their wealth. These were the norms of PNG life shaped by the traditional education system until (Butt, 1989) European colonisation during the late 19th century.

2.3 The colonial administration

PNG was divided and controlled by several countries before being administered as one country by Australia leading to independence in 1975. Rena (2011) summarises PNG's colonial administrations as follows:

The Dutch annexed the western half of New Guinea between 1828 and 1848. The British and Germans divided the eastern half in 1885; Great Britain took the south, and Germany took the north. Great Britain transferred control of the southeastern portion of New Guinea to Australia in 1902, which renamed it Papua. Australia seized the northern region during World War I and assumed complete control of eastern New Guinea under

a League of Nations mandate. The Japanese occupied most of the colonized areas of New Guinea during World War II. However, after the war, control of the island reverted to Australia as a United Nations trusteeship. Australia maintained control until Papua New Guinea claimed its independence in 1975. (p. 3)

PNG was under the total control of Australia from 1902 onwards, except during World War II, when the Japanese occupied most of the colonised areas of New Guinea (Crossley, 1994; Department of Foreign Affairs and Trade, 2006; Megarrity, 2005; Rena, 2011). However, after the war, the control of the island reverted to Australia as a United Nations trusteeship. Australia then administered both territories of Papua and New Guinea for decades until independence in 1975(Rena, 2011). The early missionaries who were also in the country and the colonial administration introduced formal education during the colonial era to spread Christianity and prepare PNG for independence.

2.3.1 Education during the colonial era

The early missionaries and the colonial administration introduced Western education in PNG during the colonial era. Formal Western education was introduced as a means of civilising the uncivilised Indigenous society. The London Missionary Society established the first school in 1873 to teach the people to read scriptures (Rena, 2011). The colonial administration established government schools much later (around 1929) to prepare people for administrative jobs (Crossley, 1994). The missions and the colonial administration managed their schools independently until the 1970s. However, mission schools enrolled more students than the colonial administration schools.

In 1966 there were about 129 000 students attending recognised mission primary schools compared to roughly 65 000 in administration schools. Although the government was building new schools faster than the missions were, particularly in the highlands region, missions continued to provide primary schooling for the majority of children in the period before independence. In order to prevent wasteful duplication of resources, it had been agreed to avoid competition by not building government and mission schools in the same village or area (Smith, 1987, p. 250).

Several discrepancies were noted in the operation of two independent education systems. "The main obstacle to government-mission co-operation in providing schooling hinged on the

difference in language policy" (Smith, 1987, p. 119). The colonial administration endorsed English as a language of instruction while the churches decided to use the local vernacular and/or pidgin. Other challenges included the opening of new schools in isolated and uncharted areas, the curriculum and the level of education or standard provided, the divergent educational aims, and teacher training and remuneration. These divergences led to various shortcomings that called for the formation of a unified national education system and the teaching service commission, which came into effect in 1970 as PNG prepared for independence in 1975.

However, most coastal areas of PNG had schools for many years before schools in the highlands were opened. It was not until "the late 1940s and 1950s that more and more highlanders came into contact with the world beyond their valleys as government and missions rapidly extended their influence" (Smith, 1987, p. 180). When entering the highlands, it was again the:

New Guinean evangelists, catechists and teachers who were the first to carry away Christian teaching to uncontacted communities and to establish a mission presence there. Even in areas already contacted and visited regularly by government patrols, the mission teacher with his church and school was probably the only real sign of the outside world. In this way, mission teachers served the purpose of the administration in assisting with the pacification and civilisation of their countrymen. (Smith, 1987, p. 115)

Education played a very important role in the civilisation process of the Highlands region. "It served the same purpose it had on the coasts fifty years before, that of bringing the people into the orbit of colonial control" (Smith, 1987, p. 180). The missionaries felt that they were responsible for a governmental commitment when they found themselves providing education to a wider population than the government was. Although mission schools covered more areas, some of which were very remote parts of PNG, the government did not welcome certain aspects of the mission education. For example, "The mission priority in converting the heathen led them to the necessity of using vernacular languages, while colonial regimes intent on extending government control wished to see the language of metropole spread more widely" (Smith, 1987, p. 119).

The other obstacle of mission education, apart from the language of instruction, included the curriculum and level of teacher training. The level of training of missionary teachers and the curriculum used were believed to be below par compared to the standard of government school curriculum and teachers. It was discovered that the mission school curriculum was based on the

Bible, which was taught in vernacular by the teachers who were also trained using local vernacular. This happened because "the chief aim of the missionary educational systems was to train the natives to read and write in vernacular and to teach them the principles and truths of Christian morality" (Smith, 1987, p. 131). The curriculum was therefore, centred on the Bible and taught in the local vernacular, which was believed to be easier. If mission teachers and students did not have one of PNG's 700 plus languages in common, then pidgin was the next option of instruction. Pidgin spread quickly throughout the country because it was easier to learn and regarded as PNG's second official language. However:

Despite the spread of Pidgin and the insistence of some linguistics and anthropologists that is was a useable language, English, as the language of the colonial authority, was perceived by Papua New Guineans, as the language of emancipation. A knowledge of English not only led to a good job, it (also) provided a means to access to political and economic parity with Australians. (Smith, 1987, p. 194)

The colonial administration found out that missionaries had more schools than the government, but the mission schools were using vernacular and/or pidgin as language of instruction. This was contrary to what the colonial administration anticipated, which was to use English in preparation for independence. Thus, it was felt that churches needed to change their practice of using vernacular as a medium of instruction to using English.

The missionaries also came to realise that they lacked the capacity to run and improve their education services. "By 1968 most missions realised that the only solution would be to work in close co-operation with the government under one unified education system" (Smith, 1987, p. 251). In reciprocity, the colonial government through:

...the Department of Education drew up two Education Ordinances. The first established a unified national education system. The second following from the first, created a separate teaching service to which all teachers, government and mission, would belong and which would be separate and distinct from the public service. The Ordinances, which were progressively brought to force after 1970, established the education system for independent Papua New Guinea. (Smith, 1987, p. 255)

The unified system brought all mission and government teachers under one umbrella, to be paid by the government. The government, in return, expected the mission schools to help educate Papua New Guineans in English, so the missionaries transitioned to using English. Hence, education during the colonial era prepared PNG for independence that was achieved in September 1975; however, it also created socio-economic challenges.

2.3.2 Colonisation of education and its impact

Colonisation of education in PNG and its impacts continue today. To clearly articulate how colonial education influenced PNG, this section begins with discussing traditional education, and then the introduction of formal education. In the PNG traditional education system, young people learnt the various necessary skills, knowledge, and values gradually through formal participation in activities intimately embedded in everyday life of the community or planned events, such as initiation ceremonies (Nagai, 1997). For example, boys learnt how to build a house by building one under the guidance of their fathers when their house needed replacement, and not at any other time, as there was no real-life context or opportunity to experience such occurrences. This is contrary to the Western formal education that was mostly confined to a classroom following a timetable from 8am to 3pm, Monday to Friday. Many Indigenous children did not want to attend school and ran away because they did not like sitting in a classroom. To encourage attendance, and to explain what a school is all about to the confused parents, this is what one Patrol Officer told a crowd in Kundiawa, Simbu province about building a new school for the first time in the 1950s:

Em bai sikul na kisim big save, plenty moni tru, put shoe na soks olsem mi tu. Bihan em yupela hamamas tru.' (It is like this, your children will go to school and have big knowledge, earn plenty of money, and wear shoes and socks like me). This time the impact of the full meaning scores the target. Whispers of happiness and the thought of future luxuries for their children could be seen. No wonder, a miracle had happened. (Smith, 1987, p. 154).

Similar messages were echoed across the country to encourage attendance and a few years later almost every Papua New Guinean who went to school was employed and earned money to purchase manufactured goods, which were previously considered to belong only to the white people. For example, in Kainantu in the Eastern Highlands Province the Kainantu Local Government Council recruited a year 6 leaver for a clerical job that required a year 8 leaver, as there was no one available (Smith, 1987). The people were colonised into thinking everyone going to school would have a job and this belief is deeply rooted to this day. This colonial

conception of education as a passport to paid employment (Matane, 1986), which served its purpose back then, needs to be questioned now as jobs are becoming scarce.

The decline in employment, creating unemployment related socio-economic problems became apparent during the colonial era. A former patrol officer elected to the then House of Assembly as the Member for Eastern Highlands, Sir Barry Holloway, spoke about the unemployment problem of school leavers as early as 1967 (Smith, 1987). This is how he described the situation:

Now the situation is beginning to change dramatically and will continue to do so in the next five years. Nearly every day in Kainantu, one is approached by groups of two and three with standard 6 certificates seeking work suitable to the aspirations they acquired during their schooling. They are under exhortations from their parents that a new way of life would open to them if they attended school regularly and applied themselves to their books. It becomes a very rude shock to them when they find out that the big wide world rejects them with such questions. (Smith, 1987, p. 263)

The unemployment situation is a major socio-economic challenge for PNG today. Of the many factors that contribute to this, the major issue is the mind-set of the people (i.e., an educated person should have a job), which is a colonial impact that needs to be adjusted according to current circumstances.

The traditional education systems had no curriculum or standard examinations in contrast to the Western formal education that was introduced. During the pre-independence period, educational policies, based on Western knowledge systems and implementation, were superficial because the local people lacked understanding of the underlying cultural values and processes (Nagai, 2000, p. 80). The people were taught using a standardised curriculum, and students had to sit examinations and pass to step into employment. Curriculum enactment is an autobiographical process that "emphasises the social, historical, cultural, and political embeddedness of all personal and academic knowledge" (Sharma, 2012, p. 144; cited in Pinar, 2000). Hence, in PNG, the political agenda had been to prepare the country for independence; thus, the formal education system prepared people for administrative jobs using national examinations to filter those who could not pass them.

2.3.3 Decolonisation of education in PNG

A major impact of colonial education that requires decolonising is the concept of everyone who goes to school would secure a job. Because of such colonial impact many people in PNG believe in education as a passport to a paid job which is a misguided expectation (Matane, 1986). For example, a father once said he would send his son to school to get a big job and send him money every payday, and he would no longer work in the garden (Matane, 1986). The current outcomes-based education reform is to decolonise that misguided expectation of everyone going to school end up in a paid employment. Teachers need to help students and parents realise that not everyone going to school would get a job as already experienced in the country but to prepare for their return to the rural communities through place-based learning. However, it is difficult to decolonise this mindset as many students are now attending schools made possible by the government's Tuition Fee Free (TFF) education policy. Other people who even left school many years ago view the TFF policy as a second opportunity to try their luck for employment after school. This leads to the issue of schools spending many resources in preparation for national examinations for students trying to enter tertiary institutions for further education and training for employment. Schools spending so many resources on examinations forfeit the achievement of the national curriculum goals, a dilemma that is further discussed in Chapter Seven.

2.4 Socio-economic challenges and education imperatives

The socio-economic challenges experienced in PNG at the present time are more challenging than those experienced during the colonial era and the first few years of post-colonialism. The major socio-economic issues experienced in many parts of the world today, including PNG, are the breakdown of social order and poverty.

Socio-economic challenges in PNG often relate to unemployment, an effect of a rapidly growing population and fewer jobs in the formal economy. The population was estimated to increase from around 5.7 million in 2010 to 7 million by 2014 and predicted to be around 8.5 million by 2024 (Booth et al.; 2006 Yala, 2010). However, the population exceeded 7 million, reaching 7,275,324 by 2011 (Bryant, 2014), rather than 2014 as predicted. This illustrates the high rate of population growth over a short period.

The major social problems experienced in the urban areas of PNG are usually criminal in nature, believed to be committed by young unemployed school-leavers. Young people, believed to be school leavers, account for the greatest share of crime and violence (Blank, 2008), which are widespread in Port Moresby and other urban areas around PNG. These unemployment related socio-economic problems would be more severe if the entire country depended on a cash economy. However, about 85% of the population who remain in rural communities depend mostly on a non-cash economy, where their main source of livelihood is subsistence farming, fishing, hunting, and small community-based commercial enterprises (Kale & Marimyas, 2003). These rural communities established during PNG's pre-historic times prior to coming into contact with the outside, world rarely experience the sort of socio-economic challenges that are prevalent in urban areas. The rural communities do not experience socio-economic problems because the people depend on traditional subsistence farming and the barter system of trading for their livelihood. Subsistence farming is the most important part of PNG agriculture, which provides most of the food consumed in the country, estimated to be 83% of food energy and 76% of protein (Bourke & Harwood, 2009). Once subsistence farming was established in PNG, it became the way of life for centuries before meeting the outside world.

There is a long history of agriculture in what is now PNG, with the first settlers arriving about 50 000 years ago. Agriculture began in PNG at about the same time as it appeared in the Middle East and in China, about 10 000 years ago. Some food plants domesticated in New Guinea and others were introduced from Asia and other Pacific islands. In the 1700s, new crops began to reach PNG from the Americas and one (such), (the) sweet potato, has become PNG's most important crop. Many new food and potential cash crops were introduced during the colonial period, from the early 1870s onwards (Bourke and Harwood, 2009, p. 6).

The tropical climate accounts for enough annual rainfall which enables gardening all year round to sustain the livelihood of the people. Thus, socio-economic problems, such as armed robberies, which are complex and serious occurrences happening in today's urban areas, are unheard of in the rural villages. Here is an example of how a woman from a rural community experienced such social problems in the urban market of Mt. Hagen City recently:

A young man swung a long knife at a woman's right hand when she refused to give the young man a 2:00 PGK (0.73 AU\$). The woman was trying to buy oranges at the Mt Hagen main market on Monday 16th May 2016 when this happened. Seeing the knife, the

woman dropped the 2:00 PGK which the young man picked up and disappeared among the crowd. (Gumuno, 2016)

Swinging a bush knife at another person without worrying about the police for just 2:00, PGK indicates the magnitude of socio-economic challenges in urban areas. Young school leavers who migrate to urban areas looking for employment usually cause such problems. In a recent study on urban youth unemployment in PNG, Rayel, Imbun, Jacka and Kanaparo (2014) revealed that:

The core reasons why youth migrate to cities and towns are in search for jobs and to study. This study revealed that 44 percent (n=141) migrated to the urban centres in search for job opportunities, 32 percent (n=101) for schooling, and 24 percent (n=76) for other reasons like staying with relatives, and scarce resources or inadequate economic activities in the rural areas. (p. 26)

The study revealed that the major reason for the rural-urban migration involved youths searching for jobs. When these youths are unable to find employment, as is often the case, they turn to crime to survive. The prevalence of the increasing socio-economic challenges, caused by the high rate of rural-urban migration, compelled the government to encourage rural living through place-based education. Hence, the government's intentions and strategies to encourage rural living through place-based learning are articulated in several curriculum policy documents for implementation.

2.5 PNG policy formulation

This section discusses various policies the PNG government formulated to address its socio-economic problems through education. Some of these policies influenced the wave of curriculum reforms experienced in the country. That is because it is common knowledge that education is fundamental to a country's development; thus, PNG's developmental aspirations are articulated through various policy documents intended for implementation by all government agencies. These developmental policies stem from the national goals and directive principles enshrined in the national constitution. The five national goals are:

- integral human development
- equality and participation
- national sovereignty and self-reliance

- natural resources and environment
- Papua New Guinean ways (Vision PNG, 2009, p. 2 cited in the National Constitution of PNG)

These developmental policies are adopted by the National Department of Education to construct education and/or curriculum policies to guide practice. For example, integral human development calls:

...for every person to be dynamically involved in the process of freeing himself or herself from every form of domination or oppression so that each man or woman will have the opportunity to develop as a whole person in relationship with others. (Matane, 1986, p. 11)

The policy documents significant to education and curriculum practice are the Philosophy of Education for PNG, the National Curriculum Statement, and PNG Vision 2050; the latter is a general call towards a sense of nation building. These policy documents are elaborated further in the next few sections.

2.6 The Philosophy of Education for PNG

The Philosophy of Education for PNG presents a view of how education should be managed to achieve the national goal of integral human development. The government felt that the curriculum introduced during the colonial era was foreign and did not reflect the country's aspirations enshrined in the national constitution, which came into essence later at independence in 1975. Thus, beginning with Integral Human Development as a central theme, the Philosophy of Education for PNG articulates how the education system and its curriculum should be organised to achieve the national goals, which are also the national developmental goals enshrined in the constitution. The notable recommendation in the Philosophy of Education is the call for a community-based curriculum, which would encourage rural living (Matane, 1986). Community-based curriculum is the same concept as place-based education, which this study focused on.

The recommendations of the Philosophy of Education for PNG paved the way for the education and curriculum reforms in 1992. The Secretary for Education revealed that:

During the development of this (National Curriculum) statement, the Constitution of the Independent State of PNG, Government Acts and many other important policies, reports

and plans were analysed. In particular, this statement is based on A Philosophy of Education for PNG, Ministerial Committee Report, (1986) often referred to as the Mantane report, and the integration of current education reform ideas. (DoE, 2003, p. ii)

What the Philosophy of Education for PNG advocates for, and is reiterated in the curriculum, is an education that is *relevant* to PNG. Relevant education in this context is defined as "the promotion of culture, values, attitudes, knowledge and a range of skills appropriate for Papua New Guinean societies along with the need for international competitiveness" (DoE, 2003, p. 3). The philosophical contents of the Philosophy of Education for PNG are reiterated in the National Curriculum Statement (NCS).

2.7 The National Curriculum Statement

The NCS is the national curriculum framework, which governs all curriculum activities in PNG. It was developed in 2003 to advocate the national curriculum goals and principles to guide curriculum practices throughout the country. The NCS is a government policy, and all curricular developed and implemented from elementary prep to year 12 should adhere to the curriculum principles (DoE, 2003). Any curriculum activity in PNG not adhering to the National Curriculum framework is deemed illegal. That is because the guiding curriculum principles are believed to be appropriate, and anything other than that is inappropriate. Thus, as the NCS points out, the following are the major policies that should be adopted, in this case at the classroom level, to help achieve the national curriculum goals:

The overall aim of the National Curriculum for PNG acknowledges the National Goals and Directive Principles enshrined in the National Constitution based on Integral Human Development. This means that the curriculum must aim to promote socialisation, participation, liberation and equality. (DOE, 2003, p. 9)

Teachers, therefore, need to recall the overall aim of the curriculum and devise strategies to help achieve the curriculum goals.

The NCS also encourages teachers to promote the cultures of PNG in their respective schools. "Within the National Curriculum, the teachers must integrate knowledge, skills, and attitudes to allow students to achieve the desired outcomes of integral human development" (DOE, 2003, p. 16). The government believes this approach to be a way of encouraging young children to appreciate and embrace their land and the traditional way of life. The national

curriculum intends to enable students to demonstrate their understanding and appreciation of their traditional values, such as land, customs, and cultures (DoE, 2003). These goals can only be achieved if teachers teach using real-life contexts, which means relating the skills and knowledge of the subjects to real-life situations as the national curriculum suggests (DoE, 2003). This approach is referred to as place-based learning, which is the core theme of this thesis and is discussed in detail later in Chapter Three. Through the education department, the government efforts aim to educate Papua New Guineans to embrace a sense of nation and contribute meaningfully towards nation building that is envisioned in the PNG Vision 2050 through place-based learning.

2.8 Sense of a nation and its future - PNG Vision 2050

PNG emerged as a nation at independence in 1975. The Governor General at the time, Sir John Guise, declared on 16 September 1975 that, at that point in time PNG had broken its colonial past with Australia and declared itself as an independent sovereign nation (Laurentia, 2006). "We, the people, do now establish this sovereign nation and declare ourselves, under the guiding hand of God, to be the Independent State of Papua New Guinea" (National Constitution of PNG, p. 1). With the sense of an independent nation, PNG began to chart its own course of destiny to development and prosperity from then onwards. PNG declared integral human development as its first of the five national directive goals in its national constitution.

We declare our first goal to be for every person to be dynamically involved in the process of freeing himself or herself from every form of domination or oppression so that each man or woman will have the opportunity to develop as a whole person in relationship with others. (National Constitution of PNG, p. 2)

The above directive goal laid the foundation of the Philosophy of Education for PNG, which is the key directive of the NCS. All these directive goals accumulate to a sense of direction for nation building through education. However, after 34 years of independence, PNG decided in 2009 to take stock of its progress so far as a nation.

We leaders and people must know where we want to go before we can decide how we should get there. Before a driver starts a motor car, he should first decide on his destination. Otherwise, his driving will be without purpose, and he will achieve nothing. We Papua New Guineans are now in the driving seat. The road which we should follow

ought to be marked out so that all will know the way ahead." (Vision PNG, 2009, p. 1 cited in the Constitutional Planning Committee (CPC) Report, 1974, Chapter 2, Section 4)

This goal was first articulated in 1974, when drafting the National Constitution of PNG, and was reiterated in PNG vision 2050 in 2009. Its replication and reiteration in various policy documents stresses the importance of having very clear and constructive goals for tangible development.

The Somare-Temu Government (2007-2011) decided to take stock of the past developmental track to chart a new direction for tangible development. The stock-take of the past developmental track conceived the development of PNG Vision 2050; a new direction for development. Vision 2050, as it is commonly known, declares that PNG should place amongst the top 50 nations as per the United Nations Human Development Index by 2050 (Vision, P. N. G., 2009). The PNG Vision 2050 is founded upon seven pillars that encapsulate the medium-term developmental goals and look upon the Department of Education to help realise its aspirations. The seven pillars that underpin PNG vision 2050 are:

- Human Capital Development, Gender, Youth and People Empowerment;
- Wealth Creation;
- Institutional Development and Service Delivery;
- Security and International Relations;
- Environmental Sustainability and Climate Change;
- Spiritual, Cultural and Community Development; and
- Strategic Planning, Integration and Control. (Vision, P. N. G., 2009, p. xiv)

The first pillar is related to education, which is the only mode for human capital development for people empowerment. As the then Prime Minister of PNG Sir Michael Somare stated in 2009:

Our Vision 2050 provides every man, woman, boy, and girl in this nation with the opportunity for personal development and positive engagement. As a government, we are convinced that we must empower our people with the right education and life-skills and provide them with the opportunity to earn an honest living. Only then can we guarantee our nation's continued prosperity and security. (Vision PNG 2050 (2009, p. x)

Central to the human resource development that PNG Vision 2050 aspires is the curriculum and teachers' curriculum enactment practices in the education system.

2.9 The national curriculum reform as a response

Education, as previously mentioned, is the key to the development of any country. Central to all education systems lies the curriculum. Curriculum is the essence of education that has the potential to improve the economy and reshape a country (Alvior, 2015; Pinar, 2004 a), a premise that compelled PNG to change its curriculum several times. The major and the latest curriculum reform was in 1992 because:

Before the reform, the Papua New Guinean curriculum was based on foreign Western beliefs and ideas mainly to produce Papua New Guineans to administer the country and achieve academic success. This system of education unfortunately failed to provide a useful education for all other citizens of Papua New Guinea. (DoE, 2003, p. 3)

Thus, the curriculum that was once embraced, which produced the aspired manpower for the formal sector in preparation for PNG's independence during the colonial era when there were more jobs than educated people, was now regarded as irrelevant. That was because:

The formal sector provides a rather narrow employment base for those engaged in mineral production, manufacturing, the public sector, and service industries such as finance, construction, transportation and utilities. The rapid urban growth underway since independence is related to high levels of urban unemployment, high crime rates and other related social problems. (Stiftung, 2016, p. 2)

PNG reformed its curriculum in 1992 to address such problems, with the hope of providing a basic relevant education that would be useful for all citizens. The hope of securing paid employment is no longer viable because of limited job availability. Hence, the key objective of the education reform is:

To develop an education system to meet the needs of Papua New Guinea and its people, which will provide appropriately for the return of children to the village community, for formal employment, or for continuation to further education and training. (DoE, 2001, p. 1 cited in the National Education Plan 1996)

The above is PNG's key objective in education which is translated as 'relevant education'. PNG aspires to provide a relevant education, which encourages rural living by promoting the cultures, particularly subsistence farming and barter systems, which are the norms of the rural population. Unfortunately, the centralised, developed national curriculum cannot feature all the skills, cultures, and values of PNG. This provokes a question: how can a teacher enact a centrally developed curriculum in the context of the school's local environment in a country of diverse cultures with more than 700 languages? In other words, a centrally developed curriculum does not encompass all cultures of PNG, so how do the teachers make the curriculum relevant to suit the local context?

The best approach in answer to the previously outlined question is to encourage teachers to align the curriculum text with the respective local environment to teach lessons using real-life situations (DoE, 2003). This approach will see students immersed into their culture and way of life using place-based learning experiences. PNG's cultures and way of life would be revived when students engage in real-life learning situations through place-based learning. Moreover, school leavers would be encouraged to appreciate and embrace their culture, land, and way of life to make informed decisions later in society. For example, students will understand science better when related to real-life situations; especially when taught using the local context, which provides the students the opportunity to be aware of how science influences their everyday life, how it can inform personal, community, and government decisions (DoE, 2003).

The concept of teaching and learning using real-life situations is the same concept other countries advocate as place-based learning in the literature. Place-based learning, a form of place-based education that places an emphasis on hands-on, real-world learning experiences using local environment for context and resources, provides opportunities for students to gain a deeper understanding of the local place in which they live (Bartholomaeus, 2013; Gruenewald, 2003; Sobel, 2004). Hence, the use of place-based learning in PNG schools will help achieve the overarching goal of the reformed curriculum, which is to prepare for the return of most of the school leavers to their rural communities.

2.10 Conclusion

This chapter began by outlining the importance of education as the key to PNG's development. It then discussed the geographical facts of PNG to set the background of the study. Located to the north of Australia, PNG is the second largest island country in the world, and the

largest in the Pacific. The country has witnessed a rapid population growth over recent years, resulting in an increase in the rural-urban migration, in search for paid employment. Given the escalating unemployment related socio-economic challenges in urban areas, the government is encouraging school leavers to live in rural areas via the curriculum under the current education system. This is the main reason why PNG reformed its education structure and curriculum in 1992.

Grounding young learners with the necessary knowledge, skills, and values that are appropriate to the local environment has always been part of life in the PNG traditional education system. Thus, reviving the PNG way of life through the application of place-based learning approach will surely encourage rural living as a response to the increasing socio-economic problems. This will discourage the rural-urban migration drift, and consequently minimise the unemployment related socio-economic problems experienced in urban areas. There is always an opportunity for small-scale business activities in the informal economic sector in the rural communities, where the majority of school leavers would find something to do to sustain their livelihood. The pivotal point is to connect the students to their local environment via meaningful place-based learning experiences of the enacted curriculum. It is the teachers and their curriculum enactment practices that are crucial in this spectrum, where the teachers are regarded as major contributors in the curriculum process of an education system.

Chapter Three

Teachers as contributors of curriculum: A literature review

3.0 Introduction

This second literature review chapter revolves around teachers as contributors to curriculum, especially during the curriculum implementation phase. The literature search used guidelines outlined by Randolph (2009), and Lloyd, Lewthwaite, Osborne and Boon (2015). These guidelines include: (1) problem formulation; (2) data collection; (3) data evaluation; (4) analysis and interpretation; and finally (5) the presentation (Lloyd et al., 2015, p. 2). Teachers and curriculum are synonymous in education because teachers are contributors of curriculum. No education system can function without teachers, curriculum, or both; therefore, Mulenga (2015) postulates teachers to be the most critical asset of any formal education system. Teachers are the change agents through which curriculum is translated into learning experiences for student development. Though curriculum can reshape a country (Pinar, 1995), it cannot do so without teachers. Education is vital to a country's development, but central to the function and aspirations of an education system lie the teachers and their curriculum activities. That is because "teachers are central to curriculum implementation. They design how they will teach a lesson and they construct the actual lessons with students as they teach, based on how students seem to understand a lesson" (UNICEF 2000, p. 6). Hence, the teachers' role in facilitating society's desirable knowledge, skills, values, and attitudes through the curriculum for the learners' acquisition is very important (Mulenga, 2015). Thus, the teachers and their curriculum enactment practices in PNG's education system are fundamental to the country's developmental aspirations.

PNG is a developing country, aspiring to advance and be ranked amongst the top 50 countries by the United Nations Human Development Index by 2050 (Vision, PNG, 2009). However, PNG's developmental aspirations will only come to fruition by an educated human resource, not the vast natural resources it owns. PNG Vision 2050 (2009) asserted this fact by declaring the people of PNG to be the most valuable resource for its developmental aspirations and ongoing nation building efforts. This was reiterated by the Australian High Commissioner (2014) to PNG, that: "[Even though] Papua New Guinea is benefiting from its vast natural resources, it will be its human resources that ultimately drive, shape and mobilise those benefits"

(Address by Ms Deborah Stokes, Australian High Commissioner at the University of Papua New Guinea 59th Graduation Ceremony on 11 April 2014). Concurrently, PNG Vision 2050 (2009) placed "Human Capital Development, Gender, Youth and People Empowerment" (p. xiv) as the first of its seven pillars. The PNG government relies heavily on the Department of Education to put the PNG Vision 2050 - pillar number 1 into effect; that is, to produce the aspired human-resource capital. "A well-educated, healthy, appropriately skilled, and honest work force that is committed, proactive and innovative is the kind of workforce required to implement Vision 2050" (PNG Vision, 2009, p. 12). This means, "the success of Vision 2050 is contingent upon the competencies of the country's workforce" (PNG Vision, 2009, p. 12), which can only be produced through education.

The curriculum enactment practices of a teacher are the core element of an education system for student learning. Students learn from the teacher-facilitated learning experiences in the enacted curriculum. It is, therefore, important to remember that the learning activities which students engage determine what is actually learned, which is more important than the learning activities the teacher provides (Biggs, 2003; Shuell, 1986). To that effect, the teacher should provide learning activities that are meaningful and will maximise student learning. This crux of education is what students gain from teaching and learning that develops them to become active contributors to the economy. Furthermore, it means that a teacher's efficiency in curriculum enactment can be assessed by the learning progress of the students. "Research into effective teaching keeps coming back to this critical point: student progress is the yardstick by which teacher quality should be assessed" (Coe, Aloisi, Higgins, & Major, 2014, p. 2). That is because the students' learning progress is impacted by the kind of learning activities teachers prepare. "If students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to get students to engage in learning activities that are likely to result in achieving those outcomes." (Biggs, 2003, p. 2 cited in Shuell, 1986, p. 429). In other words, how much students learn depends on the appropriateness of the learning activities the teacher constructs and facilitates. Where this literature review chapter sits in relation to the other chapters is illustrated in Figure 3.0.

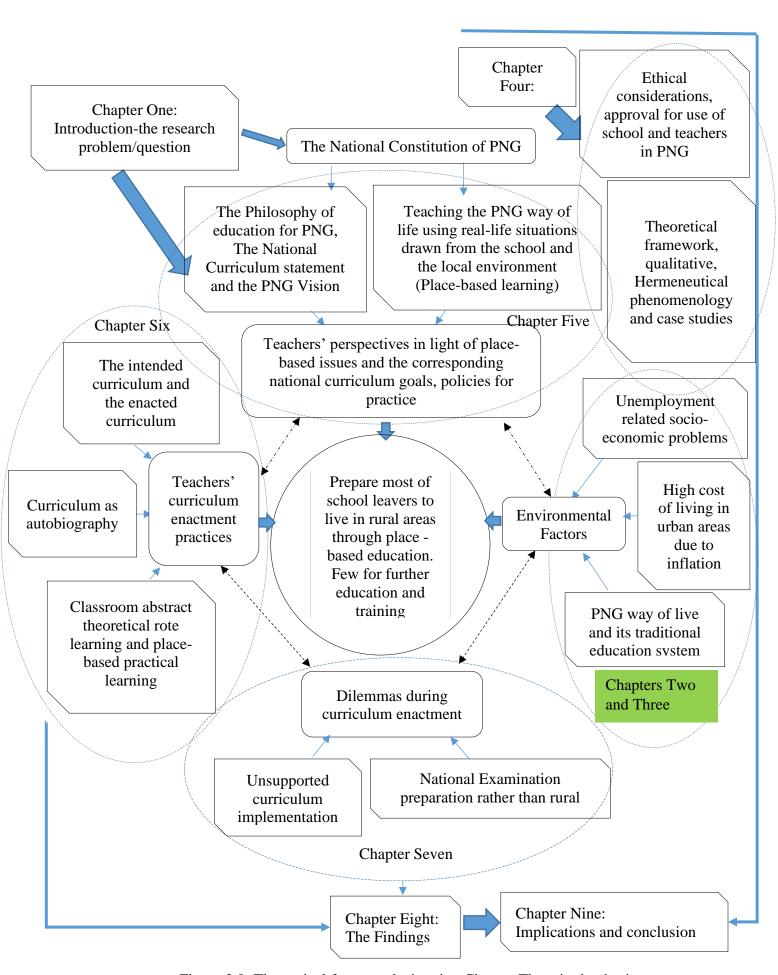


Figure 3.0: Theoretical framework situating Chapter Three in the thesis

The purpose of this literature review was to provide answers to the following questions, pertaining to the teachers' creation of place-based learning experiences for enactment:

- 1. What curriculum definition is suitable to collaborate with the concept of place-based learning?
- 2. What were the curriculum theories and the related practices in PNG during the colonial era to the present day?
- 3. Are there any studies on place-based learning as a curriculum implementation approach outside of PNG?
- 4. Are there any studies on place-based learning as a curriculum implementation approach within PNG?

The answers to these questions were used to collaborate with and deliberate on the data results, which are presented in Chapters Six, Seven and Eight. After the introduction, the problem pertaining to this literature review chapter is discussed. How the data for the chapter were collected is then outlined, then literature to define curriculum as process and artefact. Curriculum theorising during the colonial and post-colonial era is discussed next, and the chapter moves on to discussing teachers as contributors of curriculum. Curriculum implementation and place-based learning as a curriculum implementation approach are reviewed next. The literature review methodology and the literature findings follow before summarising the chapter.

3.1 The problem

This literature review focuses on how business studies teachers in PNG interpret a centrally developed curriculum, in alignment with the local environment, to create place-based learning experiences for resource and context. A centrally developed curriculum is curriculum that is planned and developed by a central unit (Gatawa, 1990), which is separate from the school. It is a curriculum development process where all curricula of the country are developed at the central location. There may be some advantages to a centralised curriculum development approach, but:

... centrally prescribed curricula have problems of finding the right curricula for all schools, since there is less interaction between the macro-level (the curriculum planner) of the system and the micro-level of the classroom. The gap created between the planners and the beneficiaries make the centralised curriculum less sensitive to local needs, that

is, the practical realities on the ground, which differ from one school to another. (Eunitah, Chindedza, Makaye, & Mapetere, 2013, p. 1 cited in Stenhouse, 1975)

This places the teachers with no choice but to adjust a centrally developed curriculum to match the context of the local environment for contextual, constructive, and meaningful student learning. The PNG DoE (2003) has mandated teachers to teach in real life situations to encourage most of the school leavers to live in rural areas. This can be achieved by creating place-based learning experiences to get students involved as much as possible with the rural environment in the enacted curriculum. That is why the DoE (2003) encouraged teachers to relate the skills and knowledge of subjects to real life situations. The reviewed literature suggested, as corroborated in the PNG curriculum policies, that the most appropriate approach to encourage rural living is the place-based learning concept. Thus, this review summarises literature pertaining to curriculum enactment practices generated as literature data.

3.2 Data collection

Data in the form of literature were searched using the online database search engines and the Eddie Koiki Mabo Library of James Cook University (JCU) for journal articles and books. The online search used the One Search and Google Scholar search engines provided by the JCU online library database services. The literature search revolved around the following key areas: place-based learning, either as a concept and/or a curriculum enactment approach, and studies conducted by other forms of research, or as thesis. Literature pertaining to place-based education, in the form of traditional education in PNG was also searched. Additionally, curriculum and teacher education journals, including Asia Pacific Journal of Teacher Education were searched. Relevant literature was obtained by searching the JCU database systems using the following terms: (1) *place-based learning*; (2) *place-based learning*Thesis*; and (3) *place-based learning*Thesis*Papua New Guinea*. Many of the journals accessed were from the Asia Pacifica Journal of Teacher Education, and the Australian Journal of Teacher Education.

The literature searched revolved around the teacher as a contributor to curriculum particularly employing place-based learning as a curriculum enactment approach. Curriculum theorising during the colonial and post-colonial eras, and whether the place-based learning approach were included, was also searched. The discussions began by defining what curriculum is, adopting the definitions by Bobbitt (1918) and Proust (2012). Curriculum theorising examples were from Miller (2014) and Weick (1995), while Crossley (1994) and Smith (1987) studied

curriculum theorising during the colonial and post-colonial eras in PNG. Scholarly articles about teachers as contributors of curriculum, particularly during curriculum implementation, were authored by Obanya (2004), Ofoha, Uchegbu, Anyika, and Nkemdirim (2009), Porter and Smithson (2001), Print (1993), and Remillard and Heck (2010). Bouck (2008), Lewthwaite et al., (2014), Milner (2003), Pinar (2000), Sharma (2012), and Smith and Lovat (1991) provided literature for 'curriculum as autobiographies', and literature pertaining to 'place-based learning' was written by Rural School and Community Trust (2005) and Smith and Sobel (2010). Moreover, Gruenewald (2003) and Sobel (2005) helped to distinguish place-based learning from place-based education that are often used interchangeably. Fogarty (2014), Harrison (2012) and Kleederman (2009) studied place-based learning in other countries, and, there have been no such studies conducted in PNG to date.

Specific literature about education developments in PNG during the colonial and post-colonial era were written by Crossley (1994), Nagai (1997) and Smith (1987). Smith's (1987) only publication used in this literature review consists of literature collated on education in PNG, including curriculum during the colonial era. Nagai (1997) authored a doctoral thesis on educational change focusing on vernacular elementary school development in PNG. Michael Crossley has written extensively on curriculum, curriculum policy, and practice in PNG some of which have been cited in this chapter and elsewhere in the thesis.

Crossley & Vulliamay's (1986) paper discusses the Secondary Schools Community Extension Project (SSCEP) for secondary schools, which is akin to place-based learning. Crossley (1994) also wrote about the Community School Agriculture Pilot Project (CSAPP) for community (primary) schools, which is similar to SSCEP; that was to integrate Western ideas about agriculture with the local agricultural practices; that was for students to have hands on experience in the local agricultural activities. Finally, Kekeya (2013) and Joskin (2013) carried out their PhD studies on curriculum implementation from a broader perspective. Their work is discussed in Section 3.8.3, studies on place-based education in PNG.

The literature sought provided insight into teachers' immense contributions to curriculum during curriculum implementation, drawing attention to place-based learning as a curriculum enactment approach. When projecting these literature insights onto place-based learning practices in PNG, there is no specific literature about place-based learning even though it is a national curriculum policy. The literature review covered studies conducted on place-based learning abroad and within Papua New Guinea. The literature review discussion moves further

to reveal the gap relating to literature and studies examining place-based learning in PNG. Since place-based learning is a curriculum enactment approach, it is appropriate that the term curriculum is defined at the outset, to provide a clear understanding of the discussions that follow.

3.3 Curriculum definition

Defining the construct of curriculum is essential to provide a meaningful context in which the creation of place-based learning experiences as a curriculum enactment approach can be discussed. However, there are a variety of curriculum definitions owing to divided perceptions of curriculum by those involved such as students, educators, researchers, administrators, and evaluators who have their own agenda of emphasis in curriculum and educational discourse (Su, 2012). For example, Tyler (1976) viewed curriculum as all the learning experiences planned and directed by the school to attain its educational goals; while Print (1993) defines curriculum as "all the planned learning opportunities offered by the organization to the learners and the experiences learners encounter when the curriculum is implemented. This does not include the hidden curriculum (p. xvii). Print (1993) further elaborates hidden curriculum is what students experience in the process of curriculum enactment that was not initially intended and stated in the curriculum, which of course varies from situation to situation and school to school. However, students not only learn when they are in school, they also learn when they are at home, church or anywhere they are engaged in all sorts of activities. Because students learn from both the intended and untended curriculum, this study adopted Franklin Bobbitt's (1918) definition of curriculum which draws attention to place-based learning.

Bobbitt (1918) defined curriculum as the course of deeds and experiences that children pass through to succeed and become the adults that society expects (Bobbitt, 1918; Proust, 2012). In other words, Bobbitt viewed curriculum as encompassing the entire scope of formative deeds and experiences that students encounter, both in and out of school (Proust, 2012; Bobbitt, 1918). Bobbitt included experiences that were unplanned and undirected, as well as experiences intentionally directed for the purposeful formation of adult members of society. The experiences Bobbitt (1918) referred to are the meaningful learning activities in that students engage within their local environment, which this study calls "place-based learning". Thus, when teachers provide place-based learning activities, Bobbitt asserted that the deeds and experiences provided will ground the students with the appropriate knowledge of the environment necessary for life within that context. Moreover, place-based education is:

being in the environment (where) students are encouraged to experience and appreciate the special characteristics of the natural environment. Real life-learning - learning activities based on real places, real issues, and authentic tasks; Sensory engagement opportunities provided to explore the environment using all five senses; Learning by doing students actively involved in hands-on exploration and investigation; Local context students encouraged to explore and investigate environmental problems and issues in their own backyard. (Lloyd & Gray, 2010, p.6 cited in Tooth & Renshaw, 2009, p.4)

Bobbitt (1918) noted that one of the major challenge teachers experience is enacting an externally developed curriculum in various settings. Ideally, the enacted curriculum should reflect features of the community in which the curriculum is used. However, it is impracticable for a centrally developed curriculum to accommodate features of all schools that use it. In such cases, Print (1998) suggested that a curriculum developed externally to a school should be modified to suit the local context. If teachers attempt to enact a centrally developed curriculum without modifying, then "students [will] have trouble finding meaning in [such] decontextualised one-size-fits-all curriculum and instruction that does not relate to their cultures and homes. The best way to contextualise education is to relate what students are learning to their heritage, land and lives" (Reyhner, 2010, p. 16) which is place-based learning.

This becomes pragmatically difficult in countries like PNG, which has a centralised curriculum development model. The Curriculum Development and Assessment Division (CDAD) of the National Department of Education develops the national curriculum for the country, meaning that PNG has a centralised curriculum development process (Nongkas, 2007). It is a one-size-fits-all curriculum approach, projected to suit each culture of the 700 hundred plus language groups. In such cases:

Stenhouse (1975) advised that centrally prescribed curricula have problems of finding the right curricula for all schools, since there is less interaction between the macro-level (the curriculum planner and developer) of the system and the micro-level of the classroom (the implementer). The gap created between the planners and the beneficiaries make the centralised curriculum less sensitive to local needs, that is, the practical realities on the ground, which differ from one school to another. (Eunitah et al., 2013, p. 41)

Similar problems are prevalent in PNG. It is a concern for teachers who are expected to create place-based learning experiences using such broad curricula. Teachers have to think more deeply about how the curriculum could be effectively implemented given the environmental

determinants. Deeper thinking and rethinking of curriculum is what Miller (2014) called curriculum theorising. Curriculum theorising is essential for the creation of meaningful place-based learning experiences by teachers, which would help to shape students to become successful in adult life, as Bobbitt (1918) anticipated.

3.4 Curriculum theorising

Curriculum theorising is an essential mental process for teachers as contributors of curriculum: teachers need to be conscious of their curriculum enactment practices. It is appropriate to unpack curriculum theorising at the outset, by defining the concept as separate words for clarity of the subsequent discussions. Since curriculum has already been defined, theorising is derived from the word 'theory' and it "belongs to the family of words that includes guess, speculation, supposition, conjecture, proposition, hypothesis, conception, explanation, (and) model" (Weick, 1995, p. 386). Consequently, curriculum theorising is the "never-ending processes of thinking, imagining, positing, reconsidering, reinterpreting, and envisaging anew various situated and contingent conceptions of curriculum and their obvious and inextricably intertwined relations to teaching and learning" (Miller, 2014, p. 13). Thus, curriculum theorising is the teachers' unending process of thinking about the learning experiences they have to prepare for students to be involved in, in preparation for a successful life in society later. Curriculum theorising is, therefore, essential for teachers to create learning experiences that are meaningful, relevant, and relate to the real world, which is constantly changing. Kivinen (2015) to that effect pointed out that:

The world in which schools operate has undergone major changes since the beginning of the 2000s, increasing the impact of globalisation and the challenges for a sustainable future. Competences needed in society and working life are changing; requiring skills for building a sustainable future. The content of education, pedagogy and school practices must be reviewed and renewed in relation to these changes. (p. 21)

Thus, curriculum theorising is essential for teachers to help them translate curriculum text into learning experiences that reflect the local environment. "While no one would contend that the curriculum field has an array of full-blown theories, there is abundant theorising activity that explores aspects of the [curriculum theorising] field" (Huencke, 1982, p. 290). Hence, curriculum theorising has been part of the curriculum processes and practices since the introduction of formal Western education in PNG during the colonial era.

3.4.1 Curriculum theorising in PNG during the colonial and post-colonial era

Curriculum theorising, the never-ending process of thinking about curriculum (Miller, 2014), commenced in PNG following the introduction of formal education during the colonial era. The underlying premise of curriculum theorising in PNG was transferring the legitimate knowledge of the coloniser such as English language to prepare for formal employment in the introduced cash economy. Just before independence when jobs started to become scarce, curriculum theorising focused on preparing for rural living as well as for employment. Hence, the theory of blending the curriculum, which was to blend the foreign curriculum with the local culture, was introduced but the theory short lived because the implementers, mostly Australians, had little or no knowledge about the local cultures (Crossley, 1994). The intention of blending the curriculum was to prepare meaningful place-based learning experiences for students related to their local environment, which would ground the students with their cultures and way of life and convey new concepts from the curriculum. Prior to the introduction of formal education in PNG, the Indigenous people already had a place-based learning oriented, informal, and traditional education system. Hence, when formal education introduced the abstract rote form of learning in PNG, many:

young people had no ambition whatsoever to learn and could not be persuaded to give up even one hour a day of their precious freedom to sit in the classroom and listen to the white teacher, who murdered their language and talked about things that did not interest them. (Smith, 1987, p. 4)

That is why many students ran away from school, which compelled curriculum theorising for a curriculum that would be relevant to PNG. Curriculum writers, such as Crossley (1994) and Smith (1987), who wrote a lot on PNG curriculum issues, revealed the various attempts by the colonial educators to make curriculum relevant to PNG. For example:

Groves, the former Director of Education in Papua and New Guinea decided that the curriculum should be free from the trammels and restrictions of older Departments of Education in Australia. There should be no regulations, no prescribed routine, and no syllabus. A competent teacher should be free to choose the content of the curriculum in his own school and to adapt it to local requirements (Crossley, 1994, p. 43).

Groves' efforts were, however not implemented because the teachers, who were mostly Australians, were not happy when they were to modify the curriculum to suit the local context when they had very little knowledge of PNG's diverse cultures and way of life (Crossley, 1994).

Hence, curriculum theorising to provide a relevant curriculum for PNG, which commenced during the colonial days, continued until the major curriculum reform in 1992 (DoE, 2003).

The idea of making the curriculum relevant to the local communities became stronger as jobs became scarce, even after independence in 1975. Three years after independence, the government introduced the Secondary Schools Community Extension Project (SSCEP) for secondary schools (Crossley & Vulliamey, 1986), and the Community School Agriculture Pilot Project (CSAPP) for community (primary) schools (Crossley, 1994). The idea was to engage students in community projects to give them hands-on practice, however, parents resisted the concept, as they believed in classroom learning for examinations and ultimately getting a job. Hence, the SSCEP and CSAPP programs were abandoned.

The major curriculum reform in 1992 was the result of curriculum theorising, where many people argued that the previous foreign based curriculum was irrelevant to PNG (DoE, 2003). Thus, the objective-based curriculum adopted in 1975 at independence from Australia, was replaced by PNG's own national curriculum. Driven by the desire of making the curriculum relevant to PNG, the current reformed curriculum mandated teachers to modify the curriculum to match the context of the local environment. The concept of engaging student learning in real life situations (DoE, 2003) is the same as the place-based learning. Thus, curriculum theorising has been prevalent in PNG during the colonial era. The crux of curriculum theorising is what students should gain from the curriculum, which depends on how teachers enact the reformed curriculum.

3.5 Teacher training in PNG

Teacher training and certification in PNG has also evolved over time from the colonial era when formal education was introduced. It started from what began as training church workers and developed to what is seen as teacher training institutions today. It was during the last thirty years of the nineteenth century that Christian missions of various nationalities and doctrine with the intention of spreading the gospel established footholds around the country to convert the heathens to Christianity (Smith, 1987). A major factor that motived the missionaries was their difficulties in communicating with the local people of more than 700 languages; hence, their immediate task was to train the local people in those establishment which were the beginning of teachers college. Pastor training schools were established where potential pastors and catechists were enrolled and given a rudimentary training in which rote learning techniques that focused

on basic literacy, numeracy and Christian religious education were taught (McLaughlin & O'Donoghue, 1996; Smith, 1985). One such establishment was a training college established in 1883 by Reverend W G Lawes of the then London Missionary Society (LMS) (now United Church) at Hanuabada to train Papua teachers (Quartermaine, 2001). Many other established mostly by the churches and the colonial administration around the country which later merged to form one or developed on their own into teachers' colleges.

Table 2.0: Early mission and government centres that became teachers' colleges

Original Centres	1996 Colleges	Place
Lutheran	Balob	Lae
Hopoi 1924	(Lutheran and	(Morobe Province)
Gelem-Siassi 1950	Anglican)	
Heldsbach 1914		
Rintebe 1957		
Amron 1934		
Anglican		
Dogura (Papua) 1898		
Methodist	Gaulim	Kokopo
Duke of York Islands 1882	(United Church)	(East New Britain Province)
Kabakada 1890		
Vunarima 1958		
Ruatoka (Papua) 1894		
Roman Catholic	Kabaleo	Kokopo
Asitavi (Bougainville Girls)	(Catholic)	(East New Britain Province)
Kieta (Bougainville Men) 1899		
Yule Island (Papua) 1892		
Vuvu (Men) 1901		
Vunakanau (Men)		
Kabaleo (Women)		
Roman Catholic	Kaindi	Wewak
Kairiu Island (Men) 1937	(Catholic)	(East Sepik Province)
Kunjingini 1955		
Roman Catholic	Holy Trinity	Mount Hagen

Fatima 1934	(Catholic)	(Western Highlands Province)
Roman Catholic	Madang	Madang
Alexishafen 1908	(Government)	(Madang Province)
Sek 1909		
Lutheran		
Amele 1923		
Karkar 1924		
Government		
Madang 1964		
Manus 1955		
Unevangelized Fields Mission	Dauli	Tari
(UFM) later Asian Pacific Christian	(Evangelical	(Hela Province)
Mission (APCM)	Alliance)	
Awaba (Papua) 1965		
Seventh Day Adventist	Sonoma	Kokopo
Kabiufa 1950	(SDA)	(East New Britain Province)
Kambubu 1936		
Government	Port Moresby	Port Moresby (National Capital
Malaguna 1934)	(PMTC)	District)
Dregerhafen 1949	(Government)	
Goroka 1959	later	
Popondetta (Papua) 1955	Port Moresby	
	Inservice	
	College (PMIC)	
	(Government)	
	Currently	
	Papua New Guinea	
	Education Institute	
	(PNGEI)	
	(Government)	

Sources: Quartermaine (2001, p.

The earlier teacher trainee entrants to these establishments were those who completed standard 5 or 6, equivalent to grade 5 and 6. They were trained to teach particular grades or standards as they were called specified by the syllabus. The first ever published teachers college syllabus was for one year to train grade 6 entrants to teach Preparatory, Standards I and II in primary schools (DoE, 1962; Quartermaine, 2001). However, the missionaries operated their schools without the government control. As Quartermaine (2001) stated, the colonial administration had no central system to control most the formal schools especially those offered by the churches because of the country's rugged topographies on mainland and scattered islands (Quartermaine, 2001). However, the teaching qualifications recognised by the government during the 1950s was A, B, C or E certificate portraying the duration of study that ranged from six months, one year, one year six months and two years (Quartermaine, 2001. As more schools opened, the level of entry into teachers' colleges increased to grade 8 and then 10. This became prevalent when teachers' college principals "did not like teachers qualified with an entrance to teacher education of only Form 2 (Standard 8) working with young Form 4 student-teachers" (Quartermaine, 2001, p. 109). The form 4 or grade 10 entrants graduated after 2 years of training with a teaching certificate eligible to teach from grade 1 to 6. Teachers with A, B, C, and D certificates were urged to go for Inservice training to upgrade their qualifications when colleges offered a two-year teacher education program for a certificate in primary teaching. Teachers colleges were then tasked to offer diploma during the major curriculum reform (Quartermaine, 2001) in 1991 and 1992 to teach grade 7 and 8 in primary schools. The entry requirements were no longer grade 10 but grade 12. Moreover, many teachers' colleges throughout the country are now offering Bachelor of Education in primary teaching as of 2020 except the Holy Trinity Teachers College (HTTC) which started in 2014 (Teachers colleges to offer degrees, 2019). What has been discussed so far is about primary school teacher training.

Secondary teacher training is offered at the University of Goroka which commenced as primary teacher training in 1961 primary teacher training in 1961, and later converted to secondary teacher training in 1967 due to the demand for secondary education with a a two year diploma to teach lower secondary classes (Guthrie, 2001). The ambition to train secondary teachers for both upper and lower secondary led to transferring the education faculty from the University of Papua New Guinea to Goroka in 1992 and naming it UPNG-Goroka Campus (Guthrie, 2001). Moreover, further development led the UPNG-Goroka Campus to a fully pledged university as "University of Goroka" in 1995 with the commencement of a degree program for grade 12 entrants followed by post-graduate studies. It currently offers a four-year

degree program in education for both pre-service, and a two-year in-service training, the later for serving teachers who do not have a degree as well as post-graduate studies. The post-graduate studies include a Post Graduate Diploma in Education (PGDE) for those who graduated from other universities with a degree and wish to pursue a teaching career. A Post Technical Vocational Education program is also offered to those who have a diploma from other colleges or universities and wish to pursue a teaching career.

3.6 Teachers as contributors of curriculum

Teachers contribute immensely to the curriculum process, particularly during the implementation phase. Teachers' contributions to curriculum are immense, yet they, according to Carl (2005), are regarded as mere recipients of a curriculum developed by specialists external to the school, and the teachers' functions are limited to effective implementation of the curriculum. Teachers contribute more to curriculum than what is speculated; and to further discuss their contribution with clarity, it is imperative that the curriculum processes are briefly highlighted. Curriculum is the learning experiences and deeds that children pass through both in and out of school to live successful lives in society later (Bobbitt, 1918; Proust, 2012). Thus, the curriculum process constitutes planning, developing, implementing, and evaluating the curriculum, which evolves around the deeds and experiences that Bobbitt (1918) endorsed for student learning. Print (1993) clarified that:

A curriculum process is a continuous cycle of activities in which all elements of the curriculum are considered and interrelated. Curriculum elements are those distinct, yet related parts of the whole curriculum including curriculum intent (aims, goals, and objectives), content learning activities and evaluation. (pp. xvii-xviii)

The curriculum elements connote the phases of the curriculum cycle including planning, developing, implementing, and evaluating, which come into motion as a dynamic curriculum process. The teachers play the key role of drawing from the curriculum what is necessary in order to provide for students to learn, as initially intended by the curriculum.

Smith and Lovat (1991) summarised this situation well when they characterised the curriculum process as....a problem solving process, in which the teacher processes a complex variety of stimuli and information and uses this to make decisions and solve problems: the teacher's key roles in this are those of information processor, manager,

decision-maker and problem-solver. (Print, 1993, p. 2 cited in Smith & Lovat, 1991, p. xiv)

This situates the teacher as the key agent through which the curriculum impacts the students, via the learning experiences created by translating the curriculum intents. "The task of the translator, in this case the teacher, is to find the intended meaning of the text (i.e., curriculum) and reproduce the teaching (learning experiences) so that it captures the intentions of the authors" (Yoon, 2013, p. 150), the curriculum planners and developers. It is a tedious process; thus, without the teachers' contributions in translating the intended curriculum, there would be no tangible learning in schools. It is the "teachers [who] decide what aspects of the content to stress, what materials to use, what experiences to provide students, and what motivational prompts to employ" (Ornstein, & Hunkins, 2013, p. 172). Learning would not be complete if students were equipped with curriculum materials alone, without a teacher. It is "the teacher (who) plays the pivotal role since teachers' knowledge, experience, and skills affect the interactions of students and materials in ways that neither students nor materials can" (Shawer, Gilmore, & Banks-Joseph, 2009, p. 125 cited in Cohen & Ball, 1999, p. 4). In other words, students will only learn when they actively participate in authentic learning experiences facilitated by a teacher. "Authentic learning is a pedagogical approach that allows students to explore, discuss, and meaningfully construct concepts and relationships in contexts that involve real-world problems and projects that are relevant to the learner" (Mims, 2003, p. 2, cited in Donovan, Bransford, & Pellegrino, 1999).

The teachers' interpretations of the curriculum intent are portrayed in the kind of learning activities they create and facilitate for student learning. Stating this in another way, student learning activities reflect the teachers' understanding of the curriculum intent. That is because "teachers often transfer what they understand of the curriculum to their students and students return home with different understandings of what was taught" (Fomunyam, 2014, p. 128, cited in Jansen, 2002; Cuban, 1992). However, if there is a misunderstanding of the curriculum by teachers, then students will end up with those misconceptions of the curriculum, contrary to the initial curriculum intent. Hence, teachers need to explore more deeply what the curriculum entails for effective implementation. For example, most teachers interviewed in a December 2012 study had no knowledge, or had very little knowledge, about the curriculum they were implementing (Atomatofa, Andrew, & Ewesor, 2013). Teachers, as agents through which curriculum intent is transmitted, need to research into the curriculum to have a fair knowledge

of what they are to implement as learning activities. The teachers' levels of interest in researching curriculum are categorised as follows:

- Category 1 teachers are those who are not aware of what the curriculum entails.
 They lack interest to find out for themselves what the curriculum changes, goals, and objectives are.
- Category 2 teachers are those with little awareness that came by chance, not by their effort. They lack interest to pursue its course.
- Category 3 teachers are those that have awareness but contribute only little to pursue its course. They have a nonchalant attitude, and lack of motivation and incentive from employers.
- Category 4 teachers are those aware of the curriculum and ready to pursue its course. They go the extra mile to ensure its objectives are met.
- Category 5 teachers are teachers fully aware of the curriculum and provide opportunity for students to be involved in the implementation process. They ensure their students understand the details of the curriculum goals.
- Category 6 teachers are those whose awareness goes beyond the classroom. They
 carry their students along with them and ensure that students' experiences are
 expanded.
- Category 7 teachers are teachers whose awareness, as a result of their personal involvement in the curriculum process, gives them a complete understanding of what the curriculum entails. (Atomatofa et al., 2013, p. 341; Atomatofa & Ewesor, 2008)

This progression indicates that some teachers, though they have a curriculum, yet they have little or no awareness of what the curriculum they are implementing entails in depth (Atomatofa et al, 2013) and may lack the motivation to implement curriculum changes. Teachers, in the context of this study, need to fully understand the curriculum intent, and align those intentions to the context of the local environment to create meaningful place-based learning experiences for the enacted curriculum.

The enacted curriculum is that which teachers use in daily classroom practice. It may differ from the mandated curriculum for a range of reasons, as Kubitskey and Fishman (2006) note. One reason for discrepancies between written curriculum and enacted

curriculum is that teachers have the task of making written curriculum goals into lesson plans, which they then translate into dynamic learning experiences, responding minute by minute to the needs and understandings of their students. (Ireland, 2014, p. 26 cited in Kubitskey & Fishman, 2006).

It is during this curriculum enactment process that teachers put more effort into curriculum construction as Shawer (2010) outlined:

The [curriculum] enactment approach sets [the] curriculum as a process jointly created and jointly and individually experienced by students and teacher. Curriculum knowledge is no longer a product, but ongoing constructions out of the enacted experiences that students and teacher create. External knowledge is viewed as a resource for teachers who create curriculum as they engage in the ongoing process of teaching and learning in the classroom. Moreover, it is they and their students who create the enacted curriculum. Teachers are creators rather than primarily receivers of curriculum knowledge. (p. 134 cited in Snyder et al., 1992, p. 429)

Curriculum enactment is the crucial stage where students are actively engaged in learning activities orchestrated by the teacher. This does not happen as easily as it sounds. There is the official curriculum expected to be implemented, and there is a teacher who may be confronted by certain environmental determinants which may make the classroom less conducive for the curriculum to be implemented as designed. This places teachers in the space between curriculum as expected and curriculum as expressed (Lewthwaite et.al 2014, p. 2 cited in Carr & Kemmis, 1986), which requires them to become more involved in curriculum making by reconstructing the curriculum to match the local context.

The new concepts of a curriculum need to be taught within familiar contexts since "words and actions without context have no meaning in all human communication and mental process" (Patton, 2015, p. 136 cited in Bateson, 1988, p. 15). Moreover, Barton et al. (2014) explicitly stated that "a teacher's conceptualisation of curriculum...will impact directly on how they decide to implement and structure the curriculum and the learning experiences in their classroom" (p. 167 cited in Ewing, 2010). Hence, teachers' understanding of curriculum content, policy, and the context in which the curriculum is to be enacted are essential in their curriculum practices. Similarly, Grossman and Thompson (2008) stated that:

A curriculum is more for teachers than it is for pupils. If it cannot change, move, perturb and inform teachers, it will have no effect on those whom they teach. It must be first and

foremost a curriculum for teachers. If it has any effect on pupils, it will have it by virtue of having had an effect on teachers. (p. 2015 cited in Burner, 1977)

Logistically, Grossman et.al (2008) implied that teachers need to reconceptualise the curriculum in alignment with the local context in the first instance, to reconstruct learning activities for student consumption. Hence, a teacher's reconceptualisation of the curriculum and the creation of learning activities are the essential credentials for effective curriculum implementation.

3.6.1 Curriculum as autobiography

Curriculum as autobiography is the process of meditating deeply about the intended curriculum in preparation for enactment. The enacted curriculum, as mentioned earlier, is the teacher-students interaction that unfolds during the teacher facilitated instruction mostly in the classroom (Remillard & Heck, 2014). Teachers, therefore, need to think more carefully and deeply in order to decide the most appropriate learning experiences for the enacted curriculum that would help maximise student learning. The teachers' deeper thoughts about curriculum according to Pinar (2000) are the teachers' curriculum as autobiography. The curriculum autobiographical process is essential for teachers because what students experience in the enacted curriculum is not precisely what the curriculum intended. Rather, students engage in activities that are prepared according to what the teacher reconceptualises of the intended curriculum. Teachers therefore need to meditate deeply to construe the curriculum intent in alignment with the local environment to provide learning experiences that are contextual for authentic learning to achieve the desired goals.

Reconceptualising a curriculum in preparedness for enactment is essential to breathe life into a dormant curriculum. "Pinar (2000) refers to this reconceptualisation process as evidence of a teacher's 'personal conversation' about the interplay between personal beliefs, environmental determinants and the intended curriculum" (Lewthwaite et al., 2014, p. 2 cited in Pinar, 2000). The teachers' personal conversations are necessary for student learning to be contextual and meaningful. Curriculum reconceptualisation is what "occurs at the interface between teacher and students as teachers consider, adjust and recreate the intended curriculum in an effort to enact it in a manner consistent with their own beliefs and the environment in which they are situated" (Lewthwaite et al., 2014, pp. 1-2).

When students participate actively in learning activities prepared by the teacher, it is like a conversation between the curriculum and the students, with the teachers as facilitators. The teachers prepare the learning activities according to their personal, vivid perceptions of the curriculum intentions, and align those intentions with the environment determinants to provide context and meaning. Pinar (2000) referred to the teacher's personal perceptions of curriculum intentions and the reconstruction of the learning activities as curriculum "autobiographical affirming that teachers make a wise and prudent practical judgement about how to act in this situation" (Lewthwaite et al., 2014, p. 2 cited in Pinar, 2000; Carr & Kemmis, 1986).

Autobiography from a generic standpoint is a personal life story written by that person (Oxford Advanced Learner's Dictionary 8th edition, 2010). Hence, autobiography in curriculum refers to the teachers' life stories of reconceptualising the curriculum to facilitate student learning. Moreover, "autobiography is a strategy for studying the relations between academic knowledge and life history with the purpose of self-understanding and social reconstruction" (Sharma, 2012, p. 144 cited in Pinar, 2000). It is impossible for all teachers to write their curriculum life stories as an autobiography; but an undisputed fact which remains at this juncture is that, every teacher has a personal curriculum story. That is because "teachers shape how curriculum is enacted in classrooms" (Bouck, 2008, p. 295, cited in Milner, 2003). This concurs with Pinar's (2000) theoretical framework that outlines autobiography as a research methodology, which emphasises the critical relationship among educators, students, and curriculum (Sharma, 2012, p. 144).

Curriculum as autobiography is the mental processes of communication between what Pinar (2004b) calls 'I', and the other inner voice. Pinar (2004b) suggested that one has to listen carefully to their own inner voice in the historical and natural world, one asks: "what is the meaning of the present?" In this context, the meaning of the present is to achieve the ultimate purpose of curriculum, which is for students to gain knowledge, skills, and values necessary for facing the real world after school. "Pinar (therefore) advocates an understanding of (the) curriculum processes through lived experience rather than through the development of a robotised or mechanical educational system" (Sharma, 2012, p. 144 cited in Pinar, 2000). Hence, curriculum as autobiography is essential for all teachers. PNG teachers are encouraged to teach in real life context (DoE, 2003), which is to create place-based, learning experiences, and that requires deeper thinking: the autobiographical process of reflecting on the interplay between the mandated curriculum, the environment and the teachers' own beliefs and capacities.

3.6.2 Teacher agency

Similar to "teachers' curriculum as autobiography" is the teacher agency theoretical framework. However, teacher agency covers a much broader spectrum of teaching and learning than revolving around curriculum meditation in the autobiographical process. The term "teacher agency" denotes teacher and agency, where "agency is not something that people can have; [but] it is something that people do" (Priestley, Biesta, & Robinson (2012). Moreover, Priestley et al. (2012) explicate agency as a 'quality' of the engagement of actors with temporal-relational contexts-for-action, not a quality of the actors themselves" (p. 3). Hence, agency is not the teachers or what they have; it is what they practice, coining the term teacher agency. Priestley et al., (2012) reiterated that, "teacher agency is inescapably connected to the teacher's capacity to govern practice in ways that are consonant with personal and professional values and beliefs" (p.189). When juxtaposing this teacher agency premise with curriculum as autobiography, it translates to teachers meditating over the curriculum while concurrently considering other important aspects, such as the school environment, to guide the enacted practices. Within the curriculum enactment spectrum, "Teacher agency is an indispensable element of good and meaningful education" (Priestley et al., 2015, p. 624). Teachers as agents are the fundamental links that connect the curriculum intent to the learners, via the learning activities of the enacted curriculum.

Teacher agency is a conceptual framework of something people do. In this context, the teachers enacted curriculum practices underpinned by their self-concepts of the curriculum and their preparedness for enactment. It is the teacher role to meditate between the prescribed curriculum, the local environment and the students, a creative imagination process. Creative mediation, a form of teacher agency coined by Osborn et al. (1997), requires considerable ingenuity and imagination (Priestley et al., 2015), during curriculum enactment. Ingenuity and imagination in curriculum activities is what Pinar (2000) calls, teachers' curriculum as autobiography, which is a meditation process of indwelling between two curriculum worlds, the curriculum-as-plan and the curriculum-as-lived-experience (Pinar & Irwin, 2005 in Aoki, 1986). Teacher agency, teachers' curriculum as autobiography, and teacher beliefs are crucial theories that guide this study in exploring the enacted curriculum practices.

3.6.3 Teachers' beliefs about curriculum

Teachers' beliefs about the prescribed curriculum influences their curriculum practices. In other words, it is the teachers' beliefs about the prescribed curriculum, rather than the prescribed intentions that influences their curriculum enactment practices. "A belief is a proposition, which may be consciously or unconsciously held, is evaluative in that it is accepted as true by the individual, and is therefore imbued with emotive commitment; further, it serves as a guide to thought and behaviour" (Xu, 2012, p. 1397 cited in Borg, 2001).

Moreover, people's beliefs are very important issues in all domains of life because it relates to human behaviour and learning (Ajzen, 1988; Fishbein & Ajzen, 1975; Gilakjani & Sabouri, 2017). Thus, teachers' beliefs are their propositions about the teaching profession and the curriculum, which imbues them with emotive commitment that guides their enactment practices. Gilakjani and Sabouri (2017) asserted that teachers' beliefs have a deep impact on their classroom principles and practices and affect what they accomplish in their classroom. In other words, rather than allowing the impact of the prescribed policies to affect their practices, it is their beliefs that influence their enactment practices, which may deviate their accomplishments from the intended goals.

There is ample research evidence that indicates "teachers' beliefs about teaching and learning may be powerfully influenced (positively or negatively) by teachers' own experiences as learners and are well established by the time teachers go to university" (Phipps & Borg, 2009, p. 381 cited in Holt Reynolds, 1992; Lortie, 1975). This means it is not easy to convince teachers to change their curriculum beliefs that are often contrary to what the prescribed curriculum entails. The influences of teacher beliefs in the enacted curriculum in face value are what students learn or gain from the curriculum. Hence, "teachers' beliefs can play either a facilitating or an inhibiting role in translating curriculum guidelines into the complex and daily reality of classroom teaching" (Handal & Herrington, 2003, p. 61 cited Haynes, 1996; Koehler & Grouws, 1992; Sosniak, Ethington, & Varelas, 1991; Jackson, 1986). In other words, if teachers' beliefs are compatible with the curriculum reform or innovation, then their enactment practice are more likely to be accepted in the sense that the desired goals are likely to be achieved (Handal & Herrington, 2003). "However, if teachers hold opposing beliefs or perceive barriers in enacting the curriculum, then low take-up, dilution and corruption of the (curriculum) reform will likely follow" (Handal & Herrington, 2003, p. 61 cited Burkhardt, Fraser, & Ridgway, 1990). No matter how much effort teachers exert in supporting the curriculum reform, it is always possible

that if their views do not coincide with those underpinning the prescribed curriculum, teachers can be obstacles to change, instead of being conveyance agents (Handal & Herrington, 2003; Prawat, 1990).

Teacher beliefs about curriculum affects enactment practices. Teachers ascribe to curriculum according to what they believe rather than the prescribed intent. The teachers' beliefs develop over time, from when they are students until they become teachers (Turner et al., 2009; Pajares, 1992), and it will take time to change. Some PNG teachers appear to believe in a curriculum that provides prescribed detailed learning activities, so they, in some instances, substitute the prescribed teacher guide with support textbooks or other materials that provide decontextualised learning activities. One example of some teachers' professional beliefs that stem from normalised practices of standardised resources is the Pacific Series introduced in PNG after independence in 1975 that contained detailed learning activities. Although it was phased out in the late 1980s, some teachers' experiences and beliefs in such curriculum mean they disregard the reformed curriculum that requires them to develop place-based learning activities and keep calling upon the government to reintroduce the Pacific Series as illustrated in Figures 3.1 and 3.2.



Figure 3.1: Call for reintroduction of the Pacific Series

Source: Kepas Winuan

https://www.facebook.com/groups/438508159518419/?multi_permalinks=221 1744628861421&comment_id=2224947730874444¬if_id=15608026488418 91¬if_t=feedback_reaction_generic

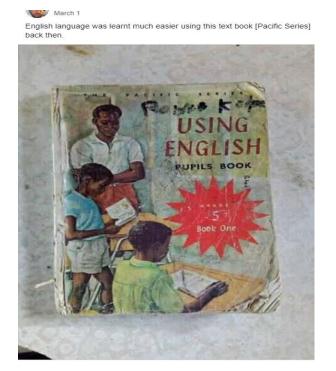


Figure 3.2: Call for reintroduction of the Pacific Series

Source: Maurice Koi

https://www.facebook.com/photo.php?fbid=2432753676952246&set=gm .2062472933788592&type=3&theater&ifg=1

3.7 Curriculum implementation

Curriculum implementation is what happens during the teaching and learning process, where teachers take the prescribed curriculum and put it into practice. Curriculum implementation refers to how the prescribed or officially designed course of study is transformed by teachers into programs of work and lessons to be experienced by the students (Ofoha et al., 2009). Curriculum implementation is synonymous with curriculum enactment and is often used interchangeably. However, the enacted curriculum refers to the students learning experiences that unfold in the classroom (Porter & Smithson, 2001) while implementation involves changing the status quo by taking prescribed curriculum and putting it into practice from teacher constructed teaching programs to student assessments including the enacted curriculum (Print, 1993, p. 217). Essentially, curriculum implementation revolves around the documented curriculum, while "the enacted curriculum cannot be scripted because the enactment itself requires teachers to respond in the moment to the events in the lesson" (Remillard & Heck, 2010, p. 4). This means the teacher-student activities that unfold in the enacted curriculum are

influenced by circumstances of the classroom at the time of teaching and learning, and not strictly as written in the teachers' lesson plans.

Curriculum implementation is the most important phase of the curriculum process, where learning takes place. It is a moment where students become actively engaged in curriculum activities prepared and facilitated by teachers for students to learn the skills, knowledge, and values the curriculum intended. To that effect:

Obanya (2004) defined implementation of curriculum as day-to-day activities which school management and classroom teachers undertake in the pursuit of the objective of any given curriculum. In this study, it means processes involved in translating educational plan into action to bring about change in the learner as they acquire the planned experiences, skills, and knowledge that are aimed at enabling the learner function effectively in the society. (Ofoha et al., 2009, p. xi cited in Obanya, 2004)

Curriculum implementation is, therefore, the translation of what is written in the curriculum into learning activities for student participation. "The written curriculum is the official or adopted curriculum often contained in state or district policy, and represents what students are expected to learn" (Bouck, 2008, p. 294 cited in Cuban, 1992; Nolet & McLaughlin, 2000, p. 15) when the curriculum is implemented.

Moreover, the differentiated temporal phases of the curriculum process consist of "the written curriculum (referring to what appears on the printed page in instructional materials), the intended curriculum (referring to a teacher's plans for instruction), and the enacted curriculum (referring to the implementation of curricula-based tasks in the classroom)" (Remillard & Heck, 2014, p. 707). Therefore, teachers, as curriculum implementers, are expected to interpret the curriculum text, plan the activities, and then facilitate them as student learning activities in the enacted curriculum, aimed at achieving the curriculum goals. For example, "The aim of the Australian curriculum is to provide what all young people should be taught through the specification of curriculum content and the learning expected at points in their schooling through the specification of achievement standards" (Barton et al., 2014, p. 167). Teachers in Australia should, therefore, understand the specifications of how the curriculum should be implemented as suggested by the curriculum developers.

Curriculum developers normally provide suggestions as to how the curriculum should be implemented to achieve the desired curriculum goals. However, certain circumstances during implementation may not be conducive for curriculum to be implemented as precisely as intended.

This happens because "curriculum brings with it many ramifications for all stakeholders involved in its implementation;" (Barton et al., 2014, p. 167), especially for the practising teachers. That is why "several studies in education have highlighted how the manner in which curricula are implemented does not always reflect what curriculum designers have in mind" (Orafi & Borg, 2009, p. 243 cited in e.g. O'Sullivan, 2004; Smith & Southerland, 2007). Therefore, curriculum interpretation, modification, and reconceptualistion are essential aspects of curriculum implementation in order to achieve the curriculum developers intended goals. Interpretation of curriculum text is paramount to understanding the curriculum content and goals for effective implementation. Hoover (2011) pointed out that:

A complex issue for teachers is to understand the curriculum they are required to implement, along with the outcomes reflecting student learning. Many educators view the curriculum primarily as the content they must teach, with little or no consideration of other critical curricula elements that are essential to effective teaching. (pp. 4 - 5)

The other critical curricula element which Hoover (2011) alluded to in the context of this study was the creation of place-based learning experiences. It is during the curriculum interpretation process that curricula text is modified to suit the local context to create place-based learning activities. "While curriculum developers and school administration have certain ideas on how a new curriculum might 'look' in the classroom, teachers may see this quite differently" (Barton et al., 2014, p. 169). That is why some form of modification to an externally developed curriculum, is necessary to make it look the way teachers think it should, in the context of the local environment. Print (1998) asserted that "some modification of an externally developed curriculum is necessary to take account of the differing local contextual factors such as the varying nature of students, differing school resources, differing teachers, parental input variations, community support and so forth" (pp. 217 – 218).

Curriculum developers usually expect teachers to implement curriculum in compliance with the intended curriculum implementation policies. However, tensions often arise in situations where teachers are left to implement a centrally developed curriculum, guided by the curriculum policies alone, without further support. Rogan and Aldous (2005) noted that:

In many cases, new curricula are well designed, and the aims intended to achieve are laudable; however, all too often the attention and energies of policy makers are focused on the "what" of desired educational change, neglecting the "how." Porter (1980, p. 75), speaking about the role of the national government in educational change in the

United States and Australia, claimed that ". . .the people concerned with creating policy and enacting the relevant legislation seldom look down the track to the implementation stage. (p.313)

Student learning is paramount, yet it is at stake in such cases where relevant authorities pay little or no attention to curriculum implementation. The core aspect of the curriculum implementation process is what students get out of the enacted curriculum. The issue discussed here is how much students acquire from the curricula content, and the extent of student acquisition of curriculum content depends largely on the teachers' curriculum enactment practices. Thus, this study in concurrence with Orafi and Borg's (2009) study was "particularly interested in the relationship between the intended curriculum and how it is enacted and in understanding the factors which may cause disparity between the two" (p. 244 cited in Fullan, 2001; Markee, 1997). The prevalence of such disparities should be redressed for effective curriculum implementation as they may hinder student learning (and their ability) to achieve the curriculum goals. Curriculum implementation in PNG appears to be historically problematic. As DoE (2008) revealed:

An equally important challenge for the [education] system than the development of the curriculum is whether the teachers are able to understand and teach it. There are suggestions that in some parts of the country, and not necessarily only the most remote parts, it is not being implemented at all. (p. 28)

The PNG government aspires to provide a relevant education, yet such comments are indications of something perennially wrong in the curriculum implementation process. This illustrates the important role of the teacher in curriculum implementation; curriculum will remain dormant without the teachers' contributions. Curriculum implementation demands a lot from the teachers, who need to think deeply about the curriculum to grasp a better understanding for effective implementation.

3.8 Place-based learning

Place-based learning is a curriculum implementation approach, or if you like, a curriculum enactment approach. Place-based learning incorporates the environmental context with the prescribed curriculum to design learning experiences of relevance for students. Place-based learning, or place-based education, is:

learning that is rooted in what is local-the unique history, environment, culture, economy, literature, and art of a particular place. The community provides the context for learning, student work focuses on community needs and interests, and community members serve as resources and partners in every aspect of teaching and learning. This local focus has the power to encourage students academically, pairing real-world relevance with intellectual rigor, while promoting genuine citizenship and preparing people to respect and live well in any community they chose. (Smith & Sobel, 2010, p. 23 cited in Rural School and Community Trust, 2005)

The place-based learning approach connects the students to their local environment through the curriculum. The idea of connecting the curriculum to the community to get students to experience place-based learning is becoming increasingly popular. This is because learning through place-based experience is deemed authentic, when students learn within the local community in which they live. "Authentic learning is a pedagogical approach that allows students to explore, discuss, and meaningfully construct concepts and relationships in contexts that involve real-world problems and projects that are relevant to the learner" (Mims, 2003, p. 2, cited in Donovan et al., 1999).

Place-based learning is also proving to be a useful approach in addressing an emerging problem amongst the younger generation in the 21st century. With the boom of modern technological gadgets;

What's real for many young people is what happens on their computer monitors, television screens, and MP3 players. Caught in an interior and electronically mediated world, they are losing touch with both society of flesh and blood humans and dedicate natural world that supports our species. (Smith & Sobel, 2010, p. viii).

This concern of today's young people being hooked into the cyber world rather than the real world was expressed through the social media (Facebook), and drew much attention and comments. Place-based education has the potential to redirect the focus of such young people towards the local environment to interact with the real world.

3.8.1 Place-based learning (PBL) and place-based education (PBE)

Place-based learning (PBL) and place-based education (PBE) have been used interchangeably in this thesis but their definitions in context differ slightly. For clarity in

distinguishing them, the terms place, learning, and education are briefly discussed. Beginning with the term place:

The concept of place has to do with how people develop and experience a sense of attachment to particular locations on the Earth's surface. It is also has to do with how people are affected by and effect those places. (Wattchow & Brown,2011)

This means place, or the environment in which people live and interact influences their development. Moreover:

In many respects, 'place' is a lens through which young people begin to make sense of themselves and their surroundings. It is where they form relationships and social networks, develop a sense of community and learn to live with others. (McInerney, Smyth, & Down, 2011)

The process of forming relationships and social network within their places by young people to develop a sense of community is in fact learning to live with others. Learning is described by Masadeh (2012) as a self-directed, work-based process leading to increased adaptive capacity. Moreover, learning is considered as an ongoing life journey process considered to be the heart of human resource development which may not always be clearly planned or even intentional as in the schools. This learning process includes the acquisition of skills as well as insights or factual knowledge wherever and whenever people come to interact and participate" (Mumford, 1995, cited in Masadeh, 2012, p. 64). The indicator of learning is "whenever 'people can demonstrate that they know something that they did not know before (insights and realizations as well as facts) and/or when they do something they could not do before (skills)' (Mumford, 1995, p. 13, cited in Masadeh, 2012, p. 64)

Furthermore, Learning is closely associated with education. Education is defined as "activities which aim at developing the knowledge, skills, moral values and understanding required in all aspects of life rather than knowledge and skill relating to only a limited field of activity" (Masadeh, 2012, p. 64). Education a narrower sense confined to educational settings is defined by Gupta & Baveja (2014) as nothing, but a purposeful activity, deliberately planned for the optimum development of an individual's potentials. However, education in a broader sense:

...is not limited to a classroom or a school only. It is considered to be a lifelong process, where all the experiences, knowledge and wisdom that an individual acquires at different stages of one's life through different channels (i.e., formally, informally and incidentally)

are termed as education. The broader view considers education as an act or experience that has formative or additive effect on the personality of an individual. (Gupta & Baveja, 2014, p.5)

Education is generally a plan of what to be acquired when children experience (learn) certain activities that are either intended and planned or unintended. In that sense, education is closely tied to learning because of students' engagement in planned or unplanned actives depending on the purpose, context and location or place. The location where children engage in those activities is the place which greatly affects what they acquire and develop. Place-based education and place-based learning generically means to align the concept of education and learning to the definition of place as discussed above.

Place-based education is an educational approach that incorporates the local environment as place into the teaching and learning process for context and resources. The PBE approach uses the local community and environment as a starting point to teach concepts in all subjects across the curriculum (Sobel, 2005). Therefore, in a broader perspective, PBE includes all forms of place-conscious teaching and learning including place-based learning which is the focus of this thesis. PBE places emphasis on "hands-on, real-world learning experiences" (Sobel, 2005, p. 11) which, when practically experienced becomes place-based learning. PBE lacks a specific theoretical tradition to define, but:

Its practices and purposes can be connected to experiential learning, contextual learning, problem-based learning, constructivism, outdoor education, indigenous education, environmental and ecological education, bioregional education, democratic education, multicultural education, community-based education, critical pedagogy itself, as well as other approaches that are concerned with context and the value of learning from and nurturing specific places, communities, or regions. (Gruenewald, 2003, p. 3)

PBE covers a spectrum of place-conscious teaching and learning approaches including place-based learning implicitly and not necessarily situated at place. For example, if a canoe maker expert is telling another person about making a canoe is one form of place-based learning because of the expertise involved who may not be the regular classroom teacher. Learning in this sense is theoretical without practice. However, when teaching and learning about canoe making is unfolding at a place where a canoe is under construction, then it is another form of PBL, that is actually engaging in the process of making a canoe, an aspect of education in the specific location which is PBE. PBE connects experience in the community to the content of the official

curriculum rather than discussing how these experiences would unfold in abstract inside the classroom or elsewhere, and students are encouraged to experience the actual activities and resources of their own locality (Miller & Twum, 2017), where appropriate and whenever convenient. It is doubtful whether students engage in those activities as encourage, and that is why PBL is encouraged in this thesis.

Moreover, the Google images displayed in figure 3.4 and 3.5 attempt to illustrate the slight difference between PBL and PBE as employed in the PNG traditional education that continues to this day. Place based learning happens in a specific place or situation. Learning certain skills that are complex such as making a canoe, building a house, or making clay pots requires extensive instruction and experiences, similar to an apprenticeship system (Nagai, 1997; O'Donoghue, 1994). It means someone can only learn to make a canoe by helping to make one somewhere in the local environment as Figure 3.4 illustrates, not by listening to how it is made.



Figure 3.3: Making a canoe in Kitava Island, Trobriand Islands, Kula canoe

Source: https://www.robertharding.com/preview/632-1032/papua-new-guinea-kitava-island-trobriands-kula-canoe/

The elder is more of a teacher and worker in making the canoe. The elder, probably the father or an uncle of the small boy is teaching the boy who is a helping hand in making the canoe. This is a good example of PBL as it has always been for centuries in the PNG which can be viewed as a traditional place-based education system.

Another teaching and learning approach used in the PNG traditional education system is via instructional teaching, as depicted in Figure 3.4.



Figure 3.4: Discussing a Moka exchange

Source: http://assets.rebelcircus.com/blog/wp

content/uploads/2016/12/PapuaNewGuinea_04.jpg

The house in Figure 3.4 is a more like a school classroom in a formal education system but the discussion is informal where the elders are teaching the younger ones about "Moka exchange", an exchange of gifts such as pigs, shells and now money in the Highlands. This is another form of place-based learning because the elders who have experienced and know what is involved in the "Moka exchange" are teaching the younger who have less or no experience. The younger ones are therefore taught what to say and what to do, and what not to say and what not to do. They will eventually put into practice what they are hearing later in the day or the next day. Hence, this is PBE, the learners are not engaging in activities that they are supposed to be but receiving planned and intended instructions from elders and meditating on what they will say and do next.

3.8.2 Studies on place-based education in other countries

These place-based education studies done in other countries were reviewed to establish what has already been researched in the field of place-based learning. The first study reviewed was by Kleederman (2009), entitled "the power of place-based pedagogy: theory and practice of place-based education" done in Middletown, Connecticut USA, as part of her Bachelor of Arts with Honors studies. Kleederman (2009) focused on the importance of connecting learning to

the place. She adopted Edward Casey's (2004) theory on how the place or site of learning informs our lives:

To be at all-to exist in any way – is to be somewhere, and to be somewhere is to be in some kind of place. Place is a requisite as the air we breathe, the ground on which we stand, the bodies we have. We are surrounded by places. We will walk over and through them. We live in places, relate to others in them, we die in them. Nothing we do is unplaced. How could it be otherwise? How could we fail to recognise this primal fact? (Kleederman, 2009, p. 1)

Having stressed what place means to our lives, Kleederman (2009) moved onto to link "place-based educational philosophy to the articulations of place that have been established over nearly three hundred years of writing on the North American continent" (p. 4). While appreciating Kleederman's work on linking theory and practice of place-based education, this study moves further to establish what really happens in that linking process. Moreover, this study focuses on the actual creation of place-based learning activities by the teachers to get students involved. This then cements the link between the place-based education theories to the actual place which Kleederman (2009) focused on in her thesis.

Another place-based education study titled: "Rural routes: place—based music education in two rural Canadian communities" was conducted by Julia Elaine Brook (2011) based in Canada. Brook's study was part of her PhD thesis, which focused on teaching music using the place-based education approach. The purpose of Brook's (2001) "research study was to profile exemplary rural music programs, examining how their components and contexts contributed to a deep sense of place for students, teachers, and the community" (p. ii). Brook went on to state that as a graduate student reading about music education, she "was struck by the emphasis on the need to contextualise music programs to suit our [the] students and strengthen their sense of place" (Brook, 2011, p. 3). Moreover, what Brook (2011) came to realise was that many of her colleagues:

in other rural areas strived to enrich their communities through their music programs. They developed music programs through the creative use of resources and by incorporating community members as participants in the delivery of the program or as audience members. (p. 3)

Sam Harrison's (2012) study titled "place-based praxis: exploring place-based education and the philosophy of place" was part of his PhD studies at the University of Edinburgh, Great

Britain. Harrison's study had two foci: (1) place-based education as a philosophical inquiry; and (2) an educational inquiry. "The educational inquiry was seeded by the need to understand both embodiment and learning within experiences of place in education" (Harrison, 2012, p. iv). Harrison focused deeply on what embodies learning when students engage in learning activities that are place or environment based. In other words, Harrison's study focused on the impact on students when learning in the context of the place, rather than looking at the teacher who creates and facilitates learning experiences that are place-based. Harrison focused on the recipients of place-based learning, as opposed to focusing on the creators and facilitators of place-based learning experiences, which this study focused on. Harrison's (2012) second foci was the philosophical facet of place-based learning:

prompted by Evernden's (1985) insight that the environmental crisis is a 'crisis of being'. Evernden argues that our perceived separation from the world is at the root of the environmental issues we face. Highlighting the role that 'place' might have in both these inquiries, I examine the educational and philosophical debates around place, drawing especially on place-based education (Gruenewald & Smith, 2008), and phenomenology (Merleau-Ponty, 1968). Arguments from within these literatures indicate that experiences of, and in, place hold the potential to re-examine what it means to be part of the world, here, now. (p. iv)

Harrison's foci were also emphasised by Kleederman (2009) in that the place or environment is the basis for education and living. People learn from the environment to manipulate it for their livelihood. Harrison's (2012) study was:

In response to a lack of UK research into place-based environmental education, and the need for deeper analysis of the epistemological and ontological implications of this approach, I have used examples of my practice to develop the discussion. The implications for an appropriate research method are many: the need to understand the relationship between learning about places and living well in them, the role that our identity plays in shaping our experience of place, and the fluidity of both this identity and environments themselves. (p. 305)

This gives rise to the significance of place-based education as a mode of meaningful learning, which should be embraced and employed in all societies.

Finally, William Patrick Fogarty (2014) carried out his study titled "Learning through country: competing knowledge systems and place-based pedagogy", as a thesis submitted for the

degree of Doctor of Philosophy to the Australian National University. Fogarty's (2014) thesis exposed "the dichotomies and binaries that have characterised theoretical and political discourses in the provision of remote indigenous education in Australia" (p. viii). Fogarty assumed that the Western formal education widely used in Australia overlooked the Indigenous culture and way of life, which should be reflected in the curriculum and its policies.

The research finds that ideological tensions and over simplified notions of biculturalism in indigenous affairs have dominated policy settings, resulting in compromised pedagogy at the classroom level. The research also finds that a structural disconnect exists in remote Indigenous education between schools, community and work at a local level. This disconnect is perpetuated by a failure of remote educational provision to develop pedagogic frameworks that are able to be inclusive of Indigenous knowledge and remote Indigenous development aspiration. (Fogarty, 2014, p. iii)

Fogarty (2014) claimed that because of such dichotomies and binaries being prevalent in the Australian education system, it appears to disadvantage the Aboriginal Indigenous population in terms of education. Fogarty (2014) further explained that "his thesis demonstrates the remote Indigenous developments, and their associated employment roles have specific pedagogic needs that cannot be met solely through generic pedagogy, nor can they be met through the provision of education based solely in culturalism" (p. ix). Fogarty moved on to suggest that an approach, which would amalgamate the current practices with Indigenous culture and way of life, would be appropriate for the Indigenous community. "The research shows that there is a need for pedagogic frameworks that can cater for inherent tensions and complementarities in the transmission of knowledge (Fogarty, 2014, p. ix). These studies in particular, along with other place-based learning literature cited in the above sections, have framed this educational approach in the context of PNG's educational reform agenda of place-based education.

3.8.3 Studies on place-based education in PNG

Literature pertinent to place-based education in PNG in journal articles, theses, or any other form is absent. The few literary works that are available are by authors other than Papua New Guineans and are about curriculum issues rather than place-based education. There are also several theses by Papua New Guineans on curriculum implementation in general. Thus, the discussion in this section begins with the literature reviewed on curriculum issues by non-Papua New Guinean authors. It then moves onto the Papua New Guinean thesis, followed by a summary

of what is believed to be missing in terms of place-based learning; a literature gap that this study attempted to fill.

Michael Crossley wrote extensively over many years on curriculum issues in PNG from the colonial era to contemporary times. For example, The Organisation and Management of Curriculum Development in PNG by Crossley (1994) covers colonial era curriculum issues to the current issues. Peter Smith (1987) also collated an extensive range of articles on educational issues in PNG including curriculum dating from the colonial era and the first few years of post-colonialism. The central thread running through these works was the need for a curriculum that reflected PNG ways.

There are several theses written by Papua New Guineans that cover curriculum implementation. Anna Marisen Joskin's (2013) wrote a PhD thesis titled "Investigating the Implementation Process of a Curriculum: A Case Study from PNG", while Joseph Lingawa Kekeya's (2013) thesis was titled "Investigating National Curriculum Implementation in PNG". These two PNG scholars covered curriculum implementation from a broader perspective rather than concentrating on a specific aspect, such as creating place-based learning experiences.

Though the internet, as the common avenue for literature research, was used several times to search for literature pertaining to research on place-based education in PNG, none were found. Additionally, searching for other journal articles on place-based education in PNG was fruitless. This implies that the PNG government's curriculum policy for teachers to teach in real-life situations and provide a relevant education has never been researched.

3.9 Literature findings

This literature review found that theorising the accepted definition of curriculum for effective enactment is an essential aspect of the curriculum process. Crossley (1994) recorded curriculum theorising in PNG during the colonial era, when a foreign curriculum was used in a country of diverse cultures, where people have been learning by doing for centuries. Blending of a Western curriculum with the local cultures to make a curriculum appropriate for the local environment was attempted but failed to materialise as the teachers were mostly foreigners who had no idea of PNG and its cultures. The idea of making the curriculum relevant to the local environment was introduced during the post-colonial era under SSCEP and CSAPP, but the programs were short lived for reasons such as a lack of support and resistance by parents. The

SCEEP and CSAPP concepts involved learning by doing in real life, which is akin to place-based learning. The place-based learning concept is included as a PNG national curriculum policy; yet, there is no literature pertaining to place-based learning in PNG. There is literature on curriculum policy and practices, or implementation, but nothing specific about place-based learning.

PNG reformed its curriculum in 1992, with the aim of preparing most of the school leavers for rural living (DoE, 2003). It urged teachers to teach in a real-life context, through the curriculum policies, which this study focused on as the creation of place-based learning experiences. The literature reviewed revealed several studies conducted abroad on place-based education. These studies did not focus on the creation of place-based learning experiences but considered other aspects of place-based education. There is literature on place-based education outside PNG, which attest to the importance of place-based education. However, in PNG, though place-based learning is the core policy of the current curriculum reform, there have been few studies that relate to PBL. Some examples are, the 'Maria' books: the achievements and challenges of introducing dual language, culturally relevant picture books to PNG schools" by Simoncini, Pamphilon and Simeon (2019), and "Place-Based Picture Books as an Adult Learning Tool: Supporting Agricultural Learning in Papua New Guinea" by Simoncini, Pamphilon & Mikhailovich (2017). However, this is the first major study on place-based learning as a curriculum enactment approach, in a particular secondary teaching area, in PNG.

3.10 Conclusion

PNG's developmental aspirations will only be realised by an educated human resource. The only avenue for human resource development is education. This study asserts that the curriculum implementation phase of the curriculum process is important within the education system, i.e., what students gain from the enacted curriculum that develops them to be an educated person. The literature, therefore, suggested the use of place-based education as the appropriate approach to enact curriculum in a meaningful way. Thus, the literature review revealed that place-based education has been advocated in several places outside of PNG. The literature endorses place-based education as the appropriate approach for providing meaningful learning experiences. Though there is no literature on place-based learning in PNG, the Department of Education has mandated teachers to use it. The PNG national curriculum policy says teachers are to teach in real life contexts, which Sobel (2004) called place-based education.

This chapter also discussed the literature pertaining to the crucial role that teachers play as mediators between the curriculum and the students during curriculum implementation. Curriculum as autobiography, is viewed as an integral concept to reflecting on curriculum implementation. Thus, understanding a teacher's role as a contributor of curriculum at the crucial point of curriculum implementation in PNG by translating curriculum text to student learning activities is paramount.

Chapter Four

Research methodology

4.0 Introduction

This chapter discusses the qualitative research methodology adopted by this study. This qualitative study employed the hermeneutic phenomenology and case study approaches to frame the research methodology and methods. The hermeneutic phenomenology and case study approaches are quite distinct, yet their application during the research process are interrelated. It is essential to define the terms hermeneutic phenomenology, case study, research, methodology, and methods at the outset to situate the discussion of research methodology perspectives as applied in this study. Research is a systematic process of generating data, analysing, and interpreting to increase understanding of a phenomenon under investigation (Leedy & Ormrod, 2010). Moreover, interpreting the generated data to construct meaning of lived experiences of a phenomenon is the art and science of hermeneutic phenomenology (Friesen et al., 2012). The hermeneutic phenomenology and case study approaches guided this qualitative study, which collected, analysed, and interpreted data relating to teachers' thoughts and actions. The underlying intent was to increase understanding of the practicing business studies teachers' enacted curriculum practises using the place-based learning phenomenon. Moreover, a research methodology is a process that involves planning about studying the social realities and mapping out data collection strategies (Strauss & Corbin, 1990). When the research methodology as a plan unfolds or put into practice, the status quo changes from research methodology to research methods. Techniques and procedures employed to conduct research become the research methods that are determined by the research methodology (McGregor & Murnane, 2010).

Since this is an educational research, it is important to note what Gall, Borg and Gall (2007) cautioned, that all educational research is prone to error and bias because it is a very human process. This study therefore adhered to the "established procedures which researchers have developed over time to minimise such influence for error and bias in the findings" (Gall et al., 2007, p. 1) by following the systematic research process of collecting, analysing, and interpreting information. Figure 4.0 illustrates where this chapter situates in relation to the other chapters of the thesis.

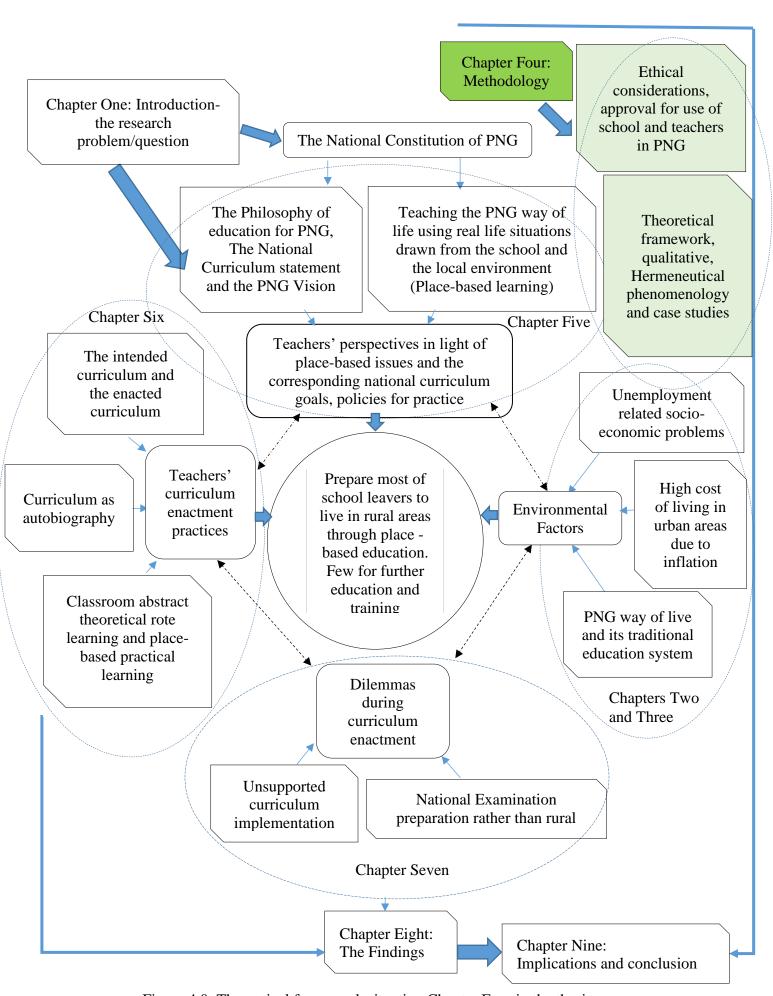


Figure 4.0: Theoretical framework situating Chapter Four in the thesis

This chapter begins by re-stating the aims of the study from chapter one to achieve cohesiveness and to situate this study's theoretical framework into perspective. The chapter then discusses the research theories that underpin this study as research paradigm, approaches and design. Moreover, the chapter discusses the research questions also from Chapter One; and the research methodology and methods. The teacher participants and the data collection and analysis procedures are also discussed in this chapter. Other areas that constitute the research methodology also discussed in this chapter include data validity, ethics, and the limitations of the study.

4.1 Aim of the study

This study aimed to explore how business studies teachers enact the curriculum in alignment with the local environment using the place-based learning approach to accomplish the overarching curriculum goal. The PNG national curriculum goal is twofold: (1) the preparation for the return of many of the school leavers to their rural communities; and (2) the preparation of the few with academia capabilities to pursue further education and training for ultimate employment (DoE, 2003). The intention of this overarching curriculum goal is to help PNG realise Vision 205, to be a smart, wise, fair, healthy, and happy society, ranked amongst the top 50 countries by the United Nations Human Development Index (HDI) by 2050 (Vision, P. N. G. 2050, 2009).

The underlying tool to help PNG realise its vision 2050 is an educated population. Central to producing an educated workforce are the teacher's curriculum enactment practises in schools. It is through the teacher alone that the curriculum intent reaches the students in the form of learning activities. Place-based learning uses all aspects of the local environment in teaching and learning, and is asserted to be the appropriate curriculum enactment approach that will help achieve this curriculum goal (Clark, 2008; Gruenewald, 2003; Rural School and Community Trust, 2005; Smith & Sobel, 2010; Sobel, 2005). Therefore, this study explored how teachers align the curriculum text to the local environment to create meaningful place-based learning experiences for student engagement during the curriculum enactment process.

Are PNG teachers aware that the place-based learning concept is expressed as teaching in real life situations in the curriculum documents (DoE, 2007; DoE, 2006; DoE, 2003), and do they attempt to implement it? Human capital development is PNG's prime goal because the country's developmental aspirations are anchored in an educated human resource (Vision PNG).

2050, 2009). Consistent with this aspiration, this study investigated curriculum implementation, paying attention to the teachers' creation of place-based learning experiences in alignment with the local environment. Do teachers modify the curriculum to suit the local context? Do they create place-based learning experiences for student engagement? Are the teachers able to overcome difficulties they experience during curriculum implementation? The aim of this study was to refine these questions in scope and develop some insights into the experiences of teachers in enacting place-based learning.

4.2 The research questions

The research questions from chapter one are inserted in this research methodology chapter again to illustrate their influence in the research methods. When developing research questions in qualitative studies, Creswell and Clark (2004) suggested the use of good qualitative research questions beginning with "how" and "what" to generate data and "explore, identify, or describe" what actually happened. Research questions usually begin with an overarching question. An overarching question without ambiguity provides direction for the study design and data collection and offers the potential to develop specific new questions as data collection and analysis progresses (Agee, 2009). This study developed a major research question: What are the practising business studies teachers' interpretations of the overarching PNG national curriculum goals and their enactment strategies in achieving them?

Subsidiary questions narrow the broader focus of the overarching question to provide directions for specific data to be collected (Agee, 2009). Hence, the study used the following subsidiary questions to generate specific data and collectively address the overarching question and the theories that guided this study:

- 1. What are the practising business studies teachers' perceptions of the place-based learning concept and its relatedness to the PNG's National Curriculum goals?
- 2. How do teachers enact the teacher curricular intent informed by the prescribed curriculum in alignment with the local context, with attention to place-based learning?
- 3. What dilemmas (if any) do business studies teachers experience when implementing a centrally developed curriculum in a country of diverse cultures, values, languages and even the geographical settings?

These research questions were shaped by qualitative approach with the underlying theories and approaches this study adapted. The questions collectively helped to gain an in-depth understanding of the classroom phenomenon in teaching and learning, particularly the place-based learning approach.

4.3 Theoretical framework

A theoretical framework in research according to Grant & Osanloo (2014) is the blueprint which guides the selection and employment of philosophical, epistemological, methodological, and analytical theories to build and support a study. It is, in other words, the alignment of philosophical, epistemological, methodological, and analytical approaches to the practical aspects of the study such as literature reviews, data collection and analysis. Moreover, a theoretical framework is based on existing theories in a field of inquiry that relates and/or reflects the hypothesis of a research topic which a researcher borrows to guide in constructing his/her own research inquiry (Adom et al., 2016). Furthermore, a theoretical framework becomes a researcher's lens, through which certain phenomena of the world under investigation are viewed (Grant & Osanloo, 2014). Just like a map that guides travellers' paths when travelling through a particular location; a theoretical framework resonates and guides the researcher to avoid deviating from the confines of the nominated theories to contribute scholarly to the academic arena (Adom et al., 2016).

The in-depth interviews, lesson observation and document analysis are the data collection procedures of this study, and their relevancy to the topic of place-based learning as a lived-experience of teachers reflects the interpretivism, constructivism, hermeneutical phenomenology, and case study theories this study employed. The essence of a theoretical framework is that, it serves as a foundation upon which the rationale for the study, the problem statement, the purpose, the significance, research questions, literature review, research methodology, data collection, and analysis (Grant & Osanloo, 2014). That is why, the philosophical theories adapted for this study include interpretivism and constructivism, which are captured in the research paradigm while the hermeneutical phenomenology and case study approaches captured in the research design are mentioned where appropriate throughout the thesis.

4.4 Research Paradigm

Paradigm generically refers to how people conceptualise the world in order to understand it. "A paradigm is a worldview, a way of thinking about and making sense of the real-world complexities. As such, paradigms are deeply embedded in the socialisation of adherents and practitioners" (Patton, 2015, p. 89). Moreover, Krauss (2005) has taken the term paradigm "... to be the basic belief system or world view that guides the investigation" (p. 759, cited in Guba & Lincoln, 1994, p. 105). In adapting the definition of paradigm from Guba and Lincoln (1994), Kraus (2005), and Patton (2015), this study attempted to make sense of the complexities of the selected Business Studies teachers' enacted curriculum practises. This study, therefore, used the interpretivist and constructivist paradigms to make sense of creating place-based learning experience as a curriculum enactment phenomenon. "Researchers within the interpretivist paradigm are naturalistic since they apply to real-world situations as they unfold naturally, more specifically; they tend to be non-manipulative, unobtrusive, and non- controlling" (Tuli, 2011, p. 101). The researcher avoided all forms of manipulation during the data collection process by recording and collecting data as provided by the participating teachers rather than influencing them what to provide to maintain data validity.

The constructivist paradigm guided this study. Constructivism, according to Gall et al. (2007) is "the epistemological doctrine that social reality is constructed, that it is constructed differently by different individuals, and that these constructions are transmitted to members of a society by various social agencies and processes" (p. 22). The teacher constructed and facilitated learning activities that unfold during the enacted curriculum construct.

This study used the interpretivist and constructivist paradigms. Tuli (2011) described the interpretivist–constructivist paradigm as: "an interpretivist–constructivist perspective, the theoretical framework for most qualitative research sees the world as constructed, interpreted, and experienced by people in their interactions with each other and with wider social systems" (p. 100). The classroom practices that prevail, when pitched against the prescribed theories, established practices, and the researcher's personal experiences in curriculum enactment, construct realistic meanings for improved future curriculum practices. The teachers enacted curriculum practices were explored thoroughly as guided by the research design or research plan.

4.5 Research design

Research design is a plan that maps out how the research is to be conducted. It is a plan carefully structured to execute systematically to validate the research findings (Mouton, 1996). The research design also provides directions from the underlying philosophical perspectives underpinned by the research questions. Yin (2003) in simplicity states that "a research is an action plan for getting from here to there, where 'here' may be defined as the initial set of questions to be answered and 'there' is some set of answers" (p. 19). Maxwell's (2006) interactive model in Figure 4.1 seems to describe Yin's (2003) definition of research design.

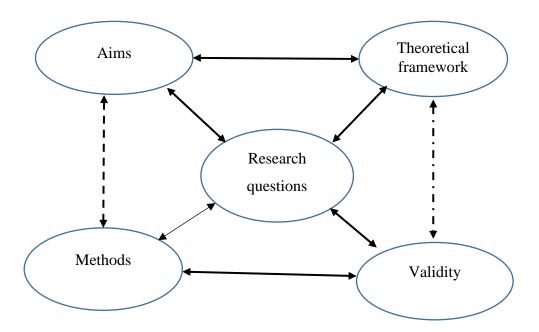


Figure 4.1. An interactive model of research design.

Source: Maxwell (2006).

A research design specifies what data is required and how data will be generated and analysed to answer the research questions (van Wyk, 2012). It connects the theoretical methodology to the practical methods or procedures of data collection and analysis. This is educational research, which according to Gall et al. (2007) is prone to error and bias because of human involvement. The study therefore incorporated a well-developed research design and adopted strict adherence during the research process to mitigate possible bias and error. The research design was shaped by the hermeneutical phenomenology and case study approaches the study adopted.

4.6 The research approaches

The study adopted the hermeneutic phenomenology and case study approaches to capture the teachers' lived experiences of the enacted curriculum phenomenon. The hermeneutic phenomenology and case study approaches also link inextricably to the research questions, either shaping them initially or suggesting new questions as the study progresses (Agee, 2009). Hermeneutic phenomenology is an approach that focuses on subjective experiences of individuals and groups attempting to unveil the world as experienced by the subject through their life world stories (Kafle, 2011). It was the attempt of this study to unveil the teacher's lived experiences of place-based curriculum enactment phenomenon by employing the hermeneutic phenomenology approach.

Moreover, hermeneutic phenomenology is the art of interpreting and constructing meaning of a phenomenon by studying the lived experiences of those involved to gain a deeper understanding of the nature of everyday experiences (Friesen et al., 2012; Denzin & Lincoln, 2011). The aim of the hermeneutic phenomenology approach is to provide an understanding of the lived experiences of those involved in the phenomenon by interpreting the stories they tell. The basic approach to gain a deeper understanding of the participants' lived experiences is to narrate one's own experiences while listening to their narratives (Lindseth & Norberg, 2004). Hence, a phenomenological study should seek to answer questions such as "what, why, who, how, with whom, to whom and for whom" (Lindseth & Norberg, 2004, p. 149).

This study sought answers to the type of questions listed by Lindseth & Norberg (2004) in the above sentence to adapt the phenological approach. Stating this other way, the three research questions were therefore formulated to begin with "what" and "how" affirming the employment of the hermeneutic phenomenology as a research approach in this study. That was to capture an in-depth understanding of the business studies teachers' lived experiences in curriculum enactment practises by generating 'what', 'who', 'how' and 'why' subsidiary questions the interface interview sessions.

The case study theory was also used in conjunction with the hermeneutic phenomenology approach in this study. The case study approach, as a research theory, generates an in-depth, multi-faceted understanding of complex issues in real-life contexts (Crowe, Huby, Cresswell, Robertson, & Sheikh, 2011) such as the employment of place-based learning as an enacted

curriculum practice in this study. The justification of employing both the case study and hermeneutic phenomenology approaches are described in the next section.

4.7 The interplay of case study and hermeneutic phenomenology

The definitions of hermeneutic phenomenology and case study approaches are revisited to illustrate their interrelatedness when used in the same study. Hermeneutic is the art and science of interpretation to make meaning, while phenomenology is the study of experience, particularly as it is lived and as it is structured through consciousness (Friesen et al., 2012). Moreover, a case study investigates a contemporary phenomenon (the case) in its real-world context (Yin, 2014, p. 2). From the various types of case studies provided by literature, this study adopted the descriptive case study, which is "a case study whose purpose is to describe a phenomenon (the case) in its real-world context" (Yin, 20014, p. 239).

This study focused on five business studies teachers' lived experiences of creating place-based learning activities and adopting them in the enacted curriculum. The detailed descriptions of real-world classroom experiences captured in the data collected were later interpreted to construct meaning of the curriculum implementation phenomenon. The meanings constructed provided vital information, which will be communicated widely through the thesis to help improve future curriculum enactment practises using the creating place-based learning experiences.

Thus, the study of the business studies teachers' lived experiences reflected the phenomenological approach, while the case study approach set the parameters to be more focused on the five business studies teachers from two regions of PNG. The deep exploration of business studies teachers' creation of place-based learning experiences as a curriculum enactment practice reflects hermeneutic phenomenology. These explorations of PBL ranged from interviews, lesson observations, lived experiences, and even media discussions of emerging problems, such as the potential overuse of modern technology which place-based learning can potentially address. The use of the descriptive case study enabled detailed descriptions of the teachers' lived experiences in their real world (school classroom) to construct meaning of the phenomenon, especially the worthwhileness of place-based learning. The interpretation of the detailed descriptions of classroom experiences to construct meaning of curriculum enactment practises for future improved practises illustrates the application of hermeneutics. This means the hermeneutic phenomenology and case study approaches provided the basis for the in-depth

interviews, document analysis, and lesson observations employed as research methods for this study.

4.8 The case of a case study

The case and case studies are not the same concept. While a case study is a research approach, 'the case' is the phenomenon studied. The cases normally studied in case studies are usually a concrete entity, such as a person, organisation, community, program, process, policy, practice, institution, or a contemporary phenomenon, such as a decision (Yin, 2014). Hence, the case for this study was the investigation of five selected business studies teachers and their curriculum enactment practises. "Researchers generally do case studies for one of the three purposes; to produce detailed description of a phenomenon, to develop possible explanation of it, or to evaluate the phenomenon" (Gall et al., 2007, p. 451). Adopting the first two purposes, this study focused on producing a detailed description of the place-based learning experience, as a curriculum enactment phenomenon in its real-world context, which is the school classroom, and develop a possible explanation about what happened. Thus, this was a descriptive case study "whose purpose is [was] to describe the phenomenon (the case) in its real-world context" (Yin, 2014, p. 238). Yin (2014) clarified that "a case study investigates a contemporary phenomenon in-depth and in its real-world context" (p. 237). Thus, the descriptive case study approach aligns with what hermeneutic phenomenology attempts to uncover, which indicates their compatibility and cohesiveness when combining these two approaches in a study.

The schools where teachers operate to enact the prescribed curriculum are a complex phenomenon of an education system. Curriculum changes, such as place-based learning, introduced as a curriculum enactment approach in implementing the lower secondary curriculum, are complex (DoE, 2006). Changing from using a curriculum with the learning activities provided, to the reformed curriculum where teachers are to align the curriculum text with the local environment to create place-based learning, is a complex process requiring thoughtful planning (DoE, 2006). Hence, cases investigated under the case study approach within an education system need to have boundaries, which include "the time period, social groups, organisations, geographic locations, or other conditions that fall within as opposed to outside of) the case in a case study, understanding that the boundaries can be fuzzy" (Yin, 2014, p. 237). Hence, this study focused on only five business studies teachers and their curriculum enactment practises in creating place-based learning experiences. The five teachers were selected from four

schools in two provinces in two specific regions. Only one urban school and one rural school in each province were used. Other elements within the schools, such as the school Principal and/or the Subject Masters who may have influenced the teachers' curriculum practises in one way or another, were not included in the case. This is because teachers decide the place-based learning activities that students experience, and that reflects how they interpret the curriculum and relate to the context in which they are teaching.

4.9 Research methodology

This study used qualitative research methodology. Qualitative study is a situated research activity consisting of interpretive material practices that makes the world visible to the researcher located in the empirical world (Denzin & Lincoln, 2011; Lewis & Ritchie, 2003). Moreover, qualitative research involves an interpretive, naturalistic approach of studying things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them (Denzin & Lincoln, 2000; Lewis & Ritchie 2003). Guided by Denzin and Lincoln's (2011) definition of qualitative research, this study endeavoured to capture what curriculum means to the practising teachers, which influences their daily curriculum enactment practises. Curriculum enactment is the actual curricular content in which students engage, in the form of learning activities facilitated by the teacher in the classroom (Porter & Smithson, 2001).

The implications are that teachers alone plan and facilitate the student learning activities during the curriculum enactment process. This means that the kind of learning activities prepared depends entirely on the teachers' interpretation of the curriculum text in the first instance, then their response to the environmental determinants during the curriculum enactment process, to make learning meaningful. Thus, how teachers make sense of the curriculum and respond to the mandated imperatives during their curriculum enactment practises were the focus of this study. The data generated using the qualitative approach were interpreted to construct meanings of how teachers defined curriculum goals and enacted the curriculum accordingly to accomplish them. How the data were generated is discussed in the research methods.

4.10 Research methods

Guided by the hermeneutic phenomenology and the case study approaches, this qualitative study employed in-depth interviews, lesson observations, and document analyses as

its data collection procedures. An interview is a discussion prompted by interviewers with openended questions to gather specific information from the interviewees. Interviews consist of oral questions that the interviewer asks for oral responses from the interviewees, usually involving one respondent at a time (Gall et al., 2007). The open-ended interview questions and probes yields in-depth responses about people's experiences, perceptions, opinions, feelings, and knowledge, consisting of verbatim data quotations with enough context to be interpreted (Patton, 2015). This study interviewed five business studies teachers during two interview sessions each, using open-ended interview questions and probes. The interviews involved audio recording and note taking.

Lesson observation was the second form of data collection. Observation of lessons taught in school classrooms is regarded as fieldwork, which are also rich descriptions of activities, behaviours, actions, conversations, interpersonal interactions, organisation of community processes including the context within which such observations were made, as well as any other aspect of human experience that can be observed and documented (Patton, 2015). Place-based learning experiences that unfolded in the classrooms were captured during lesson observations. One Business Studies lesson was observed from each participating teacher which was negotiated during the first day of the researcher's visit to the school to prepare to teach within the next few days. These lesson observations were recorded with the participants' consent by making notes and audio recordings.

The final form method of data collection was document analysis. Document analysis, in this context, refers to the collection of documents, such as lesson plans, tests, and assignments pertinent to curriculum implementation. The documentary method in research refers to the analysis of documents that contain empirical information about a phenomenon under investigation (Mogalakwe, 2006; Bailey, 1994). Hence, copies of teaching programs, lesson plans, assignments, and tests pertinent to curriculum practices were collected from the participating teachers by request. These documents complemented and validated the interview discussions and lesson observation data generated from the participating teachers.

4.11 The participants

The participants of the study were five lower secondary school commerce/business studies teachers displayed Table 4.0. These teachers were selected from a rural and an urban school in a coastal province of the Momase region, and a rural and an urban school in the

Highlands region of PNG's four regions using the purposeful sampling technique. "Purposeful sampling is a technique widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources" (Palinkas, Horwitz, Green, Wisdom, Duan & Hoagwood, 2015 cited in Patton, 2002). The selected teachers were the only key respondents for the study focusing on their purported practices of creating place-based learning experiences as a curriculum enactment approach as curriculum implementation policy. Their selection was in concurrence with the purposeful sampling which "involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest" (Palinkas et., al 2015 cited in Cresswell & Plano Clark, 2011).

With many business activities becoming prevalent almost everywhere in both urban and rural areas of PNG (UN, 2011), secondary schools are anticipated to be knowledgeable in using the local businesses and/or are relating to them in their Business Studies lessons as a place-based learning approach. The Business Studies teachers were therefore, anticipated to have created place-based learning experiences based on small-scale business activities within their local environment in accordance to the DoE (2003) curriculum imperative, which calls for teachers to teach in real life situations. In other words, given the prevalence of small-scale businesses almost everywhere in PNG, these schools and their teachers were selected to see if what is happening in the community has impacted their curriculum enactment practises using place-based learning.

The participating teachers were selected through the principals or deputy principals on the first familiarisation visit to the schools. The researcher approached the principals of the nominated schools after approval from the provincial education office; and the principals were asked to identify lower secondary business studies teachers who were willing to participate. Those volunteered to participate then became the teacher participants of this study. This means none of the participating teachers were pre-selected by the researcher.

Table 4.0: The participants

Region	Urban Schools	Rural School	Respondents		
Coastal-Momase	School A	School B	One lower secondary Business		
(Madang)			Studies teacher from each school		
Highlands (Western	School C	School D	except school C which provided 2		
Highlands)					
Totals	2 schools	2 schools	5 teachers		

4.12 Data analysis

This section discusses the analysis of the qualitative research data generated in response to the research questions. This qualitative analysis followed the hermeneutic phenomenology and case study theoretical traditions framed by the research questions and topic, which also provided the framework and guidance to data collection and analysis (Patton, 2015). Most qualitative researchers attempt to gain a deeper understanding of what they have studied and to continually refine their interpretations throughout analyse by analysing their own data manually (Basit, 2003). Similarly, data for this were manually coded and organised using a process of content analysis (Kohlbacher 2006; Glaser and Laudel, 1999). Hence, what follows are diagrammatic figures illustrating the systematic analytical process the researcher used; and the detail steps of data analysis are discussed thereafter. Figures 4.1 and 4.2 illustrate how the qualitative case study and phenomenological research approaches used in the study guided the data analyses, respectively.

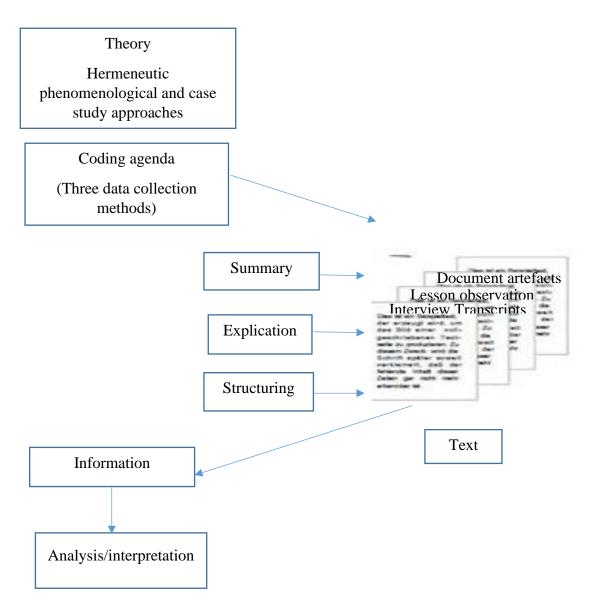


Figure 4.2: Basic proceeding of qualitative content analysis in case study research Source: Glaser & Laudel (1999); Kohlbacher, (2006).

Kohlbacher (2006), who cited Glaser and Laudel (1999), pointed out that, since qualitative research findings are usually descriptive, it is essential to have all data transcribed into text. That will help to structure and summarise what may be explicit to the research questions to analyse and elucidate information in answer to the research questions. Figure 4.2 provides a generic overview of a qualitative study data analysis. Creely (2018) provided a similar

illustration from the phenomenological research approach perspectives as a guide to data analysis.

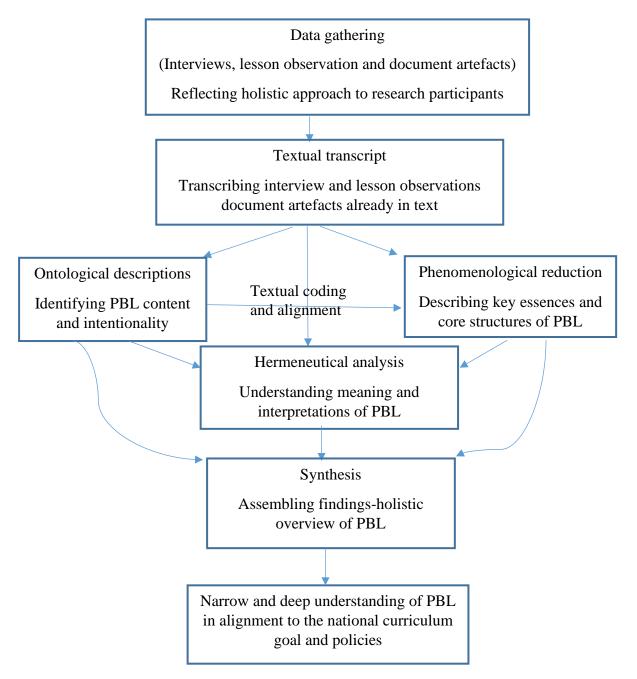


Figure 4.3. A process for doing phenomenological research and data analysis. Adopted from: Creely (2018).

An ontological description as part of the base for phenomenological interpretation of lived experiences revolves around the specificities or particulars of personal experiences (Creely, 2018). Applying Creely's (2018) ontological description to this case would be the curriculum

lived experiences of this study's teacher participants. Moreover, in the context of this study, the textual coding of interview transcripts and lesson observations with the document artefacts are especially centred on this internality in all its manifestations in experience and consciousness (Creely, 2018) of place-based learning. That is what Creely (2018) attempted to illustrate in Figure 4.2.

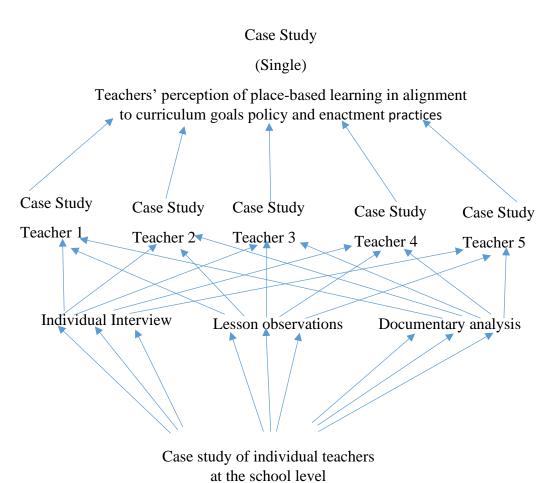


Figure 4.4: Case study data analysis layers

Source: Patton (2015)

From the case-study perspective, as Patton (2015) stated, this study is a single case study of the teachers' perspectives of the national curriculum and their enactment practices. The rule of thumb for case studies is that researchers may be more interested in a general phenomenon of cases than in an individual case but they would not understand the phenomenon without knowing about the individual case thoroughly (Bernard, 1994; Patton, 2015). Moreover,

Case data consists of all the information one has about each case (a) interview data, (b) observation, (c) the documentary data (e.g., program records or files, newspaper

clippings), (d) impression and statements of others about the case, and contextual information...in effect, all the information one has accumulated about each particular case goes into that case study. (Patton, 2015, p. 536 cited in Stake, 2000, p. 436). Interview data dominated research questions one and three, while document analysis revolved around research question two as illustrated in Table 4.1.

Table 4.1: Alignment of research question and findings chapters.

Research Question	Dominant data	Focus chapter
One	Interview	Five
Two	Document analysis and lesson observation	Six
Three	Interview, lesson observation and post-observation interview	Seven

Interview data analysis followed what Fox, Hunn and Mathers (2007) suggested. Firstly, all interview recordings were examined to make sure they were intact and in order then they were transcribed. The transcripts were organised according to the research questions per teacher participant. The interview data, responding to research question one, were analysed teacher participant by teacher participant in Chapter Five beginning with Teacher 1 and ending with Teacher 5. After a brief introduction of the teacher participant, the interview data was presented in the form of interview dialogues as transcribed. Scholarly inferences were then made to illustrate what the data meant in response to the research question. The teacher's curriculum as autobiography was discussed next, illustrating how lived experiences influence curriculum enactment practices, as inferred in the study.

Research question two data analysis followed the same order. However, research question two had three data types: document analysis, lesson observation and post-lesson observation interview. Lesson observations were analysed by playing the audio recordings several times to transcribe notes. These notes were incorporated with the notes taken during the post-lesson observation interview and the post lesson observation interviews. The documents collected, such as lesson plans, teaching programs, tests, assignments, and projects, were analysed simultaneously to substantiate the lesson observations and interviews. This meant that

data from lesson observations, document analysis and the post-lesson observation interview scripts were used to form opinions discussed in chapter six, making it the longest chapter.

Document analysis was the third form of data generated in response to research question two. Teacher documentary artefacts, such as teaching programs, lesson plans, tests, assignments, and projects were collected upon request. Document analysis involves skimming or reading the artefacts as evidence of what was involved, providing the basis to interpret (Gall et al., 2007) what transpired in the phenomenon studied. The qualitative researcher therefore needs to study the context in which the documents or records were produced to understand the phenomenon (Gall et al., 2007). The document artefacts collected in this study were analysed in alignment with the interviews and lesson observations, to identify place-based learning as a curriculum enactment policy, as well as what and how teachers practised achieving the desired national curriculum goals. These were all discussed in chapter two.

Research question three data pertaining to the dilemmas experienced in curriculum implementation were analysed and are discussed in Chapter Seven. Unlike the teacher by teacher data analysis used in chapter five and six, Chapter Seven data were arranged according to the five dilemmas raised.

In all, the three research questions collaboratively captured the curriculum enactment process, the central issue of this study. Research question one focused on the essences of teachers preparing for the curriculum-as-enacted by considering the curriculum-as-plan and their lived experiences. The preparedness for the enacted curriculum represents the essences of the 'isness' of the curriculum enactment phenomena, a manifestation of the human being, the environmental factors, and the curriculum, a way in which being-in-the-world is structured or prepared (Magrini, 2015; Aoki, 2005). Research question two focused on the actual enacted curriculum as it unfolded as well as past enacted curriculum practises, whether the place-based learning approach was in use or not. Finally, research question three dealt with the dilemmas that may hinder effective curriculum implementation.

4.13 Data validity

Data validity substantiates the worthiness of the research findings, that is, to declare the findings of a study as genuine and of value that can be trusted. "Validity is concerned with the meaningfulness of [the] research components. When researchers measure behaviours, they are

concerned with whether they are measuring what they intended to measure" (Drost, 2011, p. 114). Thus, validity connotes the trustworthiness of a broad spectrum of the research components from data collection instruments, methods, and samples to data analyses and interpretation. Moreover,

Validity in qualitative research refers to whether the findings of a study are true and certain— "true" in the sense that research findings accurately reflect the situation, and "certain" in the sense that research findings are supported by the evidence. (Guion, Diehl, & McDonald, 2011, p. 1)

This means that every data collection component and procedure is essential and should be carefully implemented to maintain data validity, which in turn validates the findings. Validity in the context of educational research is "the capability of being justified as valid which involves two concepts simultaneously, internal validity and external validity" (Wiersma & Jurs, 2009, p. 5). From a range of data validity that literature suggests, the data collection and analysis procedures that feature internal and external validity which refer to the research procedures worthiness and the trustworthiness of the findings are relevant to this study, which adhered to the data collection procedures to maintain external validity.

4.14 Internal validity

Internal validity concerns the worthiness of the research procedures as they progress, which affects the quality of the collected data. In other words, the generated data of a study will be invalid if the research procedures are not carefully followed. Hence, "internal validity is the extent to which the results of a research study can be interpreted accurately with no plausible alternative explanations" (Wiersma & Jurs, 2009, p. 7), if the data collection procedures were systematically followed. In other words, the data collection methods used must be systematic to validate the generated data. That is because "internal validity speaks to the validity of the research [components] itself" (Drost, 2001, p. 115). This means every component or phase of the research process should be implemented with care to yield internal data validity. The use of distorted or unsystematic data collection methods is likely to frustrate the data collection process, which can generate invalid data and pose difficulties in data interpretation.

The genuineness of the data collection procedures to generate valid data have been tested and refined by means of piloting the interview questions. The study used open-ended and probing

interview questions during the interviews after piloting them with another PhD student and the researcher's supervisor. Only the piloted questions were asked to start the discussions; later probing questions were used to control the discussions, keeping them within the parameters of the study. The triangulation method was also used to control data bias as discussed in Section 4.17.

4.15 External validity

External validity concerns the trustworthiness of the research findings, should they be generalised over a wider population. "External validity is the extent to which research results are generalised to populations and/or conditions" (Wiersma & Jurs, 2009, p. 9). If research findings are worthy to be extrapolated to the wider world, then data interpretation can be trusted as genuine. In other words, only genuine research findings that portray the phenomenon can be generalised. Data for this study were collected carefully, in adherence to the established research practices, to maintain validity. More importantly, great care was also taken to explicitly articulate the research procedures and the results to establish clarity of the data collection methods used and the validity of the results.

4.16 Reliability

Reliability pertinent to research means to trust or rely on the findings as genuine results of a reliable research study. Reliability is a researcher requirement for sound judgement of the research findings, based on the appropriateness of the research methods employed and the integrity of the final conclusions (Noble & Smith, 2015). It is about "the consistency of the analytical procedures, including accounting for personal and research method biases that may have influenced the findings" (Noble & Smith 2015, p. 34). That is, the research methods used must be appropriate and reliable so that the results can be trusted as being valid.

Reliability and validity are key features in data generation and analysis of a research project. Brink (1993) asserted both "validity and reliability are the key aspects of all research [which requires] meticulous attention as these two aspects can make the difference between good research and poor research" (p. 35). The absence of validity and reliability can distort research findings, which in turn will fail to adequately address the issue investigated. That is why Brink (1993) held reliability as "vital in qualitative work, where the researcher's subjectivity can so

readily cloud the interpretation of the data, and where research findings are often questioned or viewed with skepticism by the scientific community" (p. 35). Data reliability is further strengthened using the triangulation method.

4.17 Triangulation

Triangulation is a cross-examination process used in research to verify and validate data. It "is a process of verification that increases validity by incorporating several viewpoints and methods" (Yeasmin & Rahman, 2012, p. 156). The cross-examination process in triangulation can involve multiple data collection methods and/or sources. Wiersma and Jurs (2009) attested "triangulation [to be] is a part of the data collection procedures that cuts across two or more techniques or sources. It can be conducted among different data sources or different data collection methods" (p. 287). Triangulation was, therefore, used as a control mechanism in this study to detect data bias. "Basically, triangulation is the comparison of information to determine whether or not there is corroboration" (Wiersma & Jurs, 2009, p. 287).

This study generated multiple data as a way of triangulation from the same source. For example, the interview, observation, and document analysis were derived from the same study participant; and that is when the triangulation method came into play for cross-checking across the data. For instance, the place-based learning experiences that were discussed during the interviews were cross-referenced to see if they were supported by the document analysis and/or the lessons observed. The triangulation method is depicted in Figure 4.4.

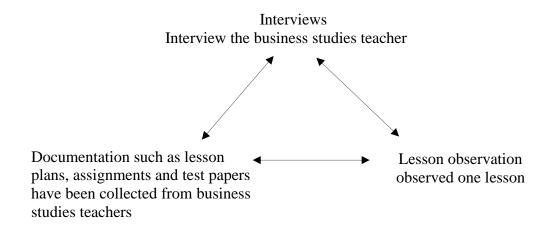


Figure 4.5: Triangulation involving multiple data collection methods

(Source: Jurs & Wiresma, 2009, p. 288)

The interview, observation and document analysis were derived from the same study participants and that is when the triangulation method came into play for crosschecking. The extent and nature of PBL experiences discussed during the interviews were supported by the document analysis or the lessons observed.

4.18 Ethics

Research ethics is very important, particularly "educational research (which) often involves people as participants in experiments, respondents to surveys, or (become) the focus of observation" (Jurs & Wiresma, 2009, p. 436). Research ethics is "the application of moral rules and professional codes of conduct to the collection, analysis, reporting, and publication of information about research subjects, in particular active acceptance of subjects' right to privacy, confidentiality and informed consent" (Marshall, 1998, p. 566).

The safety and privacy of all participants' identities, including raw data generated, had to be protected. Thus, the following steps were taken to avoid offending or causing psychological stress to any participant, once they consented to become subjects. Firstly, a letter requesting the use of schools in PNG was written to the National Department of Education (see appendix 5) and permission was granted (appendix 6). Similar letters were written to the two selected Provincial Education Advisors (see appendix 7 and 9) who also approved the request (appendix 8 and 10). Finally, the four Secondary School Principals (see appendices 11, 13, 15 and 17) who also received letters seeking their permission for the use of their schools and teachers as respondents, which they also approved (see appendices 12, 14, 16 and 18). These steps were essential and crucial because:

Researchers need access first to the research site and then to the individual participant. Whenever research is conducted in an educational setting, it is necessary to obtain permission from the site's "gatekeeper," who may be the principal, the superintendent, or a committee that is charged with this responsibility. It is important to know and follow the approval policies of the agency. (Jurs & Wiresma, 2009, p. 436)

Once approval was received, an application for ethical clearance was made to the Human Research Ethics Committee (HREC) of James Cook University (JCU), which was also approved (see appendix 4). The participant information sheet and the informed consent form (see appendix

19), which were used to explain the purpose of the study, their choice and consent of participation, were carefully scrutinised by the HREC of JCU before approval.

Subsequently, the nominated subjects were duly informed that, after extracting and analysing the information they provided and reporting it in the thesis, all details including their personal identity would be kept confidential. The audio recordings and documents collected would be locked away safely in the supervisors' lockers at JCU for a minimum of five years before destroying them. The respondents were further informed that the purpose of this study was to improve the quality of graduates in teacher education from the University of Goroka, allowing them to become effective teachers. That meant the information they were providing as participants would become very important in helping improve future teaching and learning in PNG.

4.19 Limitations

Limitations are certain aspects, occurrences and/or circumstances that limit the research process, which can affect the data collection procedures as well as the findings to some extent. This study used the case study approach to understand the complex inter-relationships between the lived experiences and curriculum enactment practises grounded in lived reality, and a phenomenological approach which studies how a person experiences or understands his or her world of curriculum practises as real (Heale & Twycross, 2018; Wilson, 2015; Manen, 1997); however, there were limitations. Limitations, according to Simon (2011), are potential weaknesses in studies that are out of a researcher's control. In other words, while the study approaches used were appropriate to explore what was initially intended, there were limitations. A contributing factor to limitations in phenomenological research is that the study cannot produce theory. It also demands high personal engagement from everyone, in this case, the researcher and the participant, where trust can become a limiting factor (Wilson, 2015). This led to one teacher, who originally agreed to participate in the study, deciding not to turn up for fear of what might happen to the information disclosed. Others who participated may have held back information that may have been of value, which limited the researcher to, as Wilson (2015) noted, dissect and reflect on the researcher's part in interpreting the participants' lived experiences of curriculum enactment.

Regardless of how well a study is planned, conducted, and constructed, all studies have limitations restricting the degree to which a study could extend in data collection which

sometimes affects the end results and conclusions that can be drawn (Simon & Goes, 2011). Though some of these limitations may be beyond the researcher's control, it is imperative that such limitations are clearly articulated to validate the data and the findings. Explicitly stating the limitations of research helps other researchers to "judge to what extent the findings can or cannot be generalised to other people and situations" (Ellis & Levy, 2009, p. 332, cited in Creswell, 2005, p. 198).

Moreover, findings of a large-scale study would have fairly represented the whole country if data were collected from all the major regions of PNG. However, given the time and financial constraints, the study was limited to only the highlands and the coastal regions. Even these two regions have provinces with many schools, which could have been used if the researcher had the luxury of time and finances. However, given these constraints, only five Business Studies teachers from four schools in only two provinces were selected and used.

4. 20 Conclusion

This chapter presented the qualitative research methodology used in this study. The hermeneutic phenomenology and case study approaches, underpinned by the interpretivist and constructivist paradigms, constituted the theoretical framework of this study. The hermeneutic phenomenology and case study approach further determined interviews, lesson observations, and document analyses as research procedures. Since all educational research is prone to error and bias, compliance with established research procedures provided by the literature was maintained for data validity. In other words, since research is a systematic process, adherence to the systematic processes was paramount to minimise error and bias.

The study focused on five selected business studies teachers and their curriculum enactment practises as the case under investigation. The phenomenon of creating place-based learning experiences, as a lived experience of the participating teachers, was the central focus of this study. The hermeneutic phenomenological approach helped construct meaning from the generated data specified by the case study approach. These meanings are presented as findings, including implications of this study, with an aggregate summary in Chapters Eight and Nine.

Chapter Five

Teachers' perspectives of the national curriculum intent: Research question one

5.0 Introduction

This chapter presents the data analysis and the findings pertaining to research question one, which asked: what are the practising business studies teachers' perceptions of the place-based learning concept and its relatedness to the PNG's National Curriculum goals? In addition, the study explored how teachers perceive the government goal of providing a relevant basic education that captures the PNG way of life, a lifestyle that is anchored in the land and sea as it has been for many years before being exposed to the outside world. These PNG ways are encapsulated in the research questions, which focus on place-based learning as, illustrated in Figure 5.0. Other factors that influence curriculum policy and practices are also included to illustrate the cohesiveness of the curriculum enactment process aligned with the three research questions, to foreshadow an overview of the data analysis. Other factors that influence curriculum policy and practices are also included to illustrate the cohesiveness of the curriculum enactment process aligned with the three research questions, to foreshadow an overview of the data analysis.

The chapter begins by describing the geographical location of the research sites, and briefly introduces the participating teachers' locations during data collection. The biographical data of each participating teacher is discussed next, before his or her interview data are presented. The interview process aimed at revealing the teachers' perception of curriculum, and how they plan and practice curriculum to respond to the national curriculum goals. Central to the teachers' curriculum practices is the investigation of adapting place-based learning as a curriculum enactment approach captured in the data analysis section. The interview discussions give indication of the role and reasoning of teachers as navigators of the space between curriculum-as-intended and curriculum-as-enacted. A summary of the teachers' voices, encapsulated in the data analysis, is presented before concluding the chapter. Figure 5.1 illustrates where Chapter Five falls in relation to the other chapters of the thesis.

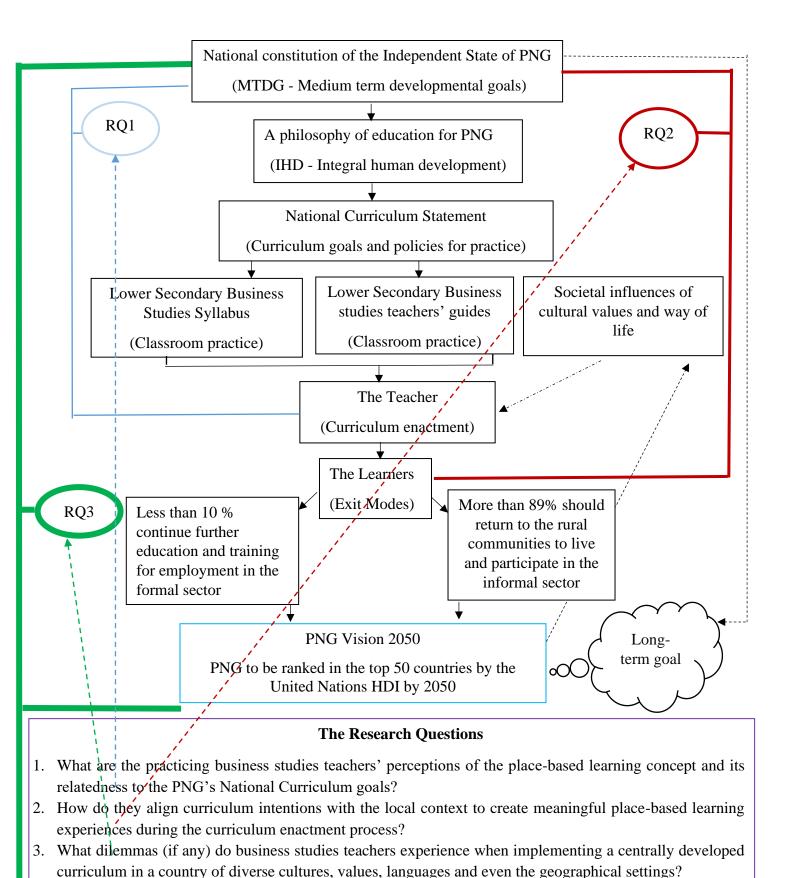


Figure 5.0

National curriculum goals, policy and practice policy documents pertaining to the research questions.

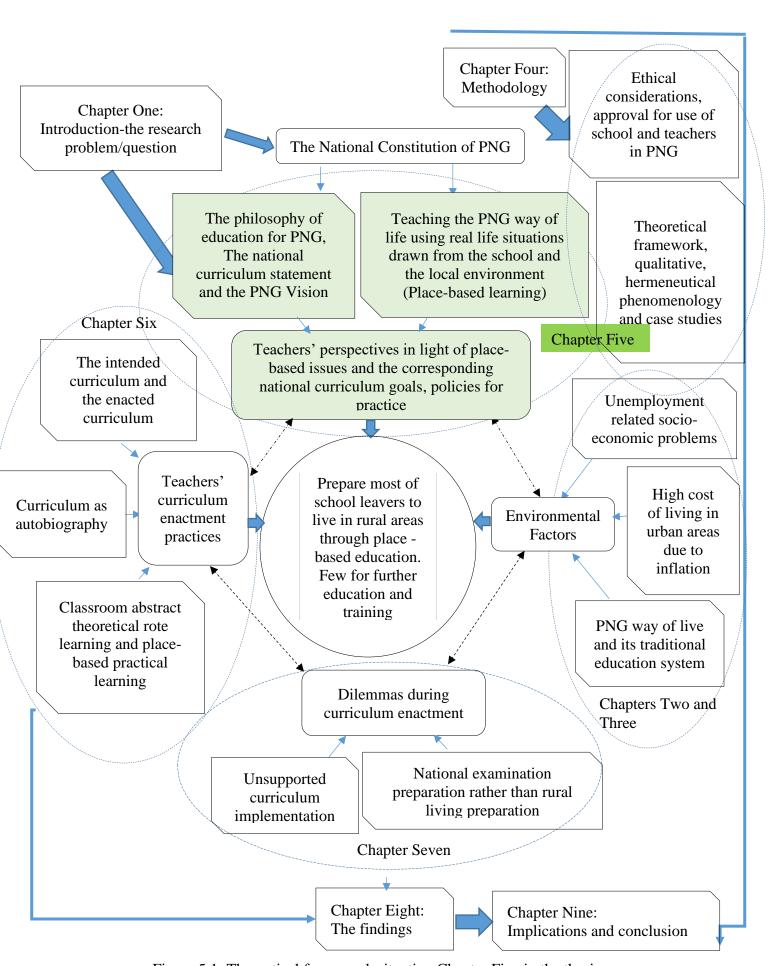


Figure 5.1: Theoretical framework situating Chapter Five in the thesis

5.1 Research site – situating curriculum goals in 'place'

PNG is a country of diverse cultures with more than 700 languages. The country's cultural diversity causes variations in value systems; what some cultural groupings value more, are valued less by others. This influences how people seek and acquire knowledge, and the skills necessary to sustain their livelihood, according to their value systems, and enable them to maintain prestige within their cultural group. For example, regarding the order of values in the highlands, where patrilineal values are dominant, Sasha (2017) noted that, land, women, and pigs are the most important assets, and land passes from the father to the son. The highlanders use pigs as local currency in the informal sector, while women are valued to bear children and raise pigs for the men. In contrast, matrilineal societies in some parts of the coastal areas and the New Guinea Islands regions, they regard females as important because the females own the land and pass it onto their daughters. Boys in a matrilineal society move to live with their wives, while the opposite happens in a patrilineal society, namely girls move to the boys' village.

These variations reflect what people value in life right across PNG, which also affects what people desire to learn, to acquire what they regard as important. For example, yams in the Trobriand Islands' culture are significant and predominantly used as currency. They signify wealth and power in all domains of the Trobriand major life events, such as birth, marriage, death, and even divorce, where yams are the highly valued gifts (Paga Hill Media, 2015). The man who produces the most and biggest yams in the Trobiand Islands is the chief, while some parts of the Highlands region, pigs as regarded as very important. These place-based cultural values connect the people to the land everywhere in PNG. The variations in value systems also influence the skills, knowledge, and values people need to learn and apply to contribute in society.

In order to investigate how 'place' might influence curriculum enactment, this study used selected schools in Madang on the coast where Teachers 1 and 2 were teaching, and Mt. Hagen in the highlands where Teachers 3, 4 and 5 were teaching. Selecting these two sites aimed at providing insights into how place-based learning is influenced by participating teachers' locations, and how this might influence their curriculum enactment. The idea of place extends beyond just the location where people live, since 'place' is a narrative or a story which involves interactions, characters, conflicts, and the rise and flow of humanity (Donovan, 2016). In other words, the features of places where people live shape how they behave and interact with other people. Madang, for example, is a coastal province, and small-scale businesses are not widely

practised, contrary to Mt. Hagen where small-scale businesses are prevalent. That is because not many people travel into or through Madang, while Mt. Hagen is a central location where people move through to other parts of the highlands all the time. It is, therefore, important to discuss the research sites as places where the participating teachers originate from and where they practise curriculum. That is because, "by understanding the importance of place and the connection to the places from which people originate, the people, their motivations, and their strengths and weaknesses begin to take shape that inspires transformational ideas and actions" (Donovan, 2016, p.22). Hence, what teachers believe, and their lived experiences, influence what and how they prepare and facilitate the enacted curriculum.

5.1.1 Madang province

Madang, where Teachers 1 and 2 were teaching, is one of the coastal provinces on the mainland of PNG, consisting of six districts: Bogia, Madang, Middle Ramu, Sumkar, Raikos, and Usino Bundi (Madang Provincial Government, 2009). The local people had been living in Madang for many centuries before coming into contact with the outside world. Adults in each PNG tribal society, including Madang, educated their children using real-life situations in practical skills, social behaviour, and spiritual beliefs, which sustained them from the time they first settled until discovered, and even continues today (Rena, 2011). It was around 1884 when the Germans settled and administered the area until the start of World War I; but their influence remained into the Australian colonial era (Pacific Wrecks, 2017).

The PNG National Statistics Office (NSO) (2011) estimated the population of Madang to be 493,906 people in 2011, which is likely to have increased by today. About 35,971 of the population live in Madang town (NSO, 2011) while the rest live in rural communities where their livelihood and daily sustenance is dependent on the environmental resources where they continue to live in isolated communities (Nature Conservancy's PNG Country Program & Madang Provincial Government, 2013). Those who live along the coast depend largely on fishing while those away from the sea live by gardening and hunting. Essential skills, knowledge and values to sustain livelihood continues to be acquired in real-life situations, as it used to be in the PNG traditional education system. These include growing food, building houses, hunting and fishing, cooking, caring for animals and making handicrafts, among many other requirements of village life (Glover, 2010; McLaughlin & O'Donoghue, 1996). For example, there was no organised avenue, venue and time for boys to learn how to make a canoe or build a house as in formal

education. Boys learnt these skills when someone was making a canoe because the old one was damaged or building a new house because the old one broke down. Hence, the location or place where a canoe was made or a house was built was focal for teaching and learning (section 3.7). In Madang, cultivated food crops and betel nut provide cash income for those who live close to markets while vanilla, copra, cocoa and coffee production are becoming important cash crops (Nature Conservancy's PNG Country Program & Madang Provincial Government, 2013).

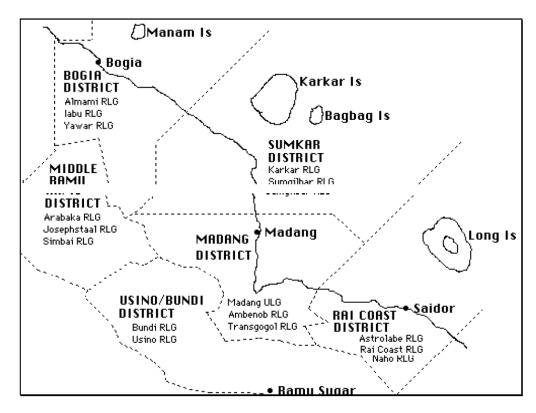


Figure 5.2: Map of Madang province.

Source: District Summary Volume III 2002 – 2007.

Madang people also make clay pots and sell them for cash at the markets. The parents usually teach young children the necessary knowledge and skills for making clay pots. For example, Gabar, Yeyaneg's daughter from Bilbil village near Madang said, "My mother taught me how to dig out the ground and pound it and put it in the water. I know the first three stages, but not the last" (Mennis, 2006, p, 276). Gabar learnt pottery making from her mother in real life, using the land for resource and context, so that she will be able to continue to make clay pots in her lifetime. Similarly, teachers in PNG are encouraged to prepare school leavers through placebased education to fit into their rural communities where there is, and where there has always

been, work and opportunities for community-based employment (DoE, 2003). The Lutheran churches began the first education programs around 1888 which were spread from Morobe where they initially started (Mack & Vogeli, (2019). Then the colonial admiration and other churches such as the Catholics started their schools. By 2015 Madang had around:

324 Elementary Schools, 148 Primary Schools, 5 Secondary schools and 7 technical schools. It also contains the Divine Wood University, Madang Technical College, Madang Teachers College, Madang Lutheran Nursing College, PNG Maritime College, Saint Fidelis College and the Madang University Centre (UPNG). (PNG 2015 Australian Education Roadshow, 2015).

Hence, Madang as a place has a longer history of trade and community based entrepreneurial activities that may shape the lens through which teachers can enact the Business Studies curriculum using the place-based learning approach.

5.1.2 Western Highlands Province, Mt. Hagen

Western Highlands, one of the seven highlands provinces located to the North-West of Port Moresby, capital of PNG, is where Teacher participants 3, 4 and 5 were teaching. Mt Hagen, the provincial headquarters of Western Highlands is in Hagen Central, one of the four districts that make up the province. The other three districts are Tambul Nebilyer, Mul Baiyer, and Dei. Western Highlands Province (WHP) had a population of 362,850 in 2011 (NSO, 2011), more than 90% of which live in their rural communities and depend on their land for survival. The WHP economy is based primarily on coffee and tea grown on plantations and smallholder blocks. The people also grow vegetables for consumption and the domestic markets, mainly those in Lae and Port Moresby (Niugini Voice, 2012). The Western Highlands people are business-minded and engage in all sorts of money-generating activities such as operating public motor vehicles (PMV) or trade stores.

Just like the rest of PNG, "the strength of WHP lies in the land, its people and various heritage properties (natural and cultural)" (Ketan, 2013, p. 2). For a Western Highlander, land is a backbone of one's livelihood. Land roots the people in their social, economic and cultural sense of place (Gustafson, 2001). In addition, land gives individuals a sense of belonging to a place providing the necessities for sustainability (Gustafson, 2001). A strong connection to place could facilitate and be reinforced through place-based learning activities, a strategy that would

encourage students to embrace their land, culture and way of life. Teachers from WHP who are practising in the Western Highlands, and who have lived and experienced the value of land, are in a better position to employ the place-based learning concept to connect students to their local communities.



Figure 5.3: Map of Western Highlands Province.

Source: Western Highlands Provincial Education Board.

The churches first introduced formal Western education in Western Highlands around the 1930s. Lingua franca or Pidgin (Tok Pisin) religious schools were the first form of formal educational institution established in Western Highlands by a Catholic priest, Fr. W. Ross, in 1936 (Melpa Lutheran Church, 2015). Lingua franca or Pidgin was easier to learn than English was, so the church schools used it to teach people to read the Bible that was also translated into Pidgin. The Lutheran missionaries also launched their schools in the native Kate language in 1937 (Melpa Lutheran Church, 2015). Instead of using Pidgin like the Catholic Church, the Lutherans used the Kote language of Morobe to teach people to read the Bible that was translated into Kote. The colonial administration followed the churches and established their schools in WHP. The province had 420 elementary schools, 156 primary schools and 11 secondary schools as of 2016 (Western Highlands Provincial Education Board, 2016). The provincial education goal was the development of a holistic child through relevant curriculum in the schools.

The use of land to sustain livelihood is always emphasised in every forum, as witnessed by the researcher who is from WHP, to educate the people, especially the young to connect themselves to the land to sustain their livelihood. This emphasis on "place" could shape the teachers' perception of the curriculum, and the way in which it is implemented, to connect the students to their land using the place-based learning approach in preparation for use after leaving school.

5.2 Data pertaining to research question one

This section presents each participating teacher's interview data responding to research question one. It discusses the teachers' perception of the national curriculum intent, which influences what, and how they prepare for enactment. The interview dialogues presents two sections focusing on the national curriculum emphases, and the teachers' conceived goals and chosen emphases. Data analysis follows the data section, involving interpretation of the teachers' responses to the interview probes.

5.3 Teacher One's biography

Teacher One, when interviewed in 2016, was 32 years old and had nine years of teaching experience after graduating from the University of Goroka in 2007. The teacher was teaching grade 11 Economics and grade 9 Business Studies in the school at the time of data collection. Teacher One grew up in a rural village of West Sepik province, one of the least developed provinces in PNG. Because of West Sepik's isolation, the traditional barter system dominates the economic activities contrary to the dominance of cash in urban areas. This teacher spent all their childhood years in a dual economy system in a rural village where due to its remoteness business transactions were either cash and/or kind such as trading food for food as in the barter system. Moreover, Teacher One taught in a remote rural high school in West Sepik Province after graduating from the University of Goroka. This grounded the teacher in a rural lifestyle until 2016 which was the teacher's first year teaching in Madang, an urban area.

5.3.1 Teacher One's data

Teacher One's data is organised in two sections. The first section pertains to selected aspects of the interview that specifically relate to research question one focusing the participant's awareness of the national curriculum goals. Subsequently, the second section refers to aspects of the interview that sought to understand influences on their curriculum enactment practises. In all the interview dialogues, 'Interviewer' denotes the researcher while 'Interviewee' denotes the teachers beginning with Teacher One. The interview dialogue is attached as appendix 22.

5.3.2 Teacher One's data analysis

Teacher One started teaching in 2008, five years after the 1992 curriculum reform articulated in the NCS came into effect in 2003. Teacher One should have had access to the NCS issued freely to all schools (DoE, 2003). A NCS is designed to guide teachers in implementing the stipulated policies to achieve certain societal goals. For example, The NCS of Solomon Islands is developed as a guiding framework to meet the teaching and learning needs in the school system to help develop the country's human resource development. (Ministry of education and human resources development, 2010). Likewise, the PNG's NCS is developed to assist curriculum officers, advisers, principals, teachers and teacher trainers and others to develop teaching and learning materials to help achieve the national curriculum goals (DoE, 2003). Given the significance of the NCS, practising teachers should attempt to explore and establish what the NCS entails to guide their practices. However, Teacher One said they had not heard of the national curriculum goals nor the NCS when probed about curriculum goals during the interview. How, then, does this teacher teach without sighting the NCS? What happens to the curriculum policy documents the DoE (2003) issues free to the schools?

If Teacher One had no idea of the NCS, what then informed the teacher's curriculum enactment practises? When probed, Teacher One revealed the grade 9 Business Studies Syllabus and Teachers' Guide as the sources of information for practice. The Business Studies Syllabus and Teachers' Guide reiterate the NCS call to adopt place-based learning as a curriculum enactment approach in achieving the desired outcomes. It was the intention of this study to establish if teachers were aware of the curriculum policies and goals with attention to place-based learning, Teacher One was asked to mention any curriculum goal found in the syllabus and/or the teachers' guides. The response was: "I am not really sure, but I think the goal is [to] get as many people as possible to be literate, at the moment we have a high percentage of the

population who are illiterate" (Teacher One). Teacher One could be amongst many teachers who are not aware of what the curriculum they are implementing entails. Teacher One appeared to have little, if any, awareness of the prescribed curriculum goals, including place-based learning. The teacher's attention was on what Teacher One perceived as important for students and the local community. For example, when asked what else informed the teacher in teaching, the response was:

Apart from the syllabus and teachers' guides, it was what I see people doing every day in life that tells me that I should teach people to be literate. I see many people asking other people to read and explain issues in such things as the print media. (Teacher One)

Teacher One expressed the goal to educate as many people as possible to become literate, which is important, but the national curriculum intent is to address the current unemployment related socio-economic problems in urban areas by encouraging rural living. Moreover, when using curriculum support materials, apart from the syllabus and teachers' guides, there was little mention of adapting materials to present a place-based learning approach:

The programs we teach [are based upon] grade 9 on outcomes based (education) [and] from what I have gathered from my other colleagues who have taught [using] this book here ... [and] I only follow what they have been doing. (Teacher One)

Teacher One, according to the interview data, has been using the syllabus, teachers' guides and the support curriculum material but not enacting these units by creating place-based learning activities.

Further probing revealed this participant also prioritised preparation for national examinations, the dominant societal and parental goal of education, and a result of the colonial history and systems discussed in Chapter 2. Teachers perceive the passing of the national examinations as very important without considering the contemporary realities where about 80 percent exit from the education system (section 1.1 and Table 7.0). The teacher also raised concerns that the Madang provincial education division never informed practicing teachers of the curriculum goals in regard to place-based learning.

In the latter part of the interview, the participant was asked about the national dilemma of young rural people migrating to urban centers, and the possible role of education in preparing school leavers for rural living to reduce migration into urban areas in search for employment with limited opportunities. Having experienced both rural and urban living, Teacher One viewed

rural living as a better choice. People living in rural areas can sustain their living from the environment by gardening, hunting and/or fishing while its only money earned mostly through employment is the means of living in urban areas where jobs are scarce these days (Section 2.2). In making it known to the participant that place-based learning, which intends to connect students to their local environment, is one of the national curriculum policies, the teacher responded by stating "that if Madang provincial education office informed us about this emphasis, we would place more emphasis on it because of its significance in preparing for rural living" (Teacher One).

5.4 Teacher Two's biography and data

Teacher Two was 61 years old when participating in this study and had been teaching for more than 40 years. The teacher was raised in a rural area of Madang during the colonial era when livelihoods were predominantly traditional subsistence farming. Teacher Two was teaching in a rural high school not far from Madang town when interviewed. The teacher received primary and secondary education, including teacher training during the colonial era from expatriate teachers who had no knowledge about the cultures and way of PNG life. Teacher Two also started teaching with mostly expatriate teachers before PNG localised all the teaching positions after independence in 1975. The data attached as appendix 23 are the interview dialogues between the researcher and Teacher Two pertaining to research question one.

5.4.1 Teacher Two's data analysis

Teacher Two started teaching a few years prior to PNG's independence in 1975 and has more than 40 years of teaching experience. Teacher Two has had the experience of using several curricula that PNG used during the colonial and post-colonial eras. When asked about the national curriculum goals, Teacher Two was not aware of any one of them when referring to the NCS and the curriculum goals. This response was not a surprise because Teacher One also said the same thing as not being aware of the NCS which stipulates the curriculum policies and goals.

The PNG NCS is designed to assist everyone involved in education particularly the teachers to become familiar with the policies and goals for effective implementation of the reform curriculum as discussed in section 2.7. When probed about how the teacher teaches without knowledge of the curriculum policies and goals in the NCS Teacher Two cited a lack of

opportunity to look at the NCS: "But we were given only the syllabus and the teacher's guides to teach, and that's all" (Teacher Two). This implies that the school where Teacher Two was teaching received only the Business Studies Syllabus and Teacher's Guide from the DoE, and not the NCS.

The absence of the NCS in the schools, however, would not disadvantage the teachers from knowing the curriculum goals and the place-based learning approach. It was surprising when Teacher Two failed to describe any of the curriculum goals in the syllabus and teachers' guides when probed, and the response was:

But, whatever is put in the book (teacher's guide and syllabus), it doesn't really aim at that one (goals and the place-based learning concept), it's like, you know, study tasol (only), study tasol na (only and), and then it's useless. So, if the curriculum and teachers' guides aims at developing students' knowledge so that when they go back home, and they use this, em bai nice moa (it would be much better). I think you understand what I am trying to get at. (Teacher Two)

Teacher Two assumed that the syllabus and teachers' guides do not state the curriculum policies and goals including the place-based learning concept. However, when discussing further about the curriculum, curriculum policies, goals, and other curriculum enactment related issues during the interview, Teacher Two began to realise the importance of the overarching curriculum goal, which is to prepare most of the school leavers for their return to the rural communities. Teacher Two also realised that place-based learning is a sanctioned teaching approach to realise the overarching curriculum goal. However, Teacher Two maintained, as shown in the interview dialogues that these goals and the place-based learning concept are difficult to implement due to parental, geographical and financial barriers such as the cost of field trips. It is inferred that this teacher, who was taught, trained, and even started teaching during the colonial era, concentrated on the syllabus alone, believing that such emphasis would prepare students for employment aligned with the dominant societal expectations of schooling since colonisation as discussed in section 2.3.1.

Teacher Two's curriculum practices are influenced by their colonial and post-colonial lived experiences. Teacher Two's agency in translating curriculum is a configuration of the past (colonial) influences while engaging with the present (Biesta et al., 2015). Teacher Two was found to be confined to the iterational dimension of agency, which according to (Biesta et al., 2015; Emirbayer & Mische 1998), is to keep reactivating the past patterns of thought and action

and routinely incorporating them in the present curriculum practices. Such dimensions of agency hinder curriculum reform. Teacher Two displayed little personal independence in teaching with attention to place-based learning as mandated by the NCS. The teacher focused on teaching in a prescribed and standardised way. When briefly introduced to the place-based learning concept, Teacher Two agreed with the researcher that it was a valid concept. However, Teacher Two maintained that the concept could not be implemented because it was not stated in the syllabus and teachers' guides, when, in fact, they are prominent.

In summary, the Business Studies Syllabus and Teachers' Guides are the only sources of information for the teacher's curriculum enactment practises. Even though the syllabus and teachers' guides reiterate the curriculum goals found in the NCS, Teacher Two insisted that the goals were not in the syllabus and teachers' guides. It infers that Teacher Two's enacted curriculum practices are grounded in the colonial and post-colonial curriculum practice of going by the books alone with emphasis on rote learning for exam preparation.

5.5 Teacher Three's biography and data

Teacher Three was teaching in an urban secondary school in Mt. Hagen, WHP of the highlands region when interviewed. The 35-year-old teacher was in the 10th year of teaching when interviewed in 2016. Moreover, Teacher Three was the Teacher in Charge (TIC) of the school's Department of Business Studies, and, as a result oversees lesson plans, tests, assignments and even the overall assessments in the department or section. This monitoring system also covers the stocktaking and monitoring of business studies curriculum materials the teachers use. Teacher three's interview data are in appendix 24.

5.5.1 Teacher Three's data analysis

Teacher Three started teaching in 2007, well after the curriculum reform in 1992. It was anticipated that Teacher Three had some knowledge about the national curriculum policies, goals and the NCS, which was released in 2003 (DoE, 2003). However, when probed about the national curriculum goals, Teacher Three said, "Okay, about these national curriculum goals, I never seen one [NCS], never heard of anyone [goals]." If this teacher never saw the NCS, nor heard of the curriculum goals and the policies, then what did the teacher strive to achieve was the next probing question. In response, Teacher Three replied, "We are using the teacher's guide,

and syllabus, so, in those syllabus and teachers' guides there are some outcomes like objectives, so we work towards achieving those, ah". The unit learning outcomes link to broader learning outcomes, which are the ultimate goals to be achieved (DoE, 2006).

As a TIC, Teacher Three is a leading teacher whose role is to improve the skills, knowledge, and performance of the teaching group such as the business studies department to improve the implementation of the business curriculum. With such responsibilities, Teacher Three should have researched what the Business Studies curriculum entails so as to improve enactment of the Business Studies curriculum across the school. Teacher Three had not sighted the curriculum goals and policies derived from the NCS (reiterated in the syllabus and teacher's guides) but has worked hard to become the TIC.

The first research question was to explore the teachers' perception of the overarching curriculum goals and policy in alignment with the local environment to prepare place-based learning activities. To keep the discussions within the parameters of the study and search deeper to find out, Teacher Three was asked to describe any of the national curriculum goals; and, the response was:

I can't remember, but, one of the clauses, because each, each unit, each unit has its own, ah outcomes, they have their own outcomes, so, one of the outcomes ah, especially for the unit 10.3, ah, 10.3 it's about ah, it's about bookkeeping, ah, bookkeeping. And, ah, one of the outcomes, is to help ah students acquire skills of bookkeeping. (Teacher Three)

The researcher asked if Teacher Three foresaw any benefits for students in using place-based learning, since learning is preparation for life in society. Teacher Three responded that the place-based learning concept was valid in provinces such as Western Highlands where there are many small-scale businesses, however, there are some issues, such as having 60 students in a class would not help teaching in real-life situations where students have to go out of the classroom. Further discussions into the constraints and benefits of place-based learning reminded the teacher of a lesson taught the previous year:

I once, not this year, but last year, took my class across to the shop near the school gate. After I arranged with, ah, yeah, the owner, the shopkeeper showed the students how, ah, bookkeeping is done [kept]. (Teacher Three)

The intent of this study was to encourage Teacher Three to consider that, what is taught in theory could also be best taught in real-life using the place-based learning approach.

In summary, Teacher Three had never sighted the NCS that states the national curriculum goals. Hence, the teacher took the Business Studies Syllabus and Teachers' Guides as the source curriculum documents for teaching. When probed if the teacher foresaw any benefits in using the place-based learning approach, the teacher agreed that there were many benefits, given the prevalence of small-scale businesses in WHP. Overall, curriculum awareness and pragmatic concerns appeared to be major obstacles for implementing a place-based approach.

5.6 Teacher Four's biography and data

Teacher Four was a 27-year-old participant in the third year of teaching when interviewed in 2016 after graduating from the University of Goroka. Teacher Four happened to be the only teacher participant taught about the NCS and place-based learning as a curriculum policy by the researcher at UoG. Teacher Four was born and raised in a rural village outside of Mt. Hagen town and had experienced rural living. The interview data are attached as appendix 25.

5.6.1 Teacher Four's data analysis

The researcher taught Teacher Four about place-based learning as a curriculum policy as well as the associated goals stated in the NCS, as part of the teacher education program offered at the University of Goroka. However, when the researcher asked Teacher Four about the curriculum goals, policies and the place-based learning concept, the response was: "yeah, ah, yes, I heard of them, the curriculum statement, but never bothered to check them here". The teacher, by not checking the NCS, implied that the document was available at the school but Teacher Four, and the other participating teachers, had not bothered to read it. Teachers who develop such nonchalant attitude in curriculum enactment are not contributing to the achievement of the curriculum goals as directed by central policy makers. Hence, questions were asked to establish what informed the teacher's practise without the NCS. Teacher Four responded that they, including the other teachers, were teaching students to pass the national examinations to transit onto the next phase of education as well as training them to start businesses if they are not selected to continue their education. This highlights the prominence of national examination preparation over the national curriculum goal of preparing students for further education, training, and employment, as well as living a sustainable life in rural areas (DoE, 2003). In other

words, without consulting the NCS, the participating teacher's goals deviated from the national curriculum core intent of preparing for rural living to preparing for national examinations.

Overall, Teacher Four gave little attention to the national curriculum goals and place-based learning as the appropriate curriculum enactment approach to achieve the desired goals learnt at university. Influenced by the school culture of prioritising preparation for national examinations as a major goal and the issues related to managing large class sizes, the teacher largely ignored the place-based learning approach to achieve the government's goal. Teacher Four supported the place-based learning concept as a valuable method of preparing students for real life later in society but the large class enrolments of 60 students discouraged the teacher from engaging students in place-based learning.

5.7 Teacher Five's biography and data

Teacher Five, when interviewed in 2016, was 35 years old and was in the tenth year of teaching in the same school in WHP. Born and raised in a remote rural village in Southern Highlands Province (SHP), the teacher had aspired to become an accountant and initially pursued a Bachelor's degree in accounting at PNG University of Technology in Lae, graduating in 2003. Teacher Five spent the next two years searching for employment as an accountant without success, so enrolled at the University of Goroka in 2006 for the PGDE program to pursue a teaching career and started teaching in 2007. The interview data are included as appendix 26.

5.7.1 Teacher Five's data analysis

Teacher Five started teaching in 2007 after completing the Post Graduate Diploma in Education (PGDE) program at UoG in 2006. That was well after the implementation of the reform curriculum in 1992. The general perception was that teachers who started teaching after the curriculum reform knew the NCS and the related policies. When Teacher Five was asked about the NCS and the curriculum goals, the teacher responded that that they had seen the NCS but had not read it, and not seen the curriculum goals.

Teacher Five's foremost goal, as mentioned above, was to get as many grade 10 students to pass the national examinations and continue onto grade 11 as possible. This means the teacher had to prepare the students thoroughly for the grade 10 examinations which consumes time

allocated for the prescribed lessons, and undermines the desired goals. The teacher's second goal was to encourage those students who cannot continue onto grade 11 to start their own small-scale businesses in their rural communities. This teacher's personal ambition for the class is similar to that of Teacher Four. However, it appears that Teacher Five was caught between preparing the students for national examinations and preparing to start their own businesses in their local communities. Data revealed the teacher prioritised examination preparations, rather than the curriculum intent of preparing school leavers for rural living, which is a tension further discussed in the following chapters.

In summary, Teacher Five was aware of the NCS document lying somewhere in the school, yet, was not aware of its intentions. Since Teacher Five's curriculum practices were based on the beliefs of what the curriculum goals are rather than the prescribed goals, imagination and creativity in using the available curriculum documents lacked which led to classroom-based practices rather than place-based learning activities as the national curriculum intended. The lack of imagination and creativity diverted the teacher's attention from covering the desired curriculum intent to achieve the government's desired goals. That led the teacher to focus on personal conceived goals such as concentrating on examination preparation, which this study identifies as an impediment to achieving curriculum goals. The teacher's second goal of preparing students to start small businesses is aligned with the national curriculum goals, however, it is far from achieving because the place-based learning concept is hardly practised except for a place-based learning taught the previous year. Awareness of the recommended place-based learning policy to address such goals as preparing students to start businesses in their local communities is absent, since the NCS was not consulted.

5.8 Summary

This chapter discussed interview data addressing research question one. The question asked what the business studies teachers perceived of the national curriculum intent and how these perceptions guided their curriculum intent. The participants' responses discussed in this section serve as a platform for exploring curriculum enactment further and discussing issues associated with the NCS agenda of advocating for place-based learning in the following chapters.

The first phase of the research indicated two of the five participating teachers had never seen the NCS while three of them were aware of its existence but lacked the interest to see its policy enactment to achieve the intended goals. Regardless of whether teachers knew about the

NCS or not, none of them were able to describe the NCS curriculum goals reiterated in the syllabus and teacher's guides because they all lacked deeper research into the curriculum. Hence, the teachers' own views focused on preparing students for national examinations and developing literacy influenced the enacted curriculum practices. The curriculum as autobiography, grounded in the colonial and post-colonial rote learning curriculum practices, influenced Teacher Two's curriculum intent. Three of the five teachers knew that the NCS was in the school and one of them received training about the NCS while at university, but they also lacked evidence of this in their practices. Even describing curriculum goals in the syllabus and teacher's guides was difficult for these teachers. These types of teachers are those categorised by Atomatofa et al. (2013) as those who have little awareness of the curriculum but lack interest to pursue it further (Section 3.7). Hence, their personal conceived goals focused on preparing students to pass the national grade 10 examinations and/or preparing students to start local businesses.

5.9 Conclusion

This chapter discussed the data analysis and the findings pertaining to research question one, which asked about the teachers' perceptions of the national curriculum aligned to the local environment and their preparedness for the enacted curriculum using the place-based learning. The hermeneutic phenomenology and case study approaches enabled the researcher to explore the teachers' lived experiences of curriculum as autobiography and their curriculum intent using guided interviews. The data revealed that the five practising teachers were not aware of placebased learning as a significant curriculum policy. When probed, they were receptive to emphasising the place-based learning approach to prepare students for rural living however, they were not able to inform the researcher about their practice to that effect except two teachers who taught place-based learning lessons without knowledge of the curriculum policy and the goals. Overall, curriculum awareness and pragmatic concerns appeared to be major obstacles for lack of preparing place-based learning activates for the enacted curriculum. The teachers were found to be practicing according to their personal conceived goals without awareness of the intended curriculum policies and goals. Hence, a gap exists between intended curriculum policy and practices, and the teachers' curriculum awareness and goals. Some of their personal goals align to the national curriculum goals, yet practices towards achieving them were not evident in the enactment, as discussed in the following chapter.

Chapter Six

Place-based learning as an enacted curriculum practice: Research question two

6.0 Introduction

This chapter presents the data and analysis pertaining to research question two. Research question two asks how teachers enact the curricular informed by the prescribed curriculum and the local context, with attention to place-based learning. Research question one explored the teachers' interpretation of the prescribed curriculum and preparedness for enactment, while this chapter explores the enacted curriculum in response to research question two.

Guided by the hermeneutic phenomenology and the case study approaches research question two generated three data types to explore the enacted curriculum phenomenon including document analysis, lesson observations and post lesson observation interviews (Dooley, 2002). The hermeneutic phenomenology approach is a way of researching the essence or essential meanings of phenomena, which this study employed, was to make meaning of the enacted curriculum phenomenology as lived (Kafle, 2011). The lived enacted curriculum experience discussed in this data analysis chapter helped formulate meaning of what happened and is happening to recommend strategies for improved practices. That is to plan and develop adequate learning activities to facilitate place-based learning activities that are engaging for authentic learning which were noted as lacking in this study. Figure 6.0 illustrates where Chapter Six is situated in relation to the rest of the thesis.

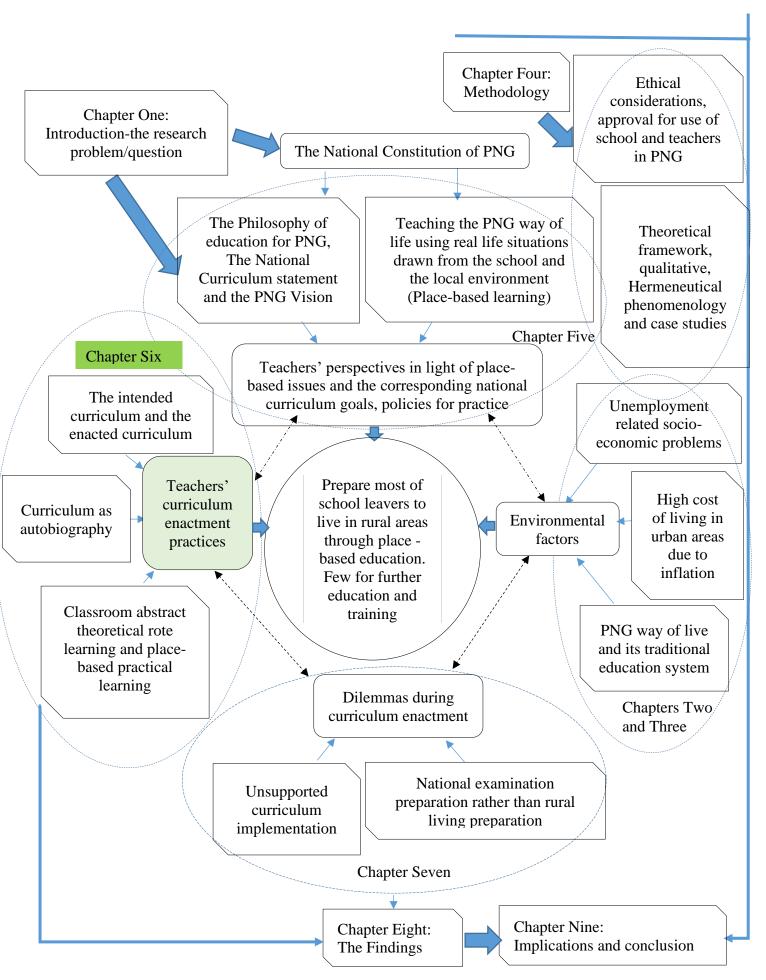


Figure 6.0: Theoretical framework situating Chapter Six in the thesis.

6. 1 Teacher One's enacted curriculum practices data: document analysis artefacts

As indicated in Chapter Five, Teacher One was not aware of the national curriculum framework that outlines curriculum goals and intent in PNG. Consequently, the teacher's primary attention was fostering students' literacy development and preparation for the national examinations. This section focuses on Teacher One's data analysis, exploring the enacted curriculum with attention to place-based learning, beginning with the document analysis artefacts. Teacher One provided a teaching program and a test sample for grade nine as document artefacts to the researcher upon request.

Teaching Program

BUSINESS STUDIES DEPARTMENT

GRADE 9 PROGRAMME: TERM I (2016)

WEEK	UNIT	OUTCOMES	CONTENT	TEACHER ACTIVITIES	STUDENT ACTIVITES	MATERIALS	COMMEN
1		ENROLLMENT		REGISTERATION			
2	9.1 Satisfying needs & wants 9.1.1 What is Production?	Students can: -define production -differentiate between needs and wants -identify relationship of production, trade, commerce& business -explain stages of production	PRODUCTION What is production? -Needs and wants -Production -Relationship Production, trade, comme ree and business -Classification of production activities -Types(stages)of production	-Ask student to define production -Ask student to provide some examples of needs and wants -Ask student to get into pairs and identify different stages of production	-In pairs identify and present different stages of production -Review Questions on pg 5 of GR 9 BS OBE Text book OB) -Do questions on pg of 6,7,8 GR 9 BS OBE Text Book	-Business Studies for Melanesia Pg1-5 -Outcome edition Business Studies	

						4
9.1 Satisfying needs and wants 9.1.2 Factors of production	Students can: -identify factors of production Land Labour Capital Enterprise -discuss different methods Of production	-Factors of production a. Land b. Labour c. Capital d. Enterprise -Specializations -Methods of production	-Ask students to identify the factors of production -Get students into groups and get them to discuss and identify different methods of production	-In groups present the different methods of production -Do review questions on pg 13 of GR 9 BS OBE Text book OB -Do question on pg 25&30 of GR 9 BS OBE Text book OB	- Business Studies for Melanesia pgs6-12 - Outcome edition Business Studies pgs 23-33	¢.
9.1 Satisfying needs and wants 9.1.3 Issues affecting production	Students can: -identify issues affecting production • Unemployment & poverty • Law & Order • Health & Education • Natural & Manmade disaster • Civil unrest	Issues affecting production a. Health b. Education c. Unemployment d. Poverty, e. Law and Order, f. Lack of basic services g. Natural and manmade disasters h. Civil unrest	-Get students into groups -Ask them (groups)to brainstorm ideas on issues affecting production -Ask students to identify issues affecting production -Get groups to do class presentation on different issues affecting	-Get into groups -In groups brain storm ideas on issues affecting production -Do review questions on pg25 of GR 9 BS OBE Text book -Do presentation in groups on different issues affecting production = - Do review questions on pgs 7,10 & 22 of GR 9 BS OBE Text book	- Business Studies for Melanesia pgs15-22 - Outcome edition Business Studies pgs 34-40	

Figure 6.1: A teaching program sample.

Source: Teacher One.

This teaching program is for a term of 10 weeks based on 'Satisfying Needs and Wants', a year 9-core unit. The unit is divided into weekly sub-units or sub-topics spread throughout the term with lesson-learning outcomes for teachers to develop relevant learning activities. The alignment of appropriate planned learning activities with the sub-topics to achieve the unit learning outcomes is paramount. The learning activities in this teaching program are underdeveloped without details about the approach to employ. For example, in week two, the program states that students will work in pairs to identify and present different stages of production and then complete the review questions on page 5 of the grade nine Outcomes Based Education (OBE) textbook. The program does not articulate how students will identify the different stages of production. In addition, there is little consideration of place-based learning. While the production focus has some contextual application, these have not been developed. Are there any production plants near the school? Are there any small bakeries, or is there a large timber mill nearby where students could visit? Teachers need to consider such questions when developing teaching programs to adapt the sanctioned place-based learning enactment approach. The emphasis of the reformed curriculum is preparing school leavers through place-based learning, and that needs to be adapted in the learning activities. In all, the term's program is underdeveloped with learning activities that provide little insight into how these will be enacted.

Test sample

Teacher One's second document analysis artefact is a test sample on "Production and Trade" (DoE, 2007; DoE, 2006). This piece of formative assessment implies the coverage of the production and trade sub-units in the enacted curriculum. The test depicts some place-based learning features.

	Business Studies Department	
	Grade: 9 Business Studies Test # Two (2), Week Ten (10), Term 1, 2016	
	Topic: Production & Trade	
5.	20	
•	Class: 9 Date: 05/04/2016 Score:/ 30	mks
Name#	Class. J_ Dutar say	0.00
	THE CHOICE	(15 mks)
PART A:	MULTIPLE CHOICE	
	What does factors of production means? It refers to	
1.	A. Factors that affect production of goods/services	•
	B. Resources used in the production of goods/services	
74	C. Resources that are used as output in production	
	C. Resources that are used as output in process	
	D. Parts of the production process	
2.	The term "Specialisation means	
	A Good at producing one product or service	
	p. The tandency to produce a particular product.	
	C. Poscurses that are used as output in production.	
	D. Producing unique goods or providing unique service	18
_		
100	"Madang Bakery" is a very good example of business that involves in;	
3.	A Specialisation C. Batch Production	
	A. Specialisation	
	B. 100 1 10 doc 10 2	580
	"Trade is an activity of exchanging goods & services for other	& or
4.		14.00
	for". What are the correct words to go into the blank spaces (above)?	
8	What are the correct words to go me	
171	A. Selling, goods, services, goods	
	B. Buying, goods, services, money	
	C. Exchanging, tradition, modern, money	
	D. Exchanging, goods, services, money	
-	An example of auxiliary services that helps traditional trade in the pa	st is
5.	A Lies of motor vehicle to transport goods	
	B. Use of canoes to move goods to trading location	*
	C. Use of telephone for communication	
ή, ÷	D. Use of modern money to exchange for goods	4
•		
	Which function of money is used to measure how rich or poor we a	re?
6.		8
	A. Median of Exchange	
25	B. Measure of Value D. Means of Setting Bests	
-	What is the main cause of "deflation"?	
7.	A Fall in having power of modern money	
	B. Rise in buying power of modern money	¥ 9
	C. Increase in prices of Imports	2
	D. Decrease in prices of Exports	
		l more
<u> </u>	"Consumers when prices of Goods & Services	_andmore
8.	when prices"	•
	Witer bridge	28
	1	

		6.●	10
	a B		
9.	Which choice below represent a	an example of capital used by School (Canteen?
	A. storekeeper	C. Freezer	
	B. Manager – Mrs. Babao	D. Tusbab campus	
10,	"Group 1 – Peeling Garden Food	ds, Group 2 – Butchering Pork Meat,	•
•	Group 3 – Digging Mumu put ar	nd Group 4 – Putting Foods & Meat int	to mumu pit"
	The work done (above) in prepare	aring mumu is an example of	VIII (1900)
	A. specialisation	C. Division of Trade	
	B. Factors of Production	D. Division of Labour	
11.	Which of the businesses in Mad	ang practices Job Method of Production	nn2
•	A. RD Tuna Cannery	C. SP Brewery	J11:
	B. Kwila Builders	D. J & Z Bakery	
		s •	
12.	Which choice bèlow does not sh Traditional Trade?	ow the difficulties exprienced in Barte	er System of
	 A. No communication 	C. Indivisibility of goods	
	B. No common Value	D. Double coincidence of war	nts
13	Who acts as 'middleman' in the	issuing/supplying of notes & coins to p	ocople of
4	PNG?		people of
	A. Central Bank	C. Commercial Banks	
	B. Bank of PNG	D. Stores	
14.	According to "Demand and "		ē
	Place? Trade takes place when	oply", when exactly do we see trading	actually taking
	A. Buyer is willing to buy at a pa	erticular price	
	B. Both buyer & seller are willing	g to exchange at a particular price.	
	C. seller is willing to sell at a par	ticular price	
	D producers & suppliers are will	lling to exchange Goods & Services for	E)
	or producers a suppliers are wil	mig to exchange Goods & Services for	money.
15.	Fish from the ocean used in the	production is classified under which Fa	actors of
	Production?	2	
	A. Land	C. Labour	ki t ik
	B. Enterprise	D. Capital	•
eart R♥ SHC	PRT ANSWER		
	our answers are brief & clear.	•	(5mks)
viane suite y	our answers are priet & clear.	20 0.01	
(1) State on	e (1) advantage of specialisation	g v	*
 -			(80)
(D)) II			
What is	Mass Production?		

A. Demand, Less, Increase, Demand, Decrease
B. Demand, More, Decrease, Demand, Increase
C. Demand, Less, Increase, Supply, Decrease
D. Supply, More, Increase, Supply, Decrease

(3) What is one (1) difference between Traditional	trade & modern trade?	
(4) State one (1) sign	milarity between Traditional Tra	de & Modern Trade.	
(5) Which function	of money helps us to find out he	ow worthy a product or service is	?
(6) What is Inflation	?		
	fully to answer the questions.		(10 mk
	ponses of Supply & Demand to I	Prices of 1 bag of Betel nut.	
Price per Bag	Quantity Demanded	Quantity Supplied	1
K80	50 Bags	10 Bags	-
K90	40 Bags	20 Bags	-
K100	30 Bags	30 Bags	1
K110	20 Bags	40 Bags	
K120	10 Bags	· 50 Bags	1
 a) Supplier is 	the agreed price, the;- willing to sellbags of be is willing to buy ba	tel nut while; gs of betel nut.	P (4)
		sing the list of words given in the	box
List of Wor	ds: upward, less, seller, downw	ard, more, same, buyer	
The Supplier i	s the while the E	Buyer is represented by the	
"The supplier	is willing to sell	ags when the price increases. Ho	
Supplier wou	d sell bags when th	e price decreases. •	wever, the
The Forces of pushes the Pri	Supply pushes the Prices	while the forces of	of Demand
The Supplier a	nd the Customer are willing trad End Of The	e when the both agree to the	price:
. 1		. 1030	
	- 3		

Figure 6.2: A test sample

Source: Teacher One

In this test (Figure 6.2), every test item relates to the term's unit on production and trade. More than 60 percent of the test items are multiple choice questions, a practice discouraged in many schools because it encourages students to guess the choices rather than thinking through and explaining an answer. The other 20 percent are questions about supply and demand from statistics in a box, while the remaining 20 percent constitute short answers.

The short answer questions reveal some features of place-based learning. For example, questions three and four, which ask students to state a difference and a similarity between traditional and modern trade respectively, feature place-based learning. To answer these questions students, need to reflect on PNG's dual economy: the informal traditional subsistence economy where goods, services, and cash are used and the modern cash economy that uses cash alone. Though there are no scripted records of traditional trade, the best source of information is the village elders who students could have been approached for information. These two questions pertain to the content taught but *how* traditional trading was taught is assumed to be abstract because the teaching program does not portray place-based learning.

The multiple-choice items listed businesses such as: Madang Bakery, Tusbab campus, RD Tuna Cannery, Kwila Builders, SP Brewery and J & Z Bakery operating in Madang. How these businesses were part of the enacted curriculum during the term is unknown, the teaching program does not mention these businesses. Another place-based learning features is the test item which uses the beetle nut trade used to illustrate demand and supply in Part C. In addition, item 11 mentions RD Tuna Cannery which is located approximately 20 minutes out of Madang town and connects to 'place', which could be used more extensively for place-based learning experiences. Chapter Five discussed the fact that the teacher had no awareness of place-based learning officially; however, the document artefacts reveal items with some place-based learning opportunities, even though students may not have engaged in place-based learning activities during the curriculum enactment process.

6.1.1 Teacher One's data: lesson observation

The lesson observation explored if the enacted curriculum paid attention to place-based learning. The lesson excerpt below captured the teacher-student dialogue that features place-based learning related to butter brands, their prices, and the shops that sell them:

Teacher:

All right, all eyes on the board, I have four squares here with four different types of butter, well, two different types of butter... at different prices. Now, when we like to, when have bread or buns, or dry biscuit, we like to have a lot of butter on it, right?

Students:

Yes.

Teacher:

Now, the current price for butter at these two different stores are listed up here, if you go to Marteens (MST), they sell their 250 gram (Meadow-Lee) butter for just K4.30, and for 500 grams they sell it for K6.90. There is another type of butter brand, or butter sold at Andersons, Black and Gold (1kg), for K10.90 and Meadow-Lee at Anderson's is K7.90 for 500 grams.

Butter brands, weight and prices and the two shops that sell them

Marteens (MST) Pty Ltd	Andersons Foodland			
Meadow-Lee (butter)	Black and Gold (butter)			
250 g @ K4.30	500 g @ K7.90			
500 g @ K6.90	1 kg @ K10.90			

If you are sent to buy butter, which one would you prefer to buy?

Stu	d	en	tc	•
olu	u	CII	เอ	•

MST butter.

Teacher:

Why would you want to buy MST butter?

Students:

It's cheap.

Teacher:

It's cheap, there are two types of MST butter here.

Which one would you prefer to buy? This one or that one? (Pointing to the chalkboard
labeled K4.30 butter weighing 250 grams and K6.90 weighing 500 gram)
Students:
250 grams.
Teacher:
250 grams, would you want to buy the 250 grams as well from at MST? So, you all agree that this one (pointing to 250 grams butter listed) is what you want to buy!
Students:
(Some say) yes, (some say) no.
Teacher:
(Exclaims) NO!
Students:
(Continue, some said) yes (and some said) no
Teacher
Asks a female student who said "No".
Why don't you want to buy that one (pointing to the 250 grams butter priced at K4.30)?
Becauseit she is saying no but she can't explain it
Iso, which one do you want to buy?
Students:
This one.
Teacher:
Still from Marteens (MST)?
Students:
Yes.
Teacher:

Alright, he says, he rather buys Meadow-Lee 500 grams for K6.90 because he will get it cheaper than two of that, yes!

Students:

Yes.

Teacher:

So, most of you would like to buy this 250 gram for K4.30, only a few want to get it for K6.90 for 500 grams, now, in the long run, you are thinking of it in the terms of price label now, price level only, in the long run, which of these four would be more beneficial to you?

Students:

1 kg,

Teacher:

1 kg, 500 g, but you don't know which brand you are going for.

Students

Meadow-lee.

Teacher

You are going for black & gold or meadow-lee, or for skyrocket, which one, you have no idea.

There is no skyrocket up here.

Students

(Giggle) continue here tonight....

This lesson about "being a wise consumer" was to convey the concept of comparing prices and buying reasonable quantities of goods at affordable prices, especially groceries that would last until the next fortnight. To illustrate this the teacher used a list of butter brands and their prices, including the shops that sell them instead of having real butter or empty containers displayed, or even taking students to the shops. The intent was to demonstrate that 500 grams of butter at PGK 6.90 was a 'wiser' and more economical choice. However, the students could not

relate the whole lesson because they have no experience in purchasing butter. This indicates lack of place-based learning as a curriculum enactment approach which research question two explored.

6.1.2 Teacher One's data: post-lesson observation interview

Since Teacher One had never heard of place-based learning as a curriculum enactment approach, hints were provided in post-lesson observation interview to guide the discussion in line with the research focus as exemplified below:

Interviewer:

A wise consumer is an appropriate topic, so would you, do you think that it would have been better if you asked somebody around (the local area) to teach (talk to) your lesson?

Interviewee:

As I ah, well, you (are) asking if I bring somebody who would have helped.

Interviewer:

Either way, how you would have used the community to, the local [community], when I'm talking about the community, I am talking about both resources and people, yah.

Interviewee:

Well, yes, it, it would have helped a lot. I mean, students would really see, yeah, definitely is happening, like, ah, like the topic was on "A wise consumer" maybe, if I had used somebody else to go (come) and talk, maybe, it could have been another teacher, or it could have been another housewife or, somebody else to talk about how they to spend and try to save money. It would apply to the students life, is that what you are asking?

Interviewer:

That's right. How about mothers or housewives? How they budget and spend money wisely or...yeah, yeah.

Interviewee:

Housewives normally do the spending on the household living expense.

Interviewer:

Yeah, and then on, the other way, do you think it would have been more appropriate if you had the certain goods (butter) that you are talking about, so that students will actually see but, what....,

Interviewee:

Display or....

Interviewer:

...what do you think.... about it?

Interviewee:

Yes, that's the, what you said is true. It would have been motivating for students if they are talking about the getting their attention and all that, but ah, I guess I didn't see it that way, I just thought that, with what (list) represented on the board by just having their names and the prices of five realistic goods. Looks like I had the prices and, the actual weight of products, I thought they knew the items I was referring to, bringing a container of something I was talking about would have been better to...

Interviewer:

Now, back to the topic that you are teaching, do you think it is important for the students, the concepts that you are getting across, and then, in the long run, in their life.

Interviewee:

In that topic that I was teaching; definitely, it is; it is an essential topic in their life. I mean everyone is a consumer, so being a wise consumer, and teaching them to save is essential, with our current situation now I guess, many income earners will go beyond the spending limits, so, it was an essential topic for the students.

The focus of the lesson observation was to explore place-based learning activities in the enacted curriculum. While place-based learning was not the teacher's focus, the interview discussed place-based learning features noted during the lesson observation. The teacher listed various brands of butter that students had no experience in purchasing them which led the interview discussion to how to address such scenario. Household groceries are usually purchased by the parents and they have a fair idea of which ones run out quickly, and which items cost

more money. Hence, it was suggested if asking someone from the local area to come and talk to the class was appropriate. In other words, whether mothers from the local community would be the appropriate people to talk about the groceries they buy, the prices and what happens when they run out before the next fortnight.

However, Teacher One mentioned other teachers as an appropriate group of people to talk to the class about budgeting because they are wage earners, while many mothers are unemployed. The essence of the wise consumer theme is not the ability to purchase, but to compare the prices, the item brand names, and deciding what to buy that would last until the next pay ending period. That gives the mothers the edge to talk from their experience of wise spending, as some may be low-income earners who may have embraced the wise consumer traits. Similarly, it would have been appropriate to draw on local commodities and students own experiences and interests rather than the selected item, butter. Hence, teachers engaged in abstract discussions about practical oriented content such as budgeting defeats the intent of adapting place-based learning as a curriculum enactment approach. Inviting people from the community to teach the class is one form of place-based learning.

6. 2 Teacher Two's curriculum enactment practices

A lesson observation and a post-lesson observation interview were the only data generated from Teacher Two instead of three data types intended for research question two. Teacher Two was unwilling to provide document analysis artefacts when requested. The unavailability of these artefacts inhibits the exploration of the teacher's past enacted curriculum practises.

Teacher Two's interpretations of the prescribed curriculum (discussed in Chapter Five) provided some insight into the value of PBL as a curriculum enactment approach. The underlying rationale for endorsing place-based learning in the reformed curriculum is to encourage school leavers to embrace their culture, way of life, and return to local communities for a sustainable livelihood. However, Teacher Two had no awareness of place-based learning outlined in the reform efforts. The teacher emphasised adherence to the curriculum as text alone but was unable to describe the curriculum goals found in the syllabus and teachers' guides when asked. This demonstrated the teacher's lack of thorough research into curriculum documents, which subsequently hinders adequate place-based learning preparation for enactment practices (Section 5.2.2.2). Section 6.2 below explores how the enacted curriculum unfolded with attention to place-

based learning in a lesson observation, and a post-lesson observation interview. Teacher Two was unable to provide document artifacts as requested so the discussion moves onto lesson observation.

6.2.1 Teacher Two's data: lesson observation

The lesson observed was about eleven factors under "A wise consumer" unit in which consumers should consider spending money wisely. A section of the lesson transcript that captured Teacher Two's enacted curriculum approach is as follows:

Teacher:

Not everybody is here but we will start.

A wise buyer, a wise buyer usually chooses different things, or considers different things before he or she goes shopping. And these things I am going to list them up on the board, they are known as factors, factors, the wise buyer chooses between these eleven things, 11 factors I'll put them up on the board. When choosing a product a wise buyer chooses these 11 things before he or she goes shopping.

Number 1, it's (a) continuation from where we stopped yesterday. Number 1 is, everybody knows very well, quality, not quantity but quality. Some of the words, you will find, we have already seen in our studies earlier on, in terms 1 and 2, but they will come up again, in this, ah, list.

Number 2, durability, everybody knows what durability is, how long a good lasts, quality, durability, number 2.

Number 3, safety features, safety feature, if you only look at it like this, it will not be clear to us, it simply means safety, or whatever good you are buying, and also the consumer's safety, especially electrical goods. The users and the person, or the product itself, safety of the product, and the users safety, eh, as I said, especially of electrical goods. When you are purchasing these, you think about the safety features.

Number 4, some people go for this one, the brand name, for example, triple 7 tin fish, Besta, triple 7 of course is now very, very expensive, ah, so people go for Besta and the other brands, but anywhere, people consider brand, when doing their shopping, that's number 4,

Number 5, where the product comes from, where the product comes from, country of origin. Country of origin, people know very well, where the thing is made, a product is made. They want it, so they will look for a name of a country in which, an item is made. Okay.

Number 6, ethical aspect. This one, simply means, number 6, everyone, original genuine products and duplicate, or pirate, when we say ah, the word pirate simply means, those who stole things, and then re-sell to the public, these are the things that we consider, when we are buying things. Original for example, original American Coca Cola, and other Coca Cola which are being made in Asian countries, that's what number 6 means, ethical aspects. We consider this, whether the original will taste better than the duplicated ones, and so forth.

Number 7. number 7, contents, ingredients, what ingredients included in that item. You would like to find out about it before you buy it, and the content, sometimes you find a good what, you what? While you are writing, a packet of sugar in another shop will, the writing will say 1 kg, ah, one kilogram. You go to another one, same, but if you get both items and you compare them, the other one has less amount of the items inside the packet, these are the things that you should consider when you are buying goods from the store. One of the examples is, washing powder, Omo. Rinso whatever, whatever, you will see, if you really compare them, you'll see, they have a 1 kilogram but actually, less than 1 kg, so, that's what we mean by content.

Number 8, very important, everyone, when shopping, especially the tinned food. Tinned food, milk, tinned fish, meat etc. You check out for the expiry date. We are coming to the end of the unit now.

Number 9, health information on the packet of an item that you are buying, health concerns.

Number 10, everyone, especially when you are buying expensive items, number 10 is important, hey, I'll give you an example of number 10, this watch here, first I went to one of the Chinese shops in Madang town, and I bought this one. Not this one but the other one. That was on Saturday, I came back, Monday, I found that it was not working, so, I had to return it. And before buying it, I asked the Papua New Guinean, a lady who was working there, in Chinese shop, if it is spoiled, what will I do? And that lady did not say anything, and I knew that she did not know what she was doing, so anywhere, I

brought the watch home, ah yeah, home and Monday I found that it was not working so I went back without any paper. I went and I asked the owner, or the Asian lady who was working, hey, in pidgin I said, skulim wok meri blong yu, em ino save long warranty na guarantee, (teach your worker, she does not know about warranty and guarantee) and she shook her head. Okay, you pay only K2 and then I'll give you a new one, so I gave only K2 and I got this one. That's what I mean by guarantee or warranty. If the watch is spoiled within this week, or two or three months, what will I do? They will give you a piece of paper stating the warranty or guarantee for two months, so, if that item is spoiled within two months, you can bring it back, and they will either fix it for you, or give you a new one. That's number 10.

And the last one; if you are finished using the product; the packet, what are you going to do with that? The container that contains the product; what are you going to do with it? Environmental impact.

I hope everybody finishes, come, so, now everybody in 9 F should know that, when you are going shopping, and you are a wise consumer, you consider the following things. They are, they will guide, they will help you choose the proper items before you buy them. Okay, on the other side, I will put the list of goods. You look at them,

Okay, now you listen very carefully, beside each one of these goods, you write down or list down, which one of these you are going to consider when you are buying these items. You got me, everyone.

Students:

Yes.

Teacher:

Okay, beside each one, I put them too close to each other, but you can spread them so that, I mean, give them enough space to list down everyone these, beside this one.

For example, this one, you are going to look for expiry date, I don't know, health concerns, I don't know, guarantee warrantee, you try and put them, it won't be one, it will be several items so, several things that you're going to consider before you purchase these things. So you list them besides these things. If you have time, enough time, we will go through it. If we don't, we will look at it in our next lesson.

Okay, if you are sitting in pairs, both of you can talk, and you list them down beside each one of them.

You understand what to do? Everybody?

Students:

Yes.

Teacher:

Right, Okay, I'll let you go ahead and do it, try your luck, try your best.

Our time is running, so, try to get everything into your exercise books, before the next teacher comes.

Everybody, everybody a question, sorry, a concern here, a brand name, sorry, I though you knew it already, so I didn't explain, a brand name is special name given to a certain product; you got it, everybody?

Students:

Yes.

Teacher:

Coca Cola is a brand name, it's a drink, generally it's a soft drink, you got it?

Students:

Yes.

Teacher:

But the name given to it is, Cocoa Cola, you got it?

Students:

Yes.

The intent of the 'eleven factors of a wise consumer' lesson was to convey what people should consider when shopping. However, instead of allowing the students to explore and discuss the pros and cons of the eleven factors, the teacher talked throughout the entire lesson with little student interaction. The only activity was a list of goods on the board where students were to indicate a factor or factors that would apply to each good listed but there was not much time left

as the teacher expressed. "Our time is running so try to get everything into your exercise books before the next teacher comes" (Teacher Two): urging the students to work quickly. This teacher-dominant lesson contrasts the place-based learning approach sanctioned for enactment. It demonstrates the gap between the intended and the enacted curriculum.

Teacher Two discussed a wristwatch that stopped working soon after purchasing (without the damaged watch) to demonstrate guarantee or warranty, the tenth wise consumer factor. Teacher Two recalled and described what happened while the students sat in silence. The rest of the lesson was dominated by abstract discussions about the safety of electrical appliances, and expiry dates of edible goods while the students continued to sit in silence. Safety precautionary notes and expiry dates are, at times, difficult to locate on the labels so, the use of real goods and/or empty containers would have provided meaningful learning experience for the students. Tinned fish, a favorite PNG household food item was mentioned also. As stated earlier, the use of several tins of fish to compare and decide on the best purchase according to safety requirements would have been contextual and meaningful. These eleven consumer factors are vital for wise spending in life, which every student should grasp and embrace. However, this lecture-type lesson without attention to place-based learning signifies a mismatch between the intended curriculum and the enacted curriculum practice. Importantly, the learning activities were void of local application.

Teacher Two taught with an assumption that students already knew the eleven wise consumer factors. This assumption prevailed with the teacher's "everybody knows" phrase when talking about two factors and "I thought you knew it already, so I didn't explain". Teacher Two talked through the eleven factors without assessing the students' understanding. The teacher's assumption proved wrong when students asked for the definition of "brand name" during the brief student activity. The teacher should avoid assuming students' knowledge of the concepts taught and seek to develop contextual and meaningful interactions to foster authentic learning in future enacted curriculum practises.

Expiry dates of edible goods is important consumer information for PNG as a developing country. Many rural people choose cheaper groceries without expiry date considerations, which places their lives at stake if expired goods are still on the shelves. Dairy products such as milk expire after few days. The expiry date labels are often difficult to find on many food items: showing students where to check for expiry dates on real food labels would be appropriate. An

effective teaching strategy would be the use of realia, which is to show the students actual items that will help to increase their sensory experience of the items (Irawan, 2017; Willis, 2008).

6.2.2 Teacher Two's data: post-lesson observation interview

There was no evidence of place-based learning in the lesson observed, so the aim of the post-lesson observation interview was to elucidate place-based learning features and discuss how to develop them for practice. Chapter Five revealed Teacher Two teaching without awareness of place-based learning as a curriculum enactment policy. The researcher therefore guided the post-lesson observation discussions to reflect on the place-based learning opportunities:

Interviewer:

My aim is to see whether you are taking this idea (place-based learning). So, in terms of ah, ah, your lesson, wise consumer, and having said that, do you think that it would be appropriate, that you would have used the local community or environment in some ways to teach what you have taught? Just want to hear your opinion, yah.

Interviewee:

Certainly, yes certainly, you are right, but it would be best if we take them to the stores, and then they choose whatever they think it's best for them, and then the teacher says, oh, how long is that thing going to last, from there, I think they will make a better decision. You, you got me?

Interviewer:

Okay, what do you think? If you had several items or pictures to explain terms such as brand name, quality, yeah, those eleven terms, do you think it would have been much better if you used some items such as Omo, or Coca Cola even to show them where the expiry dates are, etc.?

Interviewee:

Yeah, that depends, you know, now people will (made signs that people will ask for money), you understand ah...and, yeah, I did not think of bringing some items, I though students know the 11 factors, but students were a bit confused...

Interviewer:

Ah, Okay, now, your, the, the lesson this morning, wise consumer, do you think that it would be beneficial for the students, especially those who, who not pursue further but exit after grade 10 or 12, the concepts that you brought across? And then, how do you think it would benefit them? Can you elaborate further?

Interviewee:

Okay, good, to the girls, they may decide to buy fabric to sew clothes and whatever, meri blouse and what not, they should know the quality of the fabric, and things like this, and now, now a days, you look around, many people are selling small goods. Even in the villages, they should know these things, in order to choose the right types of things that the villagers want, no ken kisim tasol igo, (do not just buy anything and go) and then they don't come and buy them, such things like this.

Place-based learning characteristics discussed in the interview included how the use of real goods, empty containers, labels and images could have been adapted to provide more authentic learning. The discussion was based on the premise that, when teachers use realia (real-objects) in teaching to demonstrate real things or real life objects, it provides meaningful learning experiences that helps students with the sort of direct experience that cannot be obtained through some other teaching strategy (Irawan, 2017; Ngaroga; 2006). Hence, Teacher Two was guided to discuss how the eleven wise consumer factors would help prepare school leavers for rural living and what other strategies would have been appropriate in teaching the same lesson rather than the abstract mode employed. Teacher Two acknowledged the worthwhileness of place-based learning as a sanctioned curriculum enactment policy. Use of concrete resources such as empty cans and containers would be economical instead of focusing on buying goods or taking classes to a shop as the only authentic method, which would cost money.

Moreover, the benefits of the eleven wise consumer factors to the students later in life was another important aspect discussed with Teacher Two. The teacher viewed all factors as important because everyone inevitably becomes a consumer in life. Teacher Two used the factor "quality" as an example in checking for quality fibres by girls who wish to sew blouses for sale. Sewing and selling clothes from fabrics is a common entrepreneurial activity in PNG. However, the teacher's curriculum enactment practises were confined to abstract classroom learning; but the ideas expressed hinted place-based learning as an authentic training of students preparing for the real world expected from teachers. It is the researcher's hope Teacher Two considers place-based learning as the appropriate approach for training school leavers for sustainable living and

will embrace it in future curriculum enactment practices. In summary, Teacher Two had no awareness of place-based curriculum goals. The observed lesson revealed Teacher Two employing lecture-type practises in contrast to the endorsed place-based learning approach. The national curriculum intent for place-based learning practices was preparing for the return of school leavers to their local communities; however, that was not adapted in the enacted curriculum practises exemplified here.

6. 3 Teacher Three's data

Chapter Five indicated that Teacher Three had no idea of the NCS that stipulates the overarching curriculum framework with place-based learning emphasis. Teacher Three was not aware of the emphasis in adapting place-based learning in enacting the business studies curriculum to prepare for the return of many school leavers to their local communities (DoE, 2003). However, when asked about personal goals that drive their teaching, Teacher Three referred to using place-based learning to show how bookkeeping in preparation for those students wishing to start a business after school. Moreover, Teacher Three used a shop near the school to show the class bookkeeping practices in the previous year, and that demonstrates the teacher's initiative and creativity without knowing that place-based learning is sanctioned for practice. As discussed in Chapter Five, the teacher expressed willingness to implement PBL, but highlighted the difficulty of taking a large class of 60 students out to real places would be a hindrance (Sections 5.3.3.1 & 5.3.3.2). The enacted curriculum in the form of artefacts, observation and teacher reflection is explored below.

6.3.1 Teacher Three's document analysis artefacts: A teaching program

Teacher Three provided a teaching program of 10 weeks for term 2 of 2016, which can be found in Appendix 20.

VEEK	UNIT/TOPIC/LEARNING OUTCOM	IES CONTENT	TEACHING & LEARNING STRATEGIES/ RESOURCES	ASSESSMENT	EVALUATION
Unit10.2:	Starting a small \business Enterprise	Broad Learning Outcome: Write, imple bus	ement and manage a small business pla iness enterprise, applying ethical busin	n, individually or in teams & ess practices	è run a small
	Sub Topie: The Business Idea Learning Outcome: Analyse their strengths & weaknesses, personal skills and ideas on establishing a business iden.	◆ A New Business Idea -assessing personal skills and ideas(SWOT Analysis) -Brainstorming personal business idea - Case studies	Reading and explain with the aids of handouts by; 1. Defining the terms: -Business idea, skills, strengths, weaknesses, brainstorming 2. explain what a SWOT analysis -S-strengths, W-weaknesses, O-opportunities, T-threats 3. Identify some characteristics in self-assessment -hard working, talk with people, planner, etc Bus, Studies for Melanesia. BK2 Pp.31-61	Business calculation Test 5 20 marks	Losson tought souteness achieved Take home yes were. Most stals and very well
?	Sub Topic: Ways of Setting up a Small Business Learning Outcome: Established some ways of getting into a small business	Ways of getting into business Starting a new small business Purchasing an existing business Pranchising Starting a new small business -advantages and disadvantages -start-up capital -market research -choese a legal form/structure -plan how to use the profit	Define the terms: Franchising, franchiser, franchises, star-up capital, debtors, creditors, assets, liabilities. Outline the different ways of setting up a small business - starting up a small business purchasing an existing one & franchising. State the advantages & the disadvantages of starting a new small business Bus. Studies for Metanesia. B \$2.2 Pp.35-72		lesson taught a continued achieved

Figure 6.3: Excerpt of a teaching program or lesson plans of a grade 10 class.

Source: Teacher 3.

This teaching program is based on unit 10:2, "Starting a Small Business Enterprise", outlined in the business studies teachers' guides. The term's broad learning outcomes encompass writing, implementing, and managing a small business plan, either individually or in teams, and running a small enterprise applying ethical practices. These outcomes portray place-based learning features; for example, students running small enterprises with ethical business practices in organised case studies using real businesses over a period. Achieving these would encourage students to embrace the concept of starting and running small businesses when they leave school. Moreover, as a concept, this exemplifies place-based learning sanctioned to achieve the goal of preparing school leavers for rural living. However, it requires further development with appropriate learning activities.

The broad topic and learning outcomes are broken into weekly sub-topics and lesson learning outcomes and spread throughout the term of 10 weeks. Week one's sub-topic is a business idea, with an analysis of the strengths, weaknesses, personal skills, and ideas on establishing a business, as learning outcome. Moreover, the content for the week to achieve the learning outcome includes new business ideas, assessing skills and ideas on establishing a business idea, the SWOT (Strengths, Weakness, Opportunities and Threats) analysis a for identifying strengths and weakness from within and searching for external opportunities and

possible threats, and brainstorming of personal ideas, and case studies. The week's content that guides the construction of learning activities were not articulated clearly under what this teaching program labelled as 'teaching and learning strategies', which also includes resources for teaching. The document does not outline the learning experiences or and how the teacher will facilitate them in the enacted curriculum, to achieve the stated learning outcome. Hence, the programmed teaching and learning activities were:

Reading and explaining with the aid of handouts by: Defining the terms: (1) Business idea, skills, strengths, weakness, brainstorming, (2) explain what a SWOT analysis is, Strengths, Weakness, Opportunities, Threats; (3) identify some characteristics in self-assessment, hardworking, talking with people, planner, etc. (Teacher Three, teaching program)

Reading from handouts and verbal explanations of the SWOT analysis forfeits the good intentions of place-based learning. Several successful and unsuccessful entrepreneurs would provide the students meaningful learning by sharing their life experiences of the SWOT analysis.

The term's broad learning outcome captures the scope of student learning over 10 weeks, designed to achieve the unit-learning outcome. This accumulates to achieve the desired overarching goals of schooling. The emphasis is encouraging most school leavers to return to their rural communities by engaging them in place-based learning activities across the school curriculum. The teachers' guides to that effect aim to stimulate teachers to create exciting and meaningful teaching programs with relevant and purposeful learning activities and teaching strategies that are place-based (DoE, 2006). However, careful investigation revealed teaching program components to be abstract without place-based learning considerations. This implies the misalignment of teaching programs with the prescribed curriculum intent. The rest of the program revealed the same pattern. For example, the student learning activities section for week 2 were:

- (1) Define the terms franchising, franchiser, franchises, start-up capital, debtors, creditors, assets, liabilities.
- (2) Outlining the different ways of setting up a small business, starting up a small business, purchasing and existing one and franchising.
- (3) Stating the advantages and disadvantages of starting a new small business
- (4) Reference used, Business studies for Melanesia, Bk2, pp. 51-61). (Teacher Three-week 2 program)

Again, this portrays a text-based, teacher-centred approach extracted from the teachers' guides. The teachers' guides are designed to help teachers translate the prescribed curriculum, in alignment with the local environment, not just restating the curricula content without creating place-based learning activities.

Even the student activities for week three included comparing different methods of getting finance from financial institutions: hire purchasing, leasing, bank loans, Rural Development Bank (RDB) and the Stret Pasin Stoa scheme. These comparative activities intend to achieve the learning outcome of the week: "understanding the other factors of establishing a small business". However, the program does not indicate how these will be translated into learning activities. This reveals that teachers are constructing teaching programs without thorough consultation of the teachers' guides that advocate place-based learning. The purported learning activities without details were direct extracts from the prescribed curriculum documents designed for teachers to adapt place-based learning. The teacher's lack of place-based learning awareness revealed in Chapter Five could be another contributing factor. Hence, Teacher Three's program does not take up the curriculum intent of the teacher guides.

Project

The group project displayed in figure 6.4 below based on unit 10.2 is entitled "My Small Business Project - writing a business plan". The student tasks included identifying a business idea and giving a name to their business, writing a small business plan for their business (refer to Mary's lemonade business as a sample), and in the appendix of the projects include questionnaires, business logo used and references (if any). Mary's lemonade is a sample business described in handout notes or textbooks for students to use. As opposed to this fictional business, the use of real small businesses operating within the school locality would be more aligned to PBL.

BUSINESS STUDIES DEPARTMENT GRADE 10 BUSINESS STUDIES Project 1, WEEK5, TERM 2, 2016

Unit 10.2 Starting a small business enterprise- MYOB

Topic: My small business project -Writing a business Plan

Group Members Names:	Class:	<u>.</u>
Due date: Week 7- Friday- lunch hour	Marks:	/50 marks

Instructions:

- 1. This Project covers the topic My Small Business Project
- 2. This project carries 50 marks of your total marks.
- 3. Its due date is on week 7-Friday during lunch time. Tens (10) marks will be deducted for late assignments
- 4. It is a group project of five students (not more or less) and group participation is very important.

Task:

- 1. Identify a business idea and give a name to your business.
- 2. Write a small business plan for your business (refer to Marys lemonade business as sample)
- 3. This project must be short and sharp and straight to the point-between 2 to 3 pages and not more than 3 pages.
- It must be readable, neat and tidy. Note: You must type your work and bind it. No hand written work will be accepted.
- 5. You are to draw or design your business logo using computers.
- 6. In the appendix- include
 - i. Questionnaire
 - ii. Business Logo
 - iii. References (if any)
- At the back of this page is a sample of a business plan that will help/guide you to complete your business plan. You can add or subtract things to your business plan if you wish to.
- 8. Write all the names of your group members on the cover page of your business plan.

Marking criteria

- 1. The business idea- a well-defined and simple business idea =5marks
- 2. Content of the business plan-there must be a coherent flow of the business plan=34 marks
 - i. Cover sheet-2 mks
 - ii. Table of contents-1 mk
- iii. Mission statements-2 mks
- iv. The Business-5 mks
- v. Marketing Plan-10 mks
- vi. Financial Plan-10 mks
- vii. Appendix-4 mks
- 3. Cooperation and participation- how cooperative each member is willing to work on the project=4marks
- Neatness- your work should be neat and readable =5 marks
- 5. General presentation and organisation of the business plan =2 marks

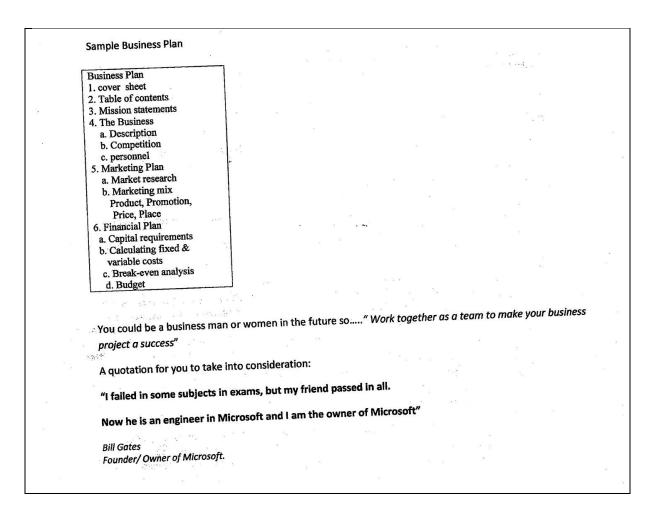


Figure 6.4: A grade10 class project

Source: Teacher 3.

The student tasks could be adapted to align with the place-based learning approach. For example, instead of referring to "Mary's lemonade business", students could have collected information using survey forms, questionnaires, or structured interviews from the small businesses that operate in Mt. Hagen. While a small business while being a student may not be practical, observing the operations of a small business for a month or two and collecting information is possible. Throughout these place-based experiences, students would learn to collect and analyse data, to collaborate with other community members in business as well as the other students to write and deliver the reports in class. Teachers only need to guide students in various data collection strategies. The inclusion of a questionnaire in the appendix of the students' projects is indicated while the use is found nowhere in the project tasks. The project design implies a gap between the intended curriculum and practice.

6.3.2 Teacher Three's data: lesson observation

Teacher Three's lesson observation was a revision about three states of production: primary, secondary and tertiary. Teacher Three referred the class to some notes as an introduction to the lesson, which contrasts to fostering student learning experiences that are place-based. The following are some segments of teacher-student dialogues, which provide evidence of the compatibility with place-based learning presented for analysis:

Teacher:

Okay, let's have a look at our handouts, our summary notes, please ah, take them out.

Okay, we have looked at, ah, chapter one already, on, ah, production.

And, ah, we are going to look at ah, chapter number two now.

Now, what is production?

Student A:

Production is the making of goods and provision of services by human effort or is the making of raw materials into finished products.

Teacher:

Very good, ah, that's correct. Now, what are needs? (Names student B) what are needs?

Student B:

(Mumbled, far from the voice recorder and recorder did not record)

Some segments are left out.

Teacher:

Good, supply refers to what a supplier or producer is willing and is able to produce and sell.

And demand and supply factors help to set the prices of goods and services involved in trading.

Okay, have a look at the statement below, if supply decreases or demand increases, prices are expected to rise. Okay, this statement is referring to one of the situations that are

given in our textbook here. Okay, we have a supplier producing 10 bags of corn and then we have another two consumers. They also want the 10 bags of corn each, but there is only one producer here, and so the supply has decreased and the demand increases, and both of the consumers are competing, that's why the price is, ah expected to rise. But, then there is another producer that comes in, and so the supply has increased, and demand has decreased, and the prices are expected to fall.

Now, what is the law of demand? This statement is referring to situation given in the textbook, on a case study. So, what is the law is supply and demand?

When prices increase, supply increases and demand decreases.

When prices decreases, supply decreases and demand increases.

Supply has increased, sorry, prices increase, suppliers know that they will make profit, that's why the also increase the supply or production of goods here, and the demand has decreased because the prices have increased, not many consumers would like to but that particular product.

Here prices have decreased; suppliers know that they will not make any profit, so it has now, ah, they have produced less, and because the prices has decreased here, the consumers are, okay, many consumers would like to buy that particular product, that's why the demand will increase.

That's the basic law of supply and demand.

Okay, inflation refers to the rise or increases in the price of goods and services and fall in the purchasing value of money. Okay, right now our kina has decreased in value and we are experiencing inflation. There is increase of prices of goods and services.

Okay, there are two types of consumers in our society today, and, one is called traditional consumer society, and it refers to people living in rural areas and they produce enough for themselves.

And modern consumer society, ah, refers to people living in urban areas; and depend heavily on cash. And they are sometimes called a cash society, because cash or money plays a key role in the exchange of goods and services.

Okay, we are going to look at the types of trade here, ah, modern trade, domestic trade and international trade. And, domestic trade refers to all the trading activities that take

place inside a country. All domestic trade in PNG involves the use of the national currency, which is the kina and toea. We don't use any other currency in the country to trade for goods and service, only kina and toea. And, it is a legal tender.

Domestic trade involves the exchange of raw materials, vegetables and farm produce and semi processed foods and manufactured goods. Domestic trade involves single steps, through which goods and services move from the producer, or from the manufacturer, to the buyer or the consumer. And there are different steps of retailing, we have one-step retailing, we have two-step retailing, three-step and also four-step retailing. Now, give me an example of a, ah one-step retailing.

Class:

Producers and consumers (chorus).

Teacher:

No, I'm asking you to give me an example.

Class:

Market (mumbled in chorus).

Teacher:

Okay, good, market, the producers produce and they sell directly to the consumers. But, here in Mt. Hagen, okay, the producers produce and then they sell them to the blackmarket mothers there, and then they then re-sell them to the consumers. So we see that there is two-step retailing taking place instead of one-step.

Okay, two-step retailing, give me an example apart from market which I have just given.

Class:

Students mumbling and not able to give a good example.

Teacher:

Think of a good example, producer to the retailer and then to the consumer.

Or, manufacturer, retailer and then consumer.

(Students still could not provide an example so teacher continues)

Let's say supermarket ah. TININGA Supper Market, that's a good example, it can buy directly from the manufacturers, and then resell them to the consumers.

Now, what about a three-step retailing? Douglas. Give me an example of a three-step retailing. It includes the producer or the manufacturer, the wholesaler, and the retailer, and then the consumer. So, give me an example.

Joel (student) mumbled something which the voice recorder did not pick up and record.

Teacher:

Okay thank you Joel, Daewong,

Daewong we have the manufacturer, and then wholesaler which is Daewong, and then the retailer, it can be a trade-store, and then, the consumer. It can be Douglas or,

Class:

(Students laughed because Douglas failed to give an answer)

Teacher:

And then we have four-step retailing, four step retailing come about if or when the manufacturer is in another country. That's when the distributor comes in, okay, we have the manufacturer, the distributor, the wholesaler, the retailer and then the consumer.

A good example is the uniforms that you are wearing, it is not manufactured here, okay, it is being manufactured in Philippines, and, who is the distributor here.

Class:

Star tailoring (chorus).

Teacher:

Okay, Star tailoring, Star tailoring is the one who imports, it becomes the distributor, so we see that, ah, four-step retailing come about when and if the manufacturer is in another country. When distributing goods and services, there are different types of transportation, or means of transportation used. And there are three main types or methods of transportation. One is land, the other one is sea or water, and then we have air. And they also have their advantages and also their disadvantages.

Okay, what are some of the advantages and disadvantages of these three types of transportation?

The entire summary notes lesson was teacher dominant without place-based considerations. Some segments featuring place-based learning were the basic laws of supply and demand, modern and traditional economy commonly referred to as cash and subsistence economy, and the one, two, three, and four-step retailing. Teacher Three's explanation of the basic law of supply and demand causing price increases or decreases using "a producer supplying 10 bags of corn" as an example is an everyday scenario at Mt. Hagen market. There are "black-market mothers" who buy garden produce in bulk from village producers every morning. The number of producers or suppliers increases, while consumer numbers decrease because most consumers are public servants who are working in the morning, hence, the prices drop. In the afternoon when the villagers return home, supply decreases when only few black-market mothers selling what they bought in the morning and the prices increase. A guided class survey for students to observe this basic law of supply and demand in motion and recording at the market during their own time would be authentic learning.

Teacher Three also mentioned modern and traditional consumers commonly referred to as cash and subsistence economies. Subsistence economy is two-fold, producing for consumption and exchanging goods and services for other goods and services without cash and the use of cash only. Guiding students to collect information about the subsistence economy from older people in the communities would have had a meaningful impact.

Teacher Three used Mt Hagen local market again to illustrate the "one-step retailing" concept: "Okay, good, (Mt Hagen) market, the producers produce, and they sell directly to the consumers" (Teacher Three), implying one-step retailing. While explaining the one-step retailing, the teacher realised that the two-step retailing was obvious. "In Mt. Hagen, okay, the producers produce and then they sell them to black market mothers there, and then they re-sell them to the consumers. So, we see that there is two-step retailing taking place instead of one-step" (Teacher Three). The teacher then asked the class to provide other examples of two-step retailing apart from the market. The students in chorus answered, "producers and consumers", which was not the answer the teacher anticipated.

Another segment with place-based characteristics was the discussion of two-step retailing, where goods are transported from producers to retailers, and ultimately to consumers. When the teacher asked for examples apart from the local market, the class mumbled without

answering. They were asked to think in terms of producers to retailers and then to the consumers. However, the class continued to mumble with no example of two-step retailing. The teacher then used "Tininga" local supermarket to explain the two-step retailing process. Tininga is a local company operating in Mt, Hagen and students could have collected empirical information about two-step retailing through guided surveys and interviews.

Finally, Teacher Three talked about "Star tailoring", a local company involved in ordering products from another country abroad: "Star tailoring is the one who imports, it becomes the distributor, so we see that, ah, four-step retailing come about when and if the manufacturer is in another country" (Teacher Three). Again, equipping students with data collection methods to visit "Star Tailoring" in their own time to collect information for discussion in class would be appropriate. This was a summary lesson, yet students were not able to provide examples of various retailing steps when asked. The students' reluctance illustrates the value of place-based learning where students would experience various retailing steps through place-based learning by observation or conducting interviews.

6.3.3 Teacher Three's data: post-lesson observation interview

A post-lesson observation interview was essential to reflect on the lesson taught. According to Chapter Five, Teacher Three had no awareness of place-based learning, hence, it provided an avenue for discussion to highlight segments that did reflect place-based learning:

Interviewer:

I am looking at the concept of teaching in a real-life situation, or the place-based approach, so, ah, in your lesson that you taught yesterday, I think it was on production, is it? Ah, then trade and money?

Interviewee:

Yes.

Production, trade and money.

Interviewer:

So, do you think your lesson could have been taught in a real-life situation?

Interviewee:

Yes, yes, definitely.

Interviewer:

Okay, can you elaborate on how?

Interviewee:

Ah, especially when it comes to the distribution process where there involved one step retailing, two step retailing, and all these, we should instead of us giving them information, we should go to them.

Interviewer:

That is right.

Interviewee:

Yeah, like a three-step retailing, it needs ah, ah, a wholesaler is in there, we have the manufacturer, wholesaler, so we can go to Daewong because we identified an example as Daewong.

Interviewer:

Do you think place-based learning lessons are important for students in their future life? You have any idea what really....

Interviewee:

Okay ah, you mean the topic or the subject itself.

Interviewer:

The topic that you taught or any other lesson that you might want to teach.

Interviewee:

Okay, I mean, like ah, in business, we can say all other subjects, it cannot be in practical life. But if you look at business, every day we are dealing with money. So it's like, we are dealing, taking business now, business is taking place when money is taken out of our pocket, that is business.

Firstly, Teacher Three was asked if place-based learning could be used to teach the same lesson or any other lesson. The teacher agreed, since Business Studies concepts are practical in

nature dealing with money every day: students should, therefore, be taken out to real businesses instead of participating in classroom discussions. Furthermore, Teacher Three pointed out that, instead of sharing information about real places such as Daewong in the classroom, students should experience the real shops involved in one-step or two-step retailing. The teacher came to realise that students can use the shops operating in Mt. Hagen to illustrate business practices in practical ways.

In summary, analysis of Teacher Three's curriculum enactment highlighted an ununawaress of the curriculum goals and policies underpinning place-based learning as an enactment policy. This unawareness was evident in the curriculum artefacts and lesson observation data, although the concepts articulated were practical in nature and had place-based learning foundations. In the post-lesson observation Teacher Three reflected on the benefits of using place-based learning practices.

6.4 Teacher Four's curriculum enactment

Curriculum artefacts, a lesson observation and a post-lesson observation interview made up the data for Teacher Four in response to research question two. This section's data analysis captures Teacher Four's enacted curriculum practises using place-based learning to achieve the curriculum goals.

Teacher Four was the only participating teacher who was trained in, and aware of place-based learning as a curriculum enactment policy (Section 5.3.4). However, a variety of factors including school cultures prevented Teacher Four from practising place-based learning in the field: "...we were told, we were taught by yeah, you, our lecturer, to take the students out to the real world, but, ah, today I see that we are not taking students out to the real world" (Teacher Four) (Sections 5.3.4.1 & 5.3.4.2). This implies that the school cultures influenced the teacher and negated what was learnt at university in enacting curriculum.

Teacher Four's practice was dominated by the school environment and the teacher's own values and beliefs which inevitably shaped the way the curriculum was interpreted and or enacted, in this instance, as ingrained by cultural norms of the school. Teacher Four's intent was preparing many students to pass grade 10 national examinations to continue grade 11 and preparing those exiting to start their own small-scale businesses. The first goal is an enculturation of school practices in which schools compete against each other to send as many

grades 10 students to grade 11 and continue to tertiary institutions after year 12. When a competitive element is introduced into a situation, a sense of external urgency and drama is created (Shindler, 2009), make that the dominant curriculum priority despite the NCS.

This school enculturated practice in contrast to the curriculum intent creates a gap between curriculum intent and practice (Section 7.5 & Table 7.0). Teacher Four's second conceived goal: preparing those students exiting formal education to start their own small-scale businesses aligns with the prescribed curriculum intent. However, Teacher Four's enacted curriculum practises revealed little evidence of place-based learning as a way of preparing students to start their own business when they leave school.

6.4.1 Teacher Four's data: curriculum artefacts

Teacher Four's curriculum artefacts consisted of a teaching program, test, assignment, and a project sample. These documents provide evidence of the teachers' enacted curriculum practises prior to data collection.

Teaching program

Teacher Four's teaching program for a term of ten weeks is presented in Figure 6.5.

GRADE 9 BUSINESS STUDIES TERM 2 PROGRAM

STRAND: Unit 9.2 and 9 - SATISFYING NEEDS AND WANTS & BEING A WISE AND RESPONSIBLE CONSUMER

The strand topics on Unit 9.2 that was not covered in term two (2) is brought forward this term.

Broad Learning Outcomes: by the end of the units student can be able to:

- 1. Use a decision making process for the purchases of goods and services
- 2. Demonstrate an understanding of maintaining budget and keeping accurate personal financial records
- Design and implement an action plan for positive consumer behavior
- 4. Use a variety of Business Communication skills in any daily business activity
- 5. Demonstrate the use of communication techniques for effective Business Communication.

Week	Strand: Units	Sub-Strand Topics	Teaching/learning Strategies (By the end of the lesson students should be able to :)	Resource	Types of Assessmen t	Evaluation
1	2Being a wise and nsible consumer	Consumer choices and decisions & Xeeping personal record	Distinguish between the different methods of paying for goods and services Identify and list the various consumer choices and decisions. Interpret and demonstrate consumer choices on Goods and Services State the reason why his important to keep the personal record.	Business in Melanesia- Bock 1. Liklik Bisnis Bock 1	1 speiling test a week	
	Init: 9.28 respons	Budget spending and saving	Understand and apply the principles of budgeting for personal income. State the different pounds of income.	Business in Meianesia- Book 1. Likiik Bishia	lage ing tests week	

UNIT 9.2 WISECONSUMER AND RESOSIBLE	Banking and Borrowing of money	Cutline the main source of income Recognize the different types of banks account and the banking procedure	Business in Meianesia- Bock 1. Liklik Bisnis Book 1	Mid-w	k.	
UNIT 9.2 WIS	Banking and Borrowing of money	Evaluata the main reason why people borrow money State good reasons and bad reasons for borrowing money	Business in Melanesia- Book 1. Liklik Bisnis Book 1	Assignr 10%	ment	
siness	What is business communicat ion	Important of business communication in business world Types of communication mostly used for business purpose (verbal, written and oral). Other types of communication-(non-verbal(body language, visual) Use of top/down, horizontal, bottom up communication processes	Business in Melanesia- Book 1. Liklik Bisnis Book 1	Spelling test a v		
Unit: 9.3 Business	Susiness Communica tion Skills	Principal of communication Use of oral and spoken language	Business in Melanesia- Book 1.			
_		 Assoling and interpreting correspondence Bit ing and speaking 	Liklik Blania Book 1	0.79 m.s / 20%	3x():	
_		Assuing and interpreting commerced dense			3%11	
	Barriers to effective communication	Assuing and interpreting correspondence Liting and toesting	Busin Mela	ness in nesia- 1. Bisnis	Spelling test a week	
Unit: 9.3 Business Communication	effective communicat	emailing and other correspondence methods People- attitude, racial differences, cultural differences, diale	Busin Mela Book Liklik Book e, Busin Melar Book	ness in nesia-1. Bisnis 1 ess in nesia-1. Bisnis 1 Bisnis 1	Spelling	
6	effective communicat ion Barriers to effective communicat	emailing and other correspondence methods People-attitude, racial differences, cultural differences, bureaucracy Language-cultural differences, diale syntax, pronunciations Listening and interpreting body language attitude an emotions System-technological	Busin Mela Book Liklik Book Busin Melai Book Liklik	pess in nesia-1. Bisnis 1 ess in nesia-1. Bisnis 1	Spelling test a week	

Figure 6.5: Teaching program.

Source: Teacher Four.

Teacher Four constructed a 10-week program for a term to cover "Satisfying needs and wants and being a wise and responsible consumer", a grade 9 unit (DoE, 2007). The unit outlined the weekly sub-units for instruction and lesson learning outcomes to achieve. These weekly learning outcomes were derived from the term's broad outcomes. By the end of the unit, students should be able to:

1. Use a decision-making process for the purchase of good and services;

- 2. Demonstrate an understanding of maintaining budgets and keeping accurate personal financial records;
- 3. Design and implement an action plan for positive consumer behaviour;
- 4. Use a variety of business communication skills in any daily business activity;
- 5. Demonstrate the use of communication skills for effective business communication.

Central to the teaching programs are learning activities which students will engage in to achieve the curriculum goals. An analysis of Teacher Four's week one program illustrates the alignment and translation process described. The Week 1 sub-topic was "consumer choices, decisions and keeping personal records". Under the teaching and learning strategies column (Figure 6.5) is where learning activities could have been stated. Teacher Four instead stated the learning outcomes:

- By the end of the lesson the students should be able to:
 - Distinguish different methods of paying goods and services is the weeks learning outcome.
 - Identify and list various consumer choices and decisions.
 - Interpret and demonstrate consumer choices on goods and services.
 - State the reasons why it is important to keep personal records.

Teacher Four had the learning outcomes and the teaching and learning strategies mixed up. This resulted in omitting the student learning activities, which is a central component of the teaching program. The syllabus and teacher's guides were designed to guide teachers to develop place-based learning activities that students would engage in during the lesson, but these were absent in this teaching program.

The rest of the teaching program was developed in the same manner, with a weekly spelling test, a superficial form of assessment regarding the curriculum goals. This program indicates some gaps in translation and some assessment practices that hinders effective teaching and learning to achieve the prescribed curriculum goals.

Test

This third test designed for term two had fifteen multiple-choice questions, which is 75 percent of the test. Though multiple-choice question tests are widely used in testing of student

knowledge, a major disadvantage is that some students can obtain certain scores in the test purely by guessing the right answers. There is no policy banning the use of multiple-choice questions but many schools in PNG discourage the practice because they believed students were guessing the answers rather than thinking. The four closed-end questions (20%) were for students to recall information, and one question (5%) was about explaining the difference between commercial banks and finance companies. The test items referred to banks and financial companies that operate in Mt. Hagen. Students would easily recall if they had experiences with the financial companies and commercial banks operating in Mt. Hagen as in the place-based learning concept.

DEPARTMENT	OF BUSINE	ss stu	DIES									
GRADE NINE B	USINESS ST	UDIES	TEST #	3 TER	MS: 2 \	NEEK:	7 Chap	ter 4: I	Financi	al Insti	tutions	
Name:			Cl:	ass:	D	ate: _		Tot	al Mar	k	_/30	
Instructions:												
✓ There are:												
 Part A 	: Multiple C	Choice (Questi	ons (15	mark	s)						
 Part B 	: Short Ans	wer Qu	estion	ıs (10) mark	5)						
 Part C 	: Extended	Respo	nse	(5 mai	rks)							
✓ Use a blue												
✓ No Cheati	ng. If you a	re cau	ght che	eating,	you w	ll be p	enalize	d				
✓ Time allow												
Multiple Choice C	Questions (3	15 mar	ks)									
Write the cor	rect alterna	ative of	fyour	choice	in the	answe	r grid b	elow				
Q1 Q2 (Q3 Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
									L			
Q2. What is the f A. Takir C. Both A Q3. Which of the A. Provisi D. Provisi Q4. The abbrevia A. Autor C. Autom Q5. It refers to th A. Centr Comp Q6. Which of the A. BSP Q7. The Bank of A. PNG Q8. It refers to a	t B. Institution of and B are of and B are of and B are of a following ding financiation ATM sometic Tailor artic Telecone types of all Bank I panies e following B. ANZ C South Pacies BC B. Cenartype of bantral bank	tution the fine or depo correct is not a e B. E ding m tands f ring E mmuni banks t B. Com comm . May fic (BSI tral Ba ink tha	C. France in posits a role of Buying oney for; B. Auto ication that ta mercial E. W.	inance ndustry B. Giv D. No of the fi import omatic in s Macl ke in d al Bank bank is before Commo	Teller In the comment of the comment	O. Curre count to monethe about the	ency ry (PNC ey as w ove utions s C. Pr nes ne of th the pu ike Fina owne D. PNC	rithdra Provision ne abov blic is k ancial I d bank GNDB riting i	ve is co known nstitut ?	rrect as; ion D.	Finance	

C. Is to act as middle person between companies and investors

B. Is to buy stocks from other countries

Q10. What is the role of an insurance company?

D. Is to import stocks from other countries

A. Lend money to ordinary people to do business

R Is	s to finance companies with money to expand their business
11. Is a re	SL B. NASFUND C. Pension Funds D. Investment Funds
A. N	SL B. NASFUND C. Felision y distance of the Bank of PNG located?
12. Wher	re is the headquarters of the burn of
A. N	At. Hagen B. Goroka C. Port Moresby D. Lae
13. What	At. Hagen B. Goroka C. Fort Moressy t is the purpose of savings and loans society operating in the country?
A 10	s to encourage individuals for fettrement savings
_	to individuals to buy assets
C 1	s to encourage people to pool their money to help them later.
	1 to horrow to set ill business
	the following are lending programs by National Development
	the term hire nurchase for equipment and vertice interests
A. 5	Large scale loans for commercial and rural development
В. І	Large scale loans for commercial collection
C. H	Have a lot of experience in debt collection
D. S	Small scale loans for agriculture development initiatives money in business.
Q15. Sto	ring of money is the same as money in business.
A.	Borrowing
В.	Saving
C.	Lending
D.	Safing
	A CONTRACTOR (40 NARDIC)
016 lis	d loop cocieties oppositing in rapid its.
a)	/d
marks)	a) (1 mark) Merchant Banks are also known as; (2 marks)
Q18. M	lerchant Banks are also known as,
Q19. Li	ist two key responsibilities of Central Bank? (2 marks)
а	1)
b	0)
	- SYPENDED RESPONSE (5 marks)
020 [C: EXPENDED RESPONSE (5 Markey Differentiate between Banks and Bank – like financial institutions?
Q20. L	
· ——	
	<<<<<< END OF THE TEST >>>>>> CHEERS TO YOU ALL >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
<<<<	CCCCCCCC END OF THE TEST CONTRACTOR OF THE TE

Figure 6.6: A test sample.

Source: Teacher Four.

The place-based learning approach emphasises hands-on, real-world learning experiences that helps students develop stronger ties to their community, and enhances students' appreciation for the local environment such as the banks, and creates a heightened commitment to live serving as active, contributing citizens of the local community (Sobel, 2005). However,

Teacher Four's teaching program made no reference to these places, suggesting that the teacher assumed students would be familiar with these places without ensuring or facilitating students experiences. Again, this indicates a misalignment between the teaching program and the test design that creates a gap between the curriculum-as-planned and curriculum-as-enacted.

DEPARTMENT OF BUSINESS STUD		genomenak espekar en reke ne genoe	90 (\$ 25) 	e e
GRADE NINE BUSINESS STUDIES A RESPONSIBLE CONSUMER	ASSIGNMENT	# 1 TERM: 2	WEEK: 5 TOPICS:	THE WISE AND
	171 SP 181	er in egen ^{er}	\$20 g at	
Group Name:	Class	• <u> </u>	Total Mark:	/ 25
P. 1		8 ¥ **	*occ	
Instructions:			W)	
✓ This assignment will be do	one in groups	of seven to	eight students to	a group
All students must particip	ate well to ga	in marks		
✓ You will do an oral presen	tation to the	class	W(r)	
✓ It is out of 25 marks		20 0000		
✓ Keep this paper safe and I	nand it in to y	our teacher l	pefore you do you	r presentation for
marking	- 12		, , , , , , , , , , , , , , , , , , , ,	. presentation for
		4.		
			ä	
TASK TO DO				
		,904	**	
Q1. Explain briefly what Wise and	Responsible	Concumar		
	Responsible	consumer m	eans in your own	words?
		38		
				tado sedap e espera de
				· · · · · · · · · · · · · · · · · · ·
	a a sa sa sa sa sa			Fa
			•	
Q2. You are required to go to the n	nain retailing	shops / store	es in Mt Hagen Cit	v particularly Rest
Buy, Rainbow, Dae Won, Mondo M	lini Mat. and		85	, particularly best
a) Compare the prices, qualit	v and quantit	v of five diffe	erent products /ac	ode that = = = =
buy from them.		,	Products /gc	ous triat we normally
b) You must also compare the	e arrangemer	nt / interior la	wout of these -t-	
c) State which of those store	is best for us	a to beneate	ayout of those sto	res.
c) State which of those store	is dest for yo	u to buy you	goods/products	that you need / want

Figure 6.7: A grade 9 class assignment.

NB: Each group must work on different products, not the same products. Keep your information

on a writing pad, A4 papers or an exercise book and do your presentation.

e) Do an Oral Presentation to the class.

Source: Teacher Four.

This place-based learning orientated assignment featured shops in Mt. Hagen. Students were to work in groups of seven or eight and visit the retailers in their own time to collect data. Students had to compare prices, quality, and quantity of at least five different goods or products that are popular with consumers. Moreover, students were to compare the interior layout of these

shops and use the provided criteria to identify the best and justify their choice. Students were required to make oral presentations in class based on the data. Though taking a class of 60 students out for place-based learning would be difficult (Section 5.3.4.1), arranging students to collect data for assignments in their own time should relieve the teacher of this problem. The teacher could employ the same approach for the weekly lessons to create authentic place-based learning opportunities.

As revealed in Chapter Five (section 5.3.4.2), Teacher Four had heard of place-based learning during teacher training at the University of Goroka. While the teacher's expressed not implementing PBL (as indicated in section 5.3.4.1 and 5.3.4), this assignment above explicitly revealed place-based learning. This suggests that Teacher Four's curriculum enactment practises are not isolated from place-based learning. The teacher's adoption of place-based practices, primarily through students self-directed community inquiry, indicated that teachers need careful guidance to connect the intended curriculum with the local environment to construct and enact place-based learning activities.

6.4.2 Teacher Four's data: lesson observation

This lesson was about budgeting, and important components of the "Being a Wise-consumer" theme:

Teacher:

Okay, this afternoon we will be moving onto another new topic, okay, which is...

Okay, the topic is national budgeting.

Okay, good, what is budgeting?

Class:

Students mumbled

Teacher:

One person, budgeting? (Names student C).

Students C:

Budgeting is the plan on how income or money is to be used.

Teacher:

Okay, budget is a written plan on how income or money is to be used, okay

Okay, I hope you are all clear?

Class:

Yes.

Teacher:

Okay, we must budget our income or money. Okay, it is a very useful way of planning for the use of our limited incomes. In a budget we include expected income and expenditure for a certain period of time. By doing so we will see how our money will be spent. We can also know if there will be some left over money to save, okay, so, it is important for all of us to do our budgeting, budget our income or money. Okay, a budget includes income and expenditure, okay, ah, let me tell you a story, write it down on a piece of a paper or an exercise book.

Okay, a mother, it's a story now, a mother brought, it's not a story you just take note of the, the sources of income. Okay, you will not write the whole story, okay, a mother, ah, on a Friday morning a mother took her coffee at the side of the road and sell them to the coffee buyers, okay. The coffee buyers bought her, her coffee and gave her twenty kina. Record that. Twenty kina, from selling her coffee she got a K20. Okay, on the same day, she brought her vegetables to the local market. She got one hundred (and) sixty kina. On the same day, her daughter who is working and living in town went home and wanted to visit her, she went there and she gave her a fifty kina. Okay, these are her sources of income in that day. Okay, how much it is (is it)?

Class:

Four hundred kina, Two hundred kina, (some call out)

160 kina plus 20 kina plus 50 kina.

Class:

Two hundred, (some still didn't get it right).

Teacher:

Two hundred and thirty kina (K230).

Okay, that was her, her income.

Okay, then she planned in her mind that with that income she will buy somethings, okay, she will spend to buy somethings so that, which will be expenses, okay.

So, with that two hundred thirty kina, she budgeted that money. That, ah fifty kina will be used to buy food. Fifty kina will be used to buy food, okay, food includes ah, protein, ah, a packet of rice, maybe sugar, tea, coffee, ah protein, it, that, ah, those are for K50.

Okay, she budgeted and ah budgeted another ten kina for soap, cooking oil and salt. Okay, another ten kina for her thongs, which were broken so, she has to buy a new one. Okay, the other twelve kina for battery, because they use torch. Okay, twenty kina for her girl who goes to school at Kitip secondary school. Twenty kina, five kina for her small daughter who goes to a primary school. Okay, let's add all of them up.

Class:

One hundred seven kina (a student called out).

Teacher:

Some are practising it (budgeting); some took the lesson for granted. If you save it until you go to tertiary institutions, come back and start a business with your savings, then you are a wise person.

Okay, you're so far income there is; your parents gave you a twenty kina. How would you budget that twenty kina in a week? Okay, I will select some people to go up to the front and they will present their budget to the rest of the class.

Three more minutes.

Okay, you should put your income on the other side, expense on the other side. Okay, see if you can save some money at the end of the day.

Okay, our time is up. Who wants to present his or her budget to the rest of the class? Put your hand up. Okay, let's hear from Student D, how do you budget your twenty kina; come to the front, in a week? Tell the class.

Student D

Bus fare for the week is K15 that is one kina fifty toea to and one kina fifty toea back, that is three kina per day times the five days gives K15. And five kina is for lunch, each day I usually spend K1. And there is no savings. (Some parts cannot be heard)

Teacher:

Yeah, Student D is saying that, ah, when his parents give him twenty kina in a week, okay, he use three kina for bus fare, one kina for lunch, every day, so, at the end of the week he does not have anything left. That means he do not do any savings. Well, he does not do any saving at the end of the week.

Who else? Who else? Okay, let's hear from Student E.

Student E:

When my parents give me twenty kina, ah from my home to school is K1 bus fare, so, I usually spend K5 each week, ah, ten kina each week from home to school, and school to home, that's ten kina and the other ten kina, ah, two kina for each day's, schooling days lunch.

Teacher:

K2 for?

Student E:

Ah lunch each day, and there's nothing left. That's all.

Teacher:

Okay, good, ah, Essentine is saying he uses K2 for bus fare each day,

Class:

K1 (one student is saying K1).

Teacher:

K2, K1 from home to school, and then in the morning, in the afternoon K1 from school to home, K2 and he spend, he spends, how much for lunch?

Class:

K10, K2 each day.

Teacher:

K2 lunch, and he's saying, ah, at the end of the week, he does not left with money, just like Student D.

Okay, who else has some money left over at the end of the week? Anyone?

Class:

No one (one student calls out).

Teacher:

Anyone?

No one.

Okay, that means, we do not save some money; maybe sometimes we do not budget too, therefore we buy some things that are not really need for us on the way, okay, maybe, we only have that money for lunch and bus fare, but, on the way maybe our friends send us a call me so we want to buy a flex card. Okay, which we buy something that is not on our, our budget. Do we sometimes do that?

Class:

No (One student calls out).

This teacher-talk dominant lesson reflected in the four-page teacher-student dialogue was about budgeting. A lesson without planned learning activities as indicated in the teaching program led Teacher Four to teach on 'ad hoc' basis. This was apparent when the students were to define "budget", an everyday term that has even found its way into most of PNG's 700 local languages. Thus, it was no surprise students gave the correct answer without hesitation. The curriculum intent is for students to experience the value of budgeting and the consequences of unwise spending, and teachers need to plan and facilitate place-based learning activities for students to experience. Students can experience the value of budgeting through the lived experiences of people invited to talk to the class. That is, when people express their lived experiences of financial constraints due to unplanned spending, students will then be more likely to appreciate the value of budgeting as well as the consequences of unwise spending.

When teachers teach without planning learning activities, or even teach in theory without inviting people from the community, as revealed in this study, this demonstrates a misalignment

between the prescribed curricular intent and the construction of the teaching program. For example, using the fictional story about a mother to illustrate wise budgeting and spending reflected unplanned learning activities. A real mother arranged to talk to the class after careful planning would have provided the students with real-life consumer experiences. Without the expression of lived experiences, the fictional mother's story did not emphasise the value and consequences of budgeting. Moreover, even students carrying out imaginary budgeting of PGK 20 per week to illustrate wise spending had no impact on the value and consequences of budgeting. Many students come from poor families and are not able to afford the luxury of spending PGK 20 every week. They just did the mental calculations of budgeting on a piece of paper without any practical effect of budgeting. These young students have no form of income experience to see the value in budgeting. The students would have shared the value and consequences of budgeting through the experiences of wage earners from the community if these people had been invited to the class. Discussing budgeting, as a concept in abstract when it is compatible with place-based learning creates a gap between the intent of teaching in real life situations and the teacher constructed curricular intent and enacted practises.

6.4.3 Teacher Four's data: post-lesson observation interview

A post-lesson observation interview was held to discuss place-based learning elements prevalent during the lesson:

Interviewer:

Okay, we'll start; you talked about budgeting and personal budgeting, do you think your lesson could apply to real life situations?

Interviewee:

Ah, real life situations you mean...

Interviewer:

In, in using real people or real situations rather than, ah, ah.

Interviewee:

Yes.

Like telling others who are already successful to come in and give them a....

Interviewer:

Yeah, but I mean in budgeting it is being wise, the students did it okay, but apart from the students, do you think you could use other people around the environment to talk about budgeting, how they spend their money and all these stuff?

Interviewee:

Yes.

Interviewer:

Who would be suitable people?

Interviewee:

I, I think I can get some teachers, yeah, some teachers to tell them on how they budget their fortnights.

Interviewer:

Yeah, that's one example... or what else, my ah, I am having in mind, how about the housewives, the mothers, and sometimes.

Interviewee:

Yes, yes, yes.

Interviewer:

I think they are the appropriate people.

Interviewee:

Yes, that's right.

Interviewer:

So, what really ah you know, what really informs you, or makes you think that budgeting is very important for the students and maybe for anybody else in the community?

Interviewee:

Ah, what I feel is ah, budgeting is important for the students because they do not receive much income, they just get ah, ah, and their only source of income is their parents, every day. So, it is much better to do budgeting every day.

Teacher Four was asked if budgeting in real life was important for the students. This was based on the premise of place-based learning which, according to Smith and Sobel (2010), can pair the real- world and classroom learning by grooming students to respect and be able to live with other people in any community they choose. However, this study revealed little evidence of place-based learning as a curriculum practice, so this question was to gauge the teacher's views for future curriculum practices in preparing students for sustainable livelihood after leaving school. Place-based learning is when student-learning experiences are attached to real, tangible things, places and people and can be accessible to every learning style such as whether students visiting certain venues and people, or people are invited to talk to the students in classrooms (Clark, 2008). However, the study revealed the teacher's unawareness of the prescribed curriculum which is designed to prepare students for the real world after leaving school. That led the teacher's misconstrued curriculum practises which defeated the purpose of preparing students for life. For example, when Teacher Four was asked, if budgeting was important to the public; the teacher responded with a "yes" three times without further deliberation. This demonstrates a lack of coordination between the curriculum, the local community and the curriculum enactment practices. The Business Studies Syllabus and Teachers' Guides are designed to help students understand how businesses influence and are influenced by the local, regional, national and global economy and social environments (DoE, 2006). Appreciating the value of budgeting and consequences of unwise spending in business and as well as one's personal life appears to be at bay in these discussions. In summary, although Teacher Four was trained in the overarching curriculum framework and place-based learning curriculum enactment policies while undergoing teacher training, they did not practise these when in the field. Much of the teacher's practises noted in this data analysis contradict the prescribed curriculum intent, except for an assignment. These discrepancies are attributed to the teacher's unawareness of the national curriculum policies and goals and underdeveloped teaching programs without learning activities. Teacher Four is categorised by Atomatofa et.al. (2013) as those who have awareness of the curriculum intent but develop a nonchalant attitude with little motivation to pursue further research and practise (section 3.5). Consequently, this creates a gap between the intended curriculum and practice. However, the place-based oriented assignment design provides a strong motivation to

promote place-based learning to narrow this gap. Teachers need encouragement and support to practise place-based learning.

6.5 Teacher Five's data

As discussed in the previous chapter, Teacher Five was aware of the NCS document but had not read it. This resulted in curriculum practices without responsiveness of the sanctioned curriculum policies, particularly place-based learning as a curriculum enactment approach. Moreover, Teacher Five focused on two goals: 1) the ambition of getting many grade 10 students to continue grade 11, and, 2) preparing others to start their own businesses in their rural communities when they leave school. The first goal reinforces the school enculturation of exam preparation, a practice that is prevalent in all PNG schools (see also Sections 6.4 & 7.5). The second goal adheres to the national curriculum ambition of preparing school leavers for rural living by engaging students in place-based learning activities. Hence, sections 6.5.1 to 6.5.3 of Chapter Six focus on Teacher Five's enacted curriculum practises with attention to place-based learning, in response to research question two.

6.5.1 Teacher Five's data: curriculum artefacts

A teaching program and an assignment constitute Teacher Five's document analysis artefacts collected upon request. Teacher Five, as the other teachers did, programmed for 10 weeks for term two of 2016 as in figure 6.8 below. However, the program does not specify the starting point, that is the term's unit or broad learning outcomes. This led to an underdeveloped teaching program with only the weekly sub-topics and lesson learning outcomes. A teaching program without broad learning outcomes signifies insufficient information on the key components such as developing place-based learning activities which should have been the core of a teaching program under the reform curriculum.

GRADE 10 BUSINESS STUDIES TEACHING PROGRAM TERM TWO 2016

Assessment Schedule

Weeks	Assessment type	Marks collected
5	Test 1	30
7	Assignment 1	20
9	Assignment 2	17
10	Exam	33
	Total -	100 marks

WEEKS	TOPICS	OBJECTIVES	CONTENTS	MATERIALS
		By the end of the		
		Lesson, Students will be		
		able to:		
1-2	No classes	No stds turned up	At the school	
3-4	Retailing and Whoelsaling	Identify and list the types of wholesalers List down the work of the retailer and the wholesaler State down the middle man in the chain of distribution follow the proper steps in calculating mark up	3types of wholesalers Wholesalers act as middleman in the chain of distribution 3 types of retailers Calculate the mark up calculate cost into store calculate the selling price	Business Practice in PNG Pg. 17 -38
5-6	Establishing a Small Business	Understand and list down the examples of small businesses practices in PNG define what a small business is planning of the business Initial Planning of the business	Purchase Contract The motive of making Profit Possession of capital or other assets Possession of certain skills	Liklik Business 2 nd Ed. Pg. 1-15.
7-8	Business Calculations	calculate the GST Percentage mark up cost of goods sold calculate net and gross profit calculate		Liklik Business 2 nd Ed. Pg. 162 -174
10	Exams			
11	WORKED ON	ASSESSMENTS		

Figure 6.8: Teaching program.

Source: Teacher Five.

Moreover, the combination of week 3 and 4 with retailing and wholesaling as weekly sub-topics but does not specify what each week would explore. Even the learning outcomes: "by the end of the lesson students will be able to identify and list the types of wholesalers, list down the work of the retailer and the wholesaler, state the middleman of distribution and following proper steps in calculating mark up prices as learning objectives" do not have planned learning activities. The program has no distinct learning activities for the two weeks, which means the learning outcomes are far from achievement. The prescribed reformed curriculum encourages teachers to create and facilitate place-based learning experiences aligned with the local environment to prepare most of the school leavers for rural living. This underdeveloped teaching program reveals a gap between the intended curriculum and practice. Business studies suggested topics are practical and can easily adopt place-based learning. For example, the weekly learning outcome "stating a middleman in the distribution chain" could use the Mt. Hagen local market where black-market mothers trade as the middleman. However, the program has no specified learning activities for students to engage to achieve desired outcomes and is therefore incomplete.

The program included content and learning objectives that would require the place-based learning approach. For example, the learning outcome for weeks 5 and 6 was: "understanding and listing examples of small business practices in PNG", which could have involved students carrying out simple guided surveys and/or interviews. Stating learning outcomes without learning activities creates ambiguity in the enacted curriculum practice. A teaching program that embodies the prescribed curriculum provides detailed notes and examples of adapting place-based learning activities.

Assignment

This assignment illustrated in figure 6.9 below consisted of calculating a balance sheet including: assets, liabilities, current assets, bank, stock, fixed assets, machinery, equipment, computer, liabilities, bank overdrafts, long-term liabilities, bank loans, capital and net profit. Some of these items such as machinery, equipment, and computers are concrete, while others are abstract such as liability. How these concepts have been covered during discussions in class is unknown because the teaching program does not mention learning activities, let alone place-based learning. Planning and facilitating place-based learning experiences would be appropriate;

for example, visiting a production site, such as a bakery, and identifying fixed assets, such as an oven, would create authentic learning.

GRADE 10 BUSINESS ASSIGNMENT # 2	WEEK 9	TERM 1	2016		
lame:		Class:	Date:	Total:	/20
tudy the Balance Sho salance Sheet as at 2					
Balance S	heet as at 21 Dec	ember, 2010.			
Assets			Liabilities		
Current Assets			Current Liabi	lities	
Bank	11 000		Bank overdr	aft 1000	
Stock	8 000	19 000			
Fixed Assets		15 000	Long term lia	bilities	
Machinery	6000		Long term lo	oan 9000	
Equipment	1200				
Computer	3000				
			TOTAL LIAB	ILITIES	
			Capital		
				on 21 Dec 150	
			Net pro	ofit 420	00
TOTAL ASSETS					
Use the above Balanc	e Sheet for Pita Ti	ading and answer th	e questions		
Q1. What is the Total	Asset?				
Q2. What is the Total	Fixed Asset?				
Q3. What is the total	liability?				
Using the Accounting Q4. What is the value			TIES		
Q5. What is the value	- 6 12 - L 11241 2				

Figure 6.9: Assignment.

Source: Teacher Five.

6.5.2 Teacher Five's data: lesson observation

Teacher Five taught a summary lesson on 'Business and the Law'. A section of the lesson transcript:

Teacher:

Okay, ah, take out your summary notes, please, and eh, there are two or three topics we haven't covered in this ah, unit or book, we will cover, take your...quick, quick.

Okay, we looked at business law, business and law, ah; this is one of those optional topics in grade ten we haven't covered, so...come inside (to late students)...that's chapter 15 of your summary notes, please, quickly. Chapter 15, ah, page 36.

Class:

Yes.

Teacher:

Okay, business law, or business and law is the topic. It's an optional topic in grade 10 units, which we haven't covered, ah, now we will go through this one, it says ah, most aspects of the business operations are affected by laws, okay, such, such aspects include ah, where the business is located, or the location of the business, ah, what it makes and sells, how and to whom it sells, or when it trades, etc.

So, if you are thinking of starting a business, your business is going to be protected by a law. You understand me?

Class:

Yes.

Teacher:

... So, these are all aspects where the law is, ah, like ah, you know, it's affected by laws. Okay, one of the first things that is affected by a law is, you registering your business name, ah. You want to start a business and you want to give a name to your business, so, in order for you to give a name, you are to be protected by a law. Okay, and that law is known as the business names act. Okay, it says, there are laws that cover what names business may use; an owner may use his or her own name, as the name of the business without having to register it. However, if a different name is used, it must be registered with the registrar, registrar of companies. According to the business names act, an act is a law, okay, so, maybe later you want to start up a business of your own, and you want to give a name to your business, then you have to follow this law, according to this law, business names act. So, everything that you want to do, deal with business have to be protected by a law. So, registering a business name is ah, it comes under a law called the business names act, an act is the law. Okay, let's continue.

To register your business, you will have to go through the office of the Investment Promotion Authority or IPA. You understand that.

Class:

Yes.

Teacher:

Any form of business that is being, ah carried out, ah, you have to register your business through the office of the Investment Promotion Authority, we have that office in Mt. Hagen too. Okay, in the Gapina building, there, there you will find that office. So, if you need to register your company or business, you have to go through the seventh floor and, ah, you find that ah, building there.

Okay, let's go on to the next ah, is laws concerning business location, where you locate your business is also affected by laws. Okay, page 37.

There are many land joining laws aimed at controlling the spread of business, they are also aimed at separating the residential areas from the different types of business areas. In urban areas businesses must obey the town planning rules, okay, in Mt. Hagen city I think we have some rules there concerning the location of the business, ah. So, these are known as the town planning rules, most of it is controlled by this group of people, ah, what they call, ah, interim ah. The interim ah in Mt. Hagen. Like, that's in Mt. Hagen but different provinces have their own city authorities. So, it says, these are regulations that control the development of land for particular purposes, ah, for example, some land may be set aside for industrial, or commercial activities. Other areas may solely for residential use and such areas no business activities (are) permitted, like for example, in Mt. Hagen city, places going down towards Dobel and Airport area is used for industrial purposes, have you seen that, big containers and big things have been, ah industrial areas have been used down there, so, in there no residential areas to be used ah, that area is set aside only for commercial, commercial purposes.

Okay, other areas may also be solely for residential use, and, in such areas, no business activities (are) permitted, so places where people live you are not supposed to do any commercial activities there. So, there are rules that control and guides ah, certain areas where you set up your business, so these are known as town planning rules.

Okay, we have another law that protects pollution. Okay, it says, industrial pollution occurs when industrial activities cause damage or harm to the surrounding areas, for example, industrial waste dumped into rivers may kill all the fish. Like in the highlands here we don't have any very big mining areas that we see but, ah, like for example, in Pogera, I have never been to Pogera, but I do not know where they used to dump their rubbish. Or, I mean not rubbish but ah,

Class:

Waste.

Teacher:

...waste, industrial waste. But, these are all controlled by a law known as environmental planning act. Okay, this is a, this law attempts to limit the amount of industrial pollution in PNG. So, this law requires all companies with activities that might harm the environment to prepare an environmental planning act, for the government, and government officials example (examine) carefully all, examine carefully all environmental plans they have received. So, in order for ah, organisation, or so, for example, like mining company to operate, they have to draw up an example, an environmental plan, okay, so in there they have to tell the government where they will dump their environmental, ah, sorry, industrial waste. So, this is all controlled, or, ah, the environmental planning act attempts to limit the amount of industrial pollution in Papua New Guinea, so that's to do with pollution.

Okay, the other thing is the licence, licencing ha, licencing to trade or licencing regulations in order for you to buy and sell, or, ha, not buy but sell something you have to have a licence, ah. Ah, for example, it says, trade stores, supermarkets, and other trading businesses must obtain a licence to trade from their local government council before they are allowed to operate. Okay, that is ah, some kind of ah, licence you will, you are given for you to operate a trade store, or a business or a second hand clothes, or what so ever. So it says, in addition separate licence must be obtained in order to sell certain items such as meat, okay, if you want to specialise in selling meat or, a liquor, okay, second hand clothes, petroleum etc. so, there are different types of goods that are being sold so you have to have a licence to trade or sell all those things. Ah, inspectors are concerned mainly with making sure that ah, businesses comply with health

regulations, so that is if you want to put up a trade store or whatever in Mt. Hagen town, you have to have a licence to trade, okay. Okay, that's the rules concerning licences.

The other thing is, laws to protect consumers, you and I as consumers, we are also protected by laws, okay. So, laws to protect consumers exist mainly to protect the health and safety of the customers, ah. We are consumers but we are also protected by law, and when the, when they buy goods and services, so consumer laws also protect consumers against purchasing goods of what quality?

Class:

Poor quality.

Teacher Five dominated the revision lesson by talking with little student engagement. This is a likely consequence of teaching without planned learning activities in the teaching program. For example, the teacher talked about registering a business with PNG Investment Promotion Authority (IPA) as the first step to start a business: then paused with a question, "(do) you understand that?" to the class who answered, "Yes", in chorus. A carefully planned lesson would inform the teacher to assist students to explain how they would register a business to illustrate their understanding. Instead the teacher then continued talking about the location of the IPA office in Gapina Building, Mt. Hagen. Whether the students in this rural school know where Gapina Building that houses the IPA is in Mt. Hagen is another unanswered question. Asking students to find Gapina building during the students' own time to report later in class would be helpful. However, the teacher dominated the lesson talking and the students just sitting through the lesson without any form of activity reveals teaching without planned learning activities.

The teacher also talked about laws concerning business location and used some of the industrial areas in and around Mt. Hagen as examples. When explaining the difference between industrial and residential areas, Dobel and Kagamuga Airport were mentioned. Residential areas are easy to locate as they are within the main centre of Mt. Hagen. However, most industrial areas are located within the outskirts of Mt Hagen making it difficult for people to identify them easily. Hence, industrial areas near Mt Hagen may remain a mystery for the students of this rural school. However, when students visit Mt Hagen in their own time with their parents or friends; they could collect information such as where the industrial and residential areas by using guided surveys and interviews or even questionnaires. The main issue here was that the classroom

practises did not match the intended curriculum. Place-based learning, which was missing in the teaching program, was also absent in the lesson, though the concepts discussed could have easily been adapted.

6.5.3 Post lesson observation interview

A post-lesson observation interview was held to discuss the lesson:

Interviewer:

Okay, I heard you talking about ah.

Interviewee:

Business law.

Interviewer:

Business law, and business name, ah, registering a company, business group and all these so, ah, it is very interesting but do you think those could be applied in the real world, when students leave the school, do you think they are applicable in the real world?

Interviewee:

Sure, I think so, that is if they start their own business and you know, thinking of registering their business name or, things like that.

Interviewer:

So, in your, even though you taught the lesson already but do you think that it would have been better if you, but unfortunately we don't have any big businesses around here but, do you think it would have been better if you used the real world, the real businesses?

Interviewee:

That right.

Yeah, I think so, if only we have a big business around here, we would invite that person, may be the owner of the business, how you have started and you know, how he have registered his business and all that, under this topic.

Interviewer:

So, it would have been better if you used a real-life situation. Now, the other question is that, what really makes you as a teacher think; when teaching those lessons, ah, they are going to, the lessons that you are teaching are going to be important, but what really makes you think that it's important for the students to know these concepts that you are teaching? What's really at the back of your mind?

Interviewee:

Okay, at the back of my mind, ah, not all of them are going to make it to grade 11 and 12 and further their studies. Some may go back to their village and may be start up a poultry project or you know, from small they start up to big, so, they can probably put this into practice. So that's why, at the back of my mind, I want them to do that so I am teaching them these.

Interviewer:

...they will go and participate in those, ah, activities so. So, again, ah, what do you think about the overall concept of ah, using real life situation or place-based learning. What, what, what do, what is your opinion on this one?

Interviewee:

Okay, my opinion is ah, l, I think, little bit of ah, place-based learning, theory, practical; I think that would be much better.

Interviewer:

Why?

Interviewee:

Because from, from, from experience, ah, like, from actually taking them into there; then they will have some good idea and maybe; later they might do that in their own, ah, like later, later on, practical life.

Interviewer:

So, ah, after these few days with me, ah, me advocating this ah, concept of ah,...

Interviewee:

Place-based.

Interviewer:

Place-based learning.

Interviewee:

Yes.

Interviewer:

What do you think? Do you think you would use that for future lessons?

Interviewee.

Yeah, I, I like that, I like that ah, place-based concept.

Interviewer:

Okay, ah, I encourage you to plan and teach some lessons (using the place-based approach).

This interview revolved around the teacher's perception of using place-based learning to teach business studies. The teacher concurred that the lesson would adapt well to place-based learning but raised the issue that there were no big companies or shops near the school. This study recognises that students equipped with guided survey forms, interview questions, and/or questionnaires to collect relevant data from businesses in their own time and then report back to their class later is more convenient than taking a class out. Students collecting data in that guided process will develop personal communication skills. Collecting and discussing empirical information would make learning lively and authentic.

Teacher Five's views were also sought regarding the application of business concepts in students' lives after leaving school. Students who want to start their own business later need to register their business, so they surely need the information was the teacher's response. Schools are change agents preparing students for the future and effective teaching and learning in Business Studies is important for economic and social change. The sanctioned place-based learning enactment approach is under used and needs advocacy for adaptation in teaching. The researcher's four visits and place-based learning advocacy convinced Teacher Five of its importance. Many teachers would be convinced about place-based learning through wide

advocacy. Business Studies is a practical subject and the teachers are willing to adapt placebased learning if there is adequate awareness and support.

Overall, Teacher Five had no awareness of the curriculum policies and goals, including place-based learning. The teaching program had no learning activities and the teacher dominated the lesson talking throughout the entire period without engaging students in any activities. However, the teacher's conviction and willingness to practise place-based learning is encouraging, especially considering Teacher Five had already taught a place-based lesson using the nearby mission store. This illustrates that the teacher was practising without thorough consultation of the prescribed curriculum, which advocates in providing a basic relevant education (as indicated in sections 2.0, 2.6, and 2.9), by using the place-based learning approach to prepare school leavers to sustain their livelihood after leaving school (sections 2.10 & 3.7). The learning activities, which should have been constructed in alignment with the local environment, were absent from the teaching program. However, the rural lived experiences of the teacher informed the teacher to teach a one-off place-based learning lesson, which implies that, Teacher Five is willing to, and can teaching lessons that are place-based if supported.

6.6 Conclusion

This chapter discussed data analysis in response to research question two: how do teachers enact the curriculum in alignment with the local context with attention to place-based learning? Curriculum enactment and an evidence of PBL approach has been presented using curriculum documents, lesson observation and post-lesson observation interview data.

The chapter revealed teachers in PNG teaching without awareness of the national curriculum policies, especially place-based learning as an enactment approach. The teachers turn to personal conceived goals, which influenced their curriculum enactment practises. The teachers' lived experiences and school enculturation practises, such as national examination preparation, also influenced their enactment practises. The former led two teachers to teach with minor evidence of place-based learning while the latter led to committing many resources in preparation for examinations (Sections 5.3.3.1, 5.3.3.2 & 5.3.5.1). Despite, Teachers' unawareness of the curriculum policies and goals, data collected revealed fragments of place-based learning. Place-based learning is a sanctioned curriculum enactment approach to encourage the majority of the school leavers to embrace their culture, way of life and the land. Given the merits of PBL having the power to pair students with the real world in preparation for

sustainable living in communities of their choice (Smith & Sobel 2010), this study advocates the opportunities for enacting it as the discussed earlier in this thesis. However, in order to translate curriculum policies successfully to practice, prevalent dilemmas and impediments need redressing.

Chapter Seven

Dilemmas of curriculum implementation: Research question three

7.0 Introduction

This chapter discusses participating teachers' perceptions of dilemmas associated with curriculum implementation, the focus of research question three. The research question asked about the dilemmas Business Studies teachers encounter when implementing a centrally developed curriculum. Curriculum implementation is changing the status quo by taking the curriculum documents as developed and putting them into practice (Print, 1988). It is the phase where teachers prepare and facilitate learning activities for students to experience according to what they (teachers) perceive the developed curriculum intent. Hence, research question three guided this study to identify specific dilemmas that impede effective curriculum enactment practices. The five key dilemmas this study identified are:

- unavailability of recommended curriculum support materials;
- lack of provincial education support in teaching place-based learning;
- tensions in big class sizes and curriculum goals;
- tensions in aligning assessment and curriculum goals;
- teachers' beliefs and competence in enacting a mandated curriculum intention.

The first two dilemmas were direct responses to research question three while the last three emerged during research questions one and two (post-lesson observation interviews) data collection and analysis. After the introduction, data analysis pertaining to the above dilemmas are discussed. This thematic arrangement portrays the diverse responses in answer to the research question. Not all participating teachers experienced or expressed the dilemmas directly and some even claimed they experienced no problems. However, as referred to in Chapter Six, review of curriculum practices revealed the challenges and impediments to implementation of PBL. It is important to note that the first three dilemmas are effects of external factors, such as conflicting policies, while the last two are teacher-related factors. Figure 7.0 illustrates where this chapter fits into the thesis.

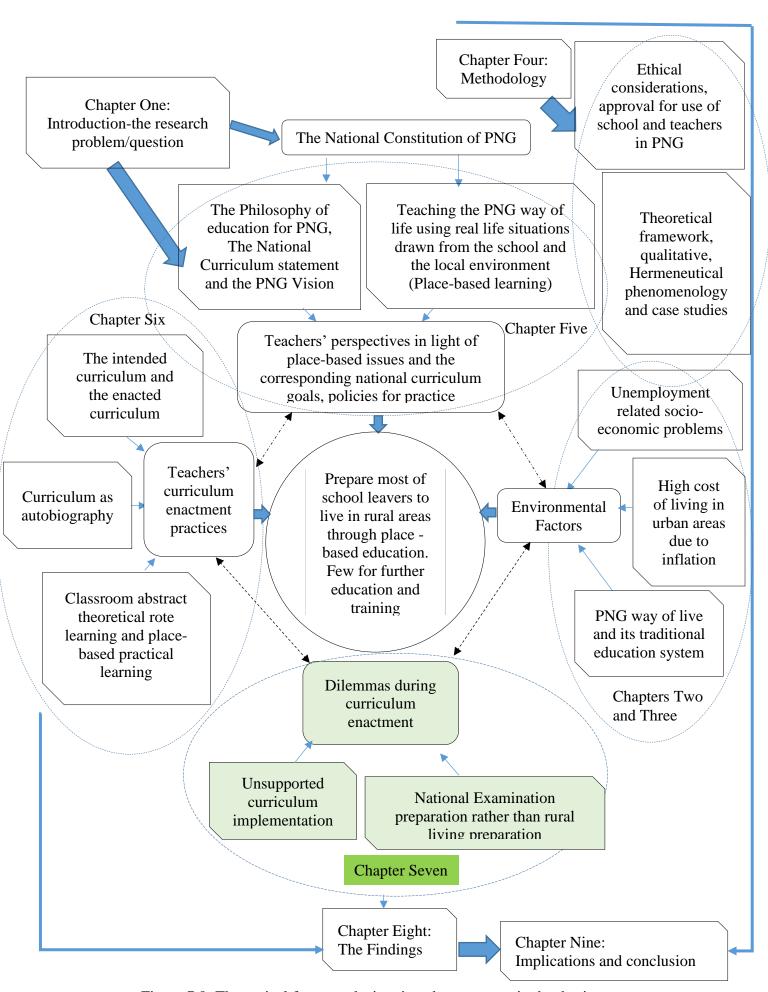


Figure 7.0: Theoretical framework situating chapter seven in the thesis

7.1 Lack of support curriculum materials

One dilemma identified is the lack of curriculum support materials as an impediment to effective curriculum implementation. The following is a short interview dialogue between the researcher and Teacher Five who raised the lack of support curriculum materials dilemma:

Interviewer:

Are there any difficulties that you experience when coming to teach business studies lessons?

Interviewee:

Yeah, I, I have difficulties, that's with textbooks, okay, at the moment we are using this outcome based textbook for grade 9s and 10s, but actually for grade 9s we have a textbook but for grade 10s I have never seen one, the outcomes based, so that's actually a, the problem that we have, we encountered.

Interviewer:

How about the syllabus and teachers' guides, have you sighted...

Interviewee:

Ah, we do not have, we have a syllabus and a teacher's guide, but the recommended books are not available.

Interviewer:

Okay.

Interviewee:

Ah, we are using that business practices in Papua New Guinea, but then the units are all over the place, the topics are all over the place, we have different authors writing the same topics but in different context so, that's, that's one of the problems that I have encountered in this school here.

Teacher Five perceived the lack of recommended textbooks as a dilemma because they believe the prescribed teachers' guides should have detailed learning activities rather than providing units with sample programs and units only. However, the "teachers' guides provides a sample program for each unit. It does not provide individual lesson plans" (DoE, 2006, p. 25).

This guides teachers to develop place-based learning activities for students to observe and do, rather than reading, writing, listening and speaking in the classroom, disconnected from real-life issues and activities. Such development is a curriculum reconceptualisation process teachers are fronted with in the enactment process (Sharma, 2012). Teachers have to meditate between the curriculum, the environment and the students, a swampy zone indeed, as Pinar (2000) stated, to reconstruct and enact a curriculum that is viable for meaningful and authentic learning (Lewthwaite et al., 2014). Teachers in this study appear to be clinging onto their conceived perceptions about the curriculum without, as Pinar (2000) stated, having a thorough consultation and meditation, or establishing an engaging conversation with the curriculum, they have. Instead of conversing with the curriculum, teachers are reflecting on their own values, beliefs, assumptions etc. about the curriculum. Hence, their enacted curriculum practices appear to be the dominated by standardised resources to guide and translate practice, which is somewhat at odds with the intended place-based approach.

If teachers were aware of the curriculum intent and the teachers' guide content, they would have realised that the teachers' guides provide sufficient content for implementation; aligning the learning units with the local environment to create place-based learning activities. As Chapter Five and Six revealed, the participant teachers did not realise that they were charged to enact the reformed curriculum with attention to a place-based agenda described in the national curriculum policies and goals. Instead of creating place-based, learning activities as the prescribed curriculum intended; Teacher Five and the other teacher participants sought the support textbooks for detailed learning activities. This implies that teachers are not convinced of the worthwhileness of the reformed curriculum intent: which is to be engaging students in place-based learning activities to prepare the majority of the school leavers for rural living.

The DoE (2003) recommended the textbooks to support the prescribed curriculum, not to substitute them. The underlying objective of the teachers' guides was to encourage teachers to create and employ place-based learning activities. Nevertheless, Teacher Five had been practising without adapting the sanctioned place-based learning approach, as evident in Chapter Six. The teachers' affinity for the use of de-contextualised, abstract learning activities motivated them to seek the recommended support textbooks with detailed learning activities. The recommended textbooks include Business Studies for Melanesia, Liklik Bisnis, and Business Practices in Papua New Guinea. Business Studies for Melanesia is the most popular amongst them as it is aligned with the syllabus and teachers' guides units and provides learning activities that are not found in the syllabus or teachers' guides. Hence, teachers use pre-prepared

decontextualised learning activities rather than creating contextualised place-based learning activities. Teacher One, who uses the Business Studies for Melanesia, revealed the following:

Interviewee:

The programs we teach, they base them on this business studies for 9 on outcomes based (education). And from what I have gathered from my other colleagues who have taught this book here, they said they have, for the last couple of years, they haven't been able to cover all these topics in this book. So, when looking at it...

Interviewer:

I am just wondering if it has been approved by DoE, ah, or, it is more like a resource book.

Interviewee:

The information in this ah, Business Studies in Melanesia, it goes quite well with the syllabus units here. Almost everything in the syllabus here is mentioned in this book here, so.

Interviewer:

Oh, okay...

Interviewee:

Ah, I am just following the trend they are following so, I just go by what they are using here so there is uniformity across the grade, eh.

Teacher One revealed the enculturated school practice of using recommended support textbooks such as "Business in Melanesia" rather than the prescribed teachers' guides because the later lacks detailed learning activities. If the teachers further explored why the teacher's guide does not have detailed learning activities, they would have realised the intention is for teachers to develop place-based learning activities. However, teachers were not practising place-based learning because of their unawareness of the overarching curriculum intent. They resort to support textbooks that provide abstract classroom-based learning activities.

The lack of support textbooks appears to be a problem because teachers believe the prescribed curriculum should provide abstract text-based learning activities rather than exploring the place-based learning intent. The participant teachers' enacted curriculum practices driven by

their beliefs and personal goals appear to be in contrast with the place-based learning which, according to Reyhner (2010), is the best approach to contextualise education by relating what students are learning to their cultural heritage, land and way of life. Hence, engaging students in abstract learning activities rather than place-based learning activities defeats the curriculum intent of preparing the majority of the school leavers for rural living.

7.2 Lack of provincial education support in teaching place-based learning

Teacher One raised the lack of provincial education support for teachers in implementing place-based learning. The following script is part of the interview dialogue between the researcher and Teacher One:

Interviewer:

Though you have never taught any lesson using the place-based learning approach, but in your normal teaching, have you experienced any major problems with curriculum implementation?

Interviewee:

Yes, ah, there are problems, ah, and the major problem is; ah, there is lack of support from the, ah, Provincial Education Division. As you aha see, the place-based education or learning is a good concept, ah, and you also stated that, ah, it, it is described in the National Curriculum Statement. The bad thing is, ah, no one at the Provincial Education Division talks about this, and ah, aha, yeah the National Department of Education, ah, is located in Port Moresby. Only if they, ah, inform us of this concept and, ah, provide us with the copies of the national curriculum statement, it would, ah, be, much better.

Lack of support by the provincial education division was an impediment for the teachers enacted curriculum practices. Teachers need guidance and support in developing awareness and agency in reconceptualising the curriculum; they need more advocacy, space, guidance and examples in enacting place-based learning. Moreover, if teacher agency was applied even without the provincial education support as a pragmatist philosophy (Biesta, 2005, 2009; Priestley et al., 2012), the teachers would have found the curriculum documents already in their schools to be sufficient for use. However, all the teacher participants had never read the NCS; two teachers did not even know of the existence of the NCS; one teacher had heard of it at

university and did nothing in the field, and two others saw or knew of it lying somewhere in the school but had never read it. A teacher's main function is classroom practice, which is to explore the reasons surrounding the shift from decontextualised classroom teaching and learning to place-based teaching and learning as a curriculum reform agenda. In other words, teachers need to explore the factors that would support them in becoming familiar with the education policy and curriculum changes. For example, the information that teachers needed to adapt place-based learning is in the curriculum documents they already have; however, since they are not aware of it, and without the provincial education support, the reformed curriculum is not enacted as intended. A lower secondary reform curriculum implementation handbook developed to assist education personnel and teachers in curriculum implementation calls for "active involvement and participation of provincial education authorities at all levels to ensure effective implementation of all aspects of the education reform" (DoE, 2006, p. 22) including the curriculum reform. Moreover, it stresses that:

Provincial education authorities must be familiar with the DOE policies and plans underpinning the reform, provide necessary facilities such as classrooms, libraries, workshops for practical skills, provide funding for staff development and training to assist teachers to successfully implement the reform curriculum, and ensure the schools implement reform curriculum and policy changes. (DoE, 2006, pp. 22-23)

Teacher One therefore believed that the provincial education authorities did not comply with the guidelines of the curriculum implementation policy. However, the teacher could have read the policy documents to find out what the reformed curriculum entailed, such as the place-based learning approach, rather than expecting provincial education authorities to visit the schools and inform them.

Provincial education support for teachers in implementing place-based learning in the PNG curriculum reform is important. A related well-known international impediment is that many well-designed new and/or reformed curricula lack effective implementation due to lack of support from the curriculum developers and policy makers (Section 3.7; Porter, 1980; Rogan & Aldous, 2005). As indicated in the follow-up interview conversations with the participants, teachers were willing to implement the place-based learning but they identified external factors, such as support from the provincial education authorities vitally necessary. Empowering and encouraging teachers to implement curriculum by enhancing them with the necessary skills and knowledge through appropriate support from the district education authorities is crucial (King-

McKenzie, Bantwini & Barry, 2013). Both the teachers and the provincial education authorities should work together in implementing the reformed curriculum.

7.3 Tensions between class sizes and curriculum goals.

Tensions between large class sizes and the achievement of curriculum goals surfaced with most teacher participants during data collection. For example, the researcher taught Teacher Four about place-based learning at university during their pre-service teacher training and was surprised to find the teacher not practising it. When asked why they were not practising place-based learning, the teacher stated the following:

Yeah, yeah, to teach them because one thing is, there is a lot of students coming in because of free education, ah, we have 60 students in one class, and one teacher, only one teacher is teaching 60 students in a class. So, it's a big problem to control the big number of students to take it (the class) out. Also, some students, most of them, they are having behaviour problems. (Teacher Four)

Taking a large class out of a classroom is indeed problematic. However, taking students to places, such as shops, workshops, government offices or even a parliament building to experience authentic learning is only one form of place-based learning. It may be difficult to take large classes out of the classroom as Teacher Four stated, but the teacher participant did not explore other forms of place-based learning to adapt. The other forms of place-based learning include inviting people from the community to talk to the class or asking students to collect data from real life situations using guided interview questions or survey forms using their own free time.

Teacher Three, who teaches a grade 10 class, also said they have 60 students in a class. The recommended class sizes for grade 9-12 secondary schools in PNG is 30 students per teacher (DoE, 2016; DoE, 2004; DoE, 1996a), approximately half the size of most participants' classes. Hence, the 1:60 teacher to student ratio is a breach of the education enrolment policy. The teacher to student ratio policy has not changed but there have been significant increases in class enrolments because of the government's Tuition Fee Free (TFF) education policy. Epri's (2016) case study that explored the impacts of large classes on student learning noted 50–88 students in three grade 9 classes of a school. These student numbers make a teacher's job difficult in a

classroom, even without the prospect of taking such large number of students out of the classroom.

The government's TFF education policy allocates funds according to student enrollment figures. Schools, therefore, increase enrollment figures to increase TFF education funds without considering the teacher to student ratio and the hindrances to effective teaching and learning in manageable classes. The TFF policy's primary objective was to expand access to basic education for all school-aged children in PNG. However, large class enrolments compromise quality education because large classes are usually difficult to manage and teach. A closer look inside the classroom and communities surrounding these schools revealed a shockingly low literacy rate, evidenced by many students being unable to read or write after completing primary education and even secondary education (Wilson, 2013). The Member of Parliament for Rigo, Honourable Lekwa Gure, summarised overcrowded classrooms reported by the National Newspaper as follows:

TFF is a good policy and is a relief for many parents, but as a result of the TFF policy, we now have many children enrolling in schools, which is wonderful but has also overcrowded the classrooms. We now have 60 to 70 students to one teacher ratio, which increases the workload of teachers and the quality drops. (Gure: We need more classrooms, schools, February 12, 2018, https://www.thenational.com.pg/gure-need-classrooms-schools)

Moreover, when the teacher to student ratio increases to more than 40 for every teacher, effective teaching declines while quality learning, in most contexts, begins to suffer (Benbow, Mizrachi, Oliver, & Said-Moshiro, 2007). The drop in the quality of education is not the only effect of overcrowded classes but it also affects intended place-based learning enactment practices. Figure 7.1 illustrates an overcrowded PNG classroom, caused by the TFF policy.



Overcrowded students is the result of TFF. 103 students were present this morning and 10 are yet to come.



Figure 7.1: Overcrowded classroom

Source: Patrick Petrus Keith on Facebook:

https://www.facebook.com/photo.php?fbid=2055789888001504&set=pcb.159

Place-based learning is an endorsed curriculum enactment policy because, according to Woodhouse and Knapp, (2000), it connects the students' curriculum activities with the multigenerational and multicultural dimensions of the society as they interface with community resources to prepare them (students) for real world. However, the envisioned intentions of place-based enacted curricula seem to remain pervasive while school enrolment figures increase and extensive resources are committed to preparing the large number of students to pass the national examinations. That defeats the whole purpose of the education reform of providing quality basic education for sustainable living in PNG thorough place-based learning. Place-based learning is sanctioned for practice to encourage school leavers to embrace rural living through locally based

experiential learning, however, the same government has introduced the TFF education policy making it difficult for teachers to enact place-based learning.

7.4 Tensions in aligning assessment and curriculum goals: examinations

Tensions between curriculum implementation and assessment, primarily preparing for national examinations, was another dilemma that surfaced. That nature of this dilemma was that, rather than enacting place-based learning as an endorsed approach to achieve the national curriculum goals, schools spend more resources and time preparing for examinations that benefit only a small number of school leavers. Many teachers believe in sending more students to the next stage of academia by getting them to pass the examinations. Consequently, when resources are committed to preparing for examinations, curriculum goals are less likely to be achieved because the focus shifts from teaching for community-based exposure to preparing students for examinations. Teacher Four responded to a query about their personal goals for teaching Business Studies by stating:

Yeah, for business study, we are training them to at least pass the national exam in grade 10, and, also we are training them as well to, they can, they can use the business study knowledge in their lifetime when they do not get any placement in grade 11. They can use the business studies skills to go back and at least become a businessman or a woman. (Teacher Four)

The teacher's foremost goal was students passing the grade 10 national examinations, rather than preparing the school leavers to start their own small-scale businesses. The teachers' responses implied the twofold curriculum goals of preparing school leavers for their return to the rural communities and starting small businesses and preparing others for employment (Sections 1.1, 1.2 & 2.9, DoE, 2003; DoE, 2001). However, resources, such as time and money are not, allocated equally; more is spent on preparing for the national examinations than covering the curriculum to prepare for the return of many to their rural communities. Teacher Five also expressed concerns about examinations when asked about what the teacher wants the class to achieve:

Interviewer:

What really, when planning for lessons, what really informs you, or, in other words, putting it the other way, what do want your students to learn when you plan your daily lessons?

Interviewee:

Okay, ah, in business studies, like, ah, ah, part of it is a, as you have mentioned, it's like ah, a place-based ah, like for example, we have business houses in Mt Hagen, ah. Okay, in some of the lessons, we are supposed to go and, ah, like, you know, see how they organise their what, their business something like that. Okay, in theory, what we are teaching is like; this is what they (business) do. So in fact, I am teaching them that, maybe when you fail your grade 10 you go out and you can do this and do that, if you do not get an offer to grade 11, so actually we are, like, when I teach them, I tell them like that. So my like what I want to do is like, I want them back, and either even start a little business of their own. That is my plan of teaching them.

Interviewer:

Apart from that any other problems that you experience, any other things that you want to talk about in terms of using the curriculum?

Interviewee:

Ah, using the curriculum, ah, ah, the topics are being picked here and there, there is no, one set of topics where we have to cover units, I mean, the units, units in, ah, especially with grade 10s I see. Like for example, in one of the exam questions that I went through with students yesterday. They picked up one of the questions ah, in ah, grade ah, 11 economics, demand and supply, which we didn't, in grade 10 we don't do that, I mean we don't cover the topic, demand and supply curve, they told us to draw the demand and supply curve. And with that I think they should, like, set a test of grade 10 units different from the grade 9, some of them are easy that, they are related to grade 9 topics, again they are putting it again to grade 10.

While the first comment does not imply preparing for grade 10 national examinations explicitly, the second response about the demand and supply curve implies covering old examination papers in preparation for the national examination. When Teacher Five stated, "we

are training them to at least pass the national exam in grade 10", they implied their efforts were being invested in examination preparations which benefits very few and not the majority who would exit the education system.

The teachers' emphasis on preparation for examinations were also influenced by parents who ensure examination preparation dominates over attention to local-based emphasis in teaching and learning. Parents maintain a strongly held view that paid employment is the desirable outcome after leaving school, and they see examinations as the stepping-stone, which their children should pass. As discussed in Chapter Two, this parental expectation is a remnant of the history of education in PNG as an almost guaranteed pathway to working in the colonial bureaucracy. It is the opposite today. There are many school leavers and very few jobs; hence, the focus is to prepare students for rural living rather than preparing to pass examinations for jobs that are limited.

The Department of Education prepares national examinations for grades 8, 10 and 12, which means students throughout the country sit the same test. The PNG education system controls and administers the national examinations through the Division of Measurements Services Unit. Students throughout the country sit the same standardised test which is viewed as a competition between the schools and teachers. Teachers therefore consider preparing their students well to do better than other schools and teachers which seems to be the cause of spending more resources in preparing for the national examinations. Preparing for examinations in most cases takes the form of teaching the content predicted to be examined and sometimes repeating the same content and past exam papers for weeks (Boit, Njoki, & Chang'ach, 2012). This practice defeats the place-based learning concept of taking classes outside into the real world. Place-based education includes conventional outdoor education to provide meaningful contextual experiences, in both natural and constructed environments (Boit et al., 2012) which the lower secondary curriculum implementation handbook explicates as follows: the reform curriculum has to prepare adequately the majority of school leavers (up to 85%) to live in their communities and conduct community-based subsistence and small-scale commercial enterprises, while at the same time support the other 15% of students who will find paid formal employment or enter tertiary education upon leaving school. (DoE, 2006, pp. 9-10).

That is why place-based learning, was sanctioned as a curriculum enactment practice to encourage students to embrace their culture, way of life and the land to live in rural communities after leaving school, which is now being interrupted by examination preparations. Table 7.0

illustrates the trend that is yet to show improvement. Schools should shift their focus from examination preparation to implementing place-based learning.

Table 7.0: School leaver statistics 2014-2016.

Year	Year 12	Transiting to	Exiting the	Information source
	students	next level	education system	
2014	21, 430	4, 500 (21%)	16930 (79%)	16, 930 Grade 12s will not enter tertiary
				schools (2014, October 6) The National,
				https://www.thenational.com.pg/16930-
				grade-12s-will-not-enter-tertiary-
				schools/
2015	23, 000	4, 700 (20)	18, 300 (80%)	Hayward-Jones, (2016). The future of
				Papua New Guinea: old challenges for
				new leaders.
				https://www.lowyinstitute.org/
2016	23, 000	5, 000	18, 000 (78%)	Salmang, (2017, September, 18) Limited
		(22%)/		space for Students, Post Courier,
				Retrieved from
				https://postcourier.com.pg/limited-
				space-students/
2018	72000	18 000	54,000 (72%)	No room for 50,000 grade 12s (2018,
		(25%)		October 30) The National,
				https://www.thenational.com.pg/no-
				room-for-50000-grade-12s/

7.5 Teachers' beliefs and sense of 'worthwhileness' of the place-based learning approach

It is evident that teachers' beliefs about curriculum influences their enacted practices. The term 'teachers' beliefs' is difficult to define and evaluate, yet, it is widely used in educational literature to discuss classroom teacher decision-making (Xu, 2012; Wallace & Priestley, 2011; Meirink, Meijer, Verloop, & Bergen, 2009; Pajares, 1992; Nespor, 1987). Classroom decisions

to facilitate learning are inevitable for teachers, especially when student-learning activities unfold during the enacted curriculum. Much of these decisions respond to the circumstances of the learning environment, which places the teachers in a situation where they have to make decisions on the spot according to their beliefs to complete the lessons. Teachers also make important decisions during the planning and programming phases. What teachers believe the curriculum to be is the beginning of the curriculum enactment process. In the context of this study, the teachers' beliefs about place-based learning as a recommended curriculum approach is the starting point that influences all other decisions and practices explored in this study.

The teachers' beliefs about place-based learning were not immediately apparent because they were not even aware of place-based learning. This section discusses the teacher beliefs about the curriculum that influences their enacted practices of which some aspects either create or are perceived as dilemmas and tensions, which somehow thwart the enactment of place-based learning elucidated from data discussed in Chapter Five to Seven. The following are some of the teacher beliefs about the curriculum:

- A curriculum with detailed learning activities, rather than the one provided with topics or units to create place-based learning.
- A curriculum that would prepare students to pass the national examinations.
- A curriculum that would prepare students to start their own businesses after they leave school, but the curriculum practices differed.
- School ethos and cultures rather than curriculum policies and goals.
- A curriculum to develop basic literature skills but practice is absent.

The teachers believed in a curriculum document with detailed learning activities rather than the prescribed Business Study Teachers' Guide which provides only the learning outcomes and expecting teachers to develop place-based learning activities. Teachers' beliefs, mostly conservative, express personal rationality in the enacted curriculum practices as well as the general daily nature of the school operations, and in the compelling influence of educational policies and systems from which these teachers find themselves to be paradoxically a social construct (Handal & Herrington, 2003). This means that the teacher participants beliefs about the curriculum align with the finding below that:

The literature indicates that many of these teachers hold behaviourist beliefs, a fact that has strong implications for the success of constructivist-oriented curriculum reform. In general, studies of teachers' pedagogical beliefs reveal the extreme complexity of

bringing about educational change, and largely explains the failure of many past reform endeavours. (Handal & Herrington, 2003, p. 59)

As this study revealed, the teacher participants beliefs led all of them to substitute the Business Studies teacher's guides with the recommended textbooks, which were found listed as references in the teaching programs. Teachers also believed in a curriculum that would help students pass national examinations and not the prescribed syllabus and teachers' guides intended to prepare students for rural living.

Moreover, the participating teachers believed in the school ethos and culture which focused on academic and de-contextualised learning rather than responding to policies that encouraged contextualised, place-based learning. For example, Teacher One who was using the recommended textbook as a substitute for the Business Studies Teachers' Guide claimed, "it had everything", referring to learning activities. In other words, Teacher One was preoccupied with beliefs about a curriculum that would provide detailed learning activities without awareness of the reform curriculum which encouraged teachers to meditate as an autobiographical process (Pinar, 2000) and teacher agency (Priestley et al., 2012) to create place-based learning activities. Instead Teacher One followed the conventional practices of using the support textbook as a substitute, which the teachers in that school had been using for many years. Hence, Teacher One, who had just transferred into that school in 2016, (the time of data collection) followed the status quo. Another teacher who said: "we were taught by yeah, you, our lecturer, to take the students out to the real world, but, ah, today I see that we are not taking students out to the real world" (Teacher Four). The "we" in the response implies the teachers as a collective, reflecting the broader school ethos (Section 5.3.4.2).

Finally, some teachers mentioned developing basic literacy skills and preparing school leavers to start their own businesses as their personal goals for teaching, although there was little evidence of this in their enacted practices. Overall, teachers displayed little evidence of enacting place-based practices and their beliefs similarly indicated little affinity towards this approach. All these teachers' beliefs and practices showed little regard for the worthwhileness of place-based learning. Although the endorsed curriculum enactment approach seeks to achieve the overarching twofold curriculum goals, the teachers focused on preparing students to continue further education and training for employment and largely neglected preparing school leavers for rural living. The teachers' beliefs and practices contrast with the endorsed emphasis on place-based learning.

7.6 Summary

This chapter explored the teachers' perceptions of the factors that influence the enactment of place-based learning. Most of the impediments identified were environmental influences. The dilemmas discussed included: the lack of provincial education support in teaching place-based learning, large class sizes and curriculum goals, tensions in prioritising and aligning place-based assessment and curriculum goals instead of emphasising examination preparation and teachers' beliefs about the curriculum. Provincial education divisions should guide teachers to translate the policy intent found in the policy documents, which teachers do not read. Teachers did not take direct responsibility for the lack of response to the curriculum emphasis. Instead, teachers expressed that place-based learning would have been, implemented, if they were aware of it.

Though the lack of support curriculum materials was raised as a dilemma, a deeper data analysis revealed that teachers resorted to textbooks more because they are accustomed to the support textbooks as a dominant pedagogical resource. The intent of the reform curriculum is for teachers is to create place-based learning activities from guides provided in the syllabus and the teachers' guides; hence, teachers do not really need supporting curricular for place-based learning, assuming they have the interest and competence to do so. The support textbooks should be used only for background information to create place-based learning activities. The large class enrolments can be addressed by government agenda and policy only. The current scenario is that, for as long as the government's TFF policy remains active, class enrolments will always be high. Finally, teachers' beliefs about the curriculum influences their practises and this study revealed teachers' beliefs and practices that contrast with the intention of the Business Studies teachers' guides of employing place-based learning as an enactment approach.

7.7 Conclusion

Teacher participants in this study revealed the realities and dilemmas that often impede curriculum implementation particularly the place—based learning approach. Most of the dilemmas surfaced because teachers' base their enactment practices on dominant modes of practice in schools or their socialisation into ways of doing things, maintaining the status quo rather than consulting the curriculum and the accompanying policy documents. The use of place-based learning as a curriculum enactment approach aims to prepare majority of the school leavers for rural living. The study also revealed certain educational policies designed to govern practice are in conflict impeding the enactment of place-based learning. If PNG aspires to achieve the

desired national curriculum goals, then the dilemmas discussed in this chapter need to be addressed to help shift teachers' personal beliefs about the curriculum, reconsider the enrolment and the TFF policies and adapt place-based learning as a common curriculum enactment approach.

Chapter Eight

Findings and discussions

8.0 Introduction

This chapter discusses the findings pertaining to the intent of the study. The intent was to explore how Business Studies teachers perceive PNG's national curriculum goals and policies and align their practices with place-based learning experiences. It also explored their enacted curriculum practises and investigated their perceptions of factors that impede implementation (Section 1.2). These intentions were explored with attention to the following research questions:

- 1. What are the practising business studies teachers' perceptions of the place-based learning concept and its relatedness to the PNG's National Curriculum goals?
- 2. How do teachers enact the teacher curricular intent informed by the prescribed curriculum in alignment to the local context with attention to place-based learning?
- 3. What (if any) dilemmas do Business Studies teachers experience when implementing a centrally developed curriculum in a country of diverse cultures, values, languages and even the geographical settings?

The research focused on what teachers construed of the curriculum designated for implementation, their preparedness for enactment and eventually their enactment practices with attention to place-based learning considerations. Place-based learning is a pedagogical approach that is deeply rooted in the local environment (Clark, 2008; Smith, 2002; Smith & Sobel, 2010; Sobel, 2005). Place-based learning provides the foundation for translating curriculum into authentic learning experiences for the students aiming to achieve PNG's twofold national curriculum goals: (1) to prepare for the return of most school leavers to their rural communities for sustainable living; and (2) to prepare those with the academic potential to pursue further education and training for employment (DoE, 2003). PNG developed this twofold goal to address an emerging and persistent scenario where approximately 80 percent of the school leavers are forced out of the education system while 20 percent continue tertiary studies annually (Table 7.0). To address this situation, teachers are encouraged to develop and facilitate place-based learning activities for students to experience, which would encourage them to return to their rural communities (DoE, 2003). Figure 8.0 illustrates the focus of this chapter and its position in relation to the other chapters of the thesis.

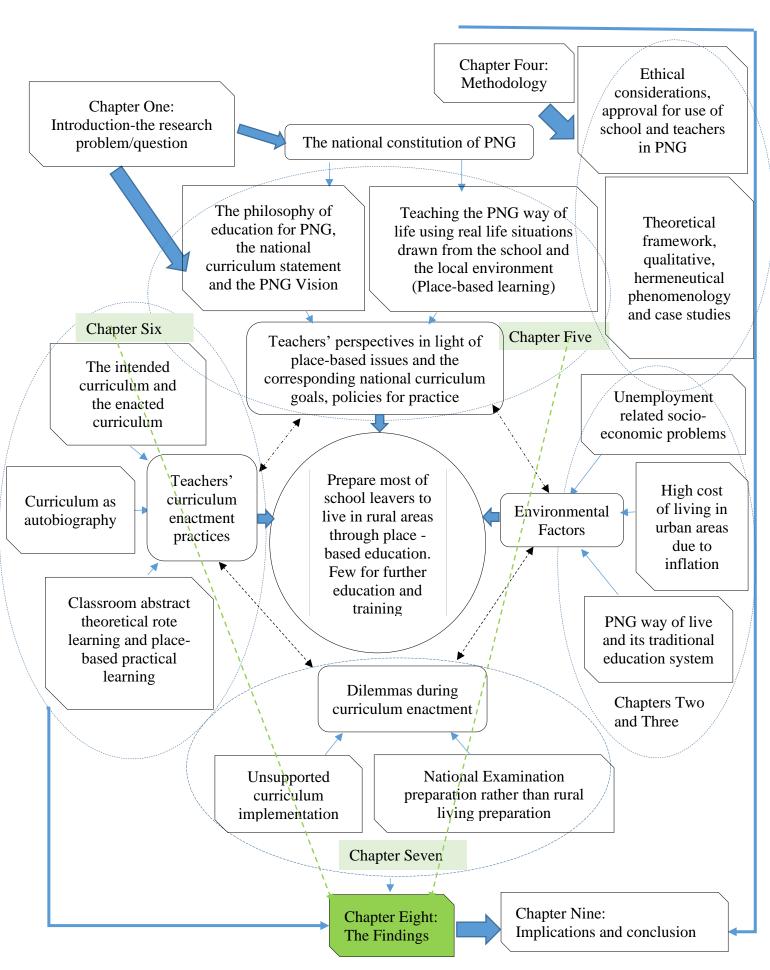


Figure 8.0: Theoretical framework situating Chapter Eight in the thesis.

The government believes that when students engage in place-based learning activities, they will appreciate and embrace their land, way of life and values, and, by doing so, they will be encouraged to choose to live in their rural communities (DoE, 2005). The DoE (2003) therefore encourages teachers to prepare and engage student learning in real life contexts by relating the subject skills and knowledge to real-life situations. Akin to this DoE (2003) aim, emphasis is Smith's (2002) concept of place-based learning that resituates learning from abstract ideas addressed in decontextualised learning in classroom settings to the local context. The study explored the teachers' curriculum practices with attention to the curriculum polices and the place-based learning approach. The major findings are organised into themes corresponding to the three research questions:

- 1. Teachers' perspectives of the national curriculum goal and polices.
- 2. Place-based learning as an enacted curriculum practice.
- 3. Dilemmas of curriculum implementation.

Discussions after this introduction begin with Section 8.1 addressing the research question one findings. Section 8.2 presents findings about place-based learning as an enacted curriculum relating to research question two while section 8.3 covers curriculum implementation dilemmas pertaining to research question three.

8.1 Teachers' perceptions of the national curriculum goals and place-based learning

How teachers come to perceive the national curriculum policies and goals with attention to place-based learning and their implementation practices is the government's chief educational goal. This study explored the teachers lived experiences of place-based learning likened to what Payne (2003) gestured as an ontological exploration to understand the teachers' perceptions of "being" in their enacted curriculum lifeworld of curriculum documents. This is the existentialism of being-in-the-world which would shape and project the possibilities for being-in a better future world of enacted curriculum practices (Cole, 2010; Delancey, 2009 & Heidegger,1977). In other words, knowing exactly what learning outcomes students are to achieve after the lesson would help shape the type of place-based learning experiences constructed for improved enactment. Research question one, focused on the practising Business Studies teachers' perceptions of the place-based learning concept and its relatedness to the PNG's national curriculum goals.

The unstructured in-depth interviews suggested by the phenomenological research approach which the study employed generated rich evocative descriptions of the teachers' perceptions of the curriculum policy and goals (Cole, 2010; Dinkins, 2005; van Manen, 2006; Roulston, 2010). However, the study revealed the participating teachers being largely unaware of the NCS with its overarching curriculum goals; and, for this reason, place-based learning, as intended by the curriculum, was mostly a new concept for them.

Place-based learning, the focus of this study, is not a new concept. It is both an old and a new phenomenon which was central to all forms of education prior to the invention of common school systems that cut the ties to the local communities (Gruenewald & Smith, 2008). This study in concurrence reveals in Sections 2.2 and 5.1 that place-based learning has always been part of the PNG traditional education system during pre-colonial days that continues to exist today. However, the study noted as Gruenewald and Smith (2008) stated that the formal Western Education system introduced during the colonial era continues to cut the students' ties to the local communities. Backed by the PNG national curriculum enactment policy this study advocates for teachers to adopt place-based learning in their curriculum practices to redirect the students' attention to their rural communities. The study's advocacy is not alone; John Dewy and William Heard Kilpatrick also spoke about the importance of incorporating student's experience of communities and places into their formal education in the last century (Gruenewald & Smith, 2008; cited in Dewey,1988; Kilpatrick, 1914). This study further revealed an issue similar to what Dewy and Kilpatrick noted earlier in the 20th century that the tendency toward centralisation and standardisation of formal education systems in the broader society continues to marginalise the place-based learning perspective and the practices advocated. Attributes that marginalise the enactment of place-based learning revealed by this study include teachers being unaware of the national curriculum policies and goals which led them to rely on their beliefs about the curriculum and conceive personal goals. The personal curriculum goals conceived are to get as many students as possible to pass the national examinations and prepare those who cannot pass the exams to start their own businesses. The former is discussed as one of the dilemmas in section 8.3 because more school resources are consumed by examination preparation while the curriculum is not adequately covered. The goal of preparing students to start their own business is expressed by the participating teachers, yet their practices lacked evidence because they were not aware of the curriculum policies and goals.

Teachers play a pivotal role in the implementation process of the intended curriculum. More explicitly according to Ross (2017), the intended, planned, and enacted curricula go hand

in hand in the implementation process only through teachers' interpretation of the curriculum. In this critical situation "it is the duty of the classroom teacher to translate the curriculum goals from theory to practice" (Atomatofa et al., 2013, p. 340) to achieve the desired national curriculum goals. However, this study revealed that the teacher participants were unaware of the national curriculum policies and goals which they were to practice and achieve as stated in the PNG national curriculum statement (DoE, 2003) because no one told them. This implies that there are teachers who are not aware of what the curriculum entails and yet lack interest to find out for themselves what the curriculum changes, goals, and objectives are (Atomatofa et al., 2013). More organized in-service programs for teachers at the provincial, district and school levels would address this because the information they need in implementing place-based learning is with them, somebody needs to lead them to the information.

8.2 Place-based learning as an enacted curriculum practice

The second research question explored the enacted curriculum practices aligned with the local environment with attention to place-based learning. The three data types generated pertaining to research question two were analysed and discussed in Chapter Six including curriculum artefacts, lesson observations and post-lesson observation interviews. The artefacts such as planning documents and assessment samples revealed:

- Underdeveloped teaching programs without learning activities.
- Place-based learning connotations in the document artefacts but with little carry through in practice.

Teaching programs are instructional plans that represent a teacher's consideration of the prescribed curriculum to guide the facilitation of learning activities in the enacted curriculum. This postulates learning activities as the core element of the teaching program because all "good intentions, fine goals and objectives, excellent content, flawless evaluation procedures: then, are all for naught if the learning activities in which students engage do not provide them with experience whose consequences are educational" (Print, 1993, p. 164 cited in Zais, 1976, p. 350). This concurs with Print's (1993) definition of learning activities "as those activities offered to learners in the teaching-learning situation which are designed to acquire the designated content and thereby achieve the stated objectives and more broadly, the curriculum's intent" (pp. 164-165). To develop appropriate learning activities that will achieve the intended goals, teachers

need to know what the curriculum entails and what the learning outcomes are to guide them in developing a teaching program.

However, this research found most teachers had underdeveloped teaching programs in terms of learning activities. Some teachers' programs even omitted stating learning activities while others included very broad statements without details of how the students would experience the learning activities. Moreover, none of the programs mentioned place-based learning. While this omission might not reflect the experienced curriculum and the linkages, examples and context teachers draw in, it is not used to underpin approach. The underdeveloped programs led to teacher-dominant lessons without student activities or open dialogue. Concepts that could have been adapted to emphasise place-based learning in alignment with the local environment were, instead, taught using the conventional abstract approach. Teachers' beliefs about the prescribed curriculum and their personal conceived goals led teachers to deviate from achieving the overarching curriculum goal through place-based learning.

Document artefacts, such as tests, assignments, and project samples were forms of assessment that manifested the past curriculum enactment practices. In other words, the document artifacts pertaining to assessment portrayed what was covered in the enacted curriculum. The DoE (2003) advocates the assessment and reporting policy to ensure feedback is provided for the learners and to inform teachers on students' progress. In practice, this "means that teachers identify assessment activities based on the learning outcomes described in the syllabuses (and teachers' guides)" DoE, 2003 b, p. 6), which are assumed to have been programmed and covered in the enacted curriculum. The assessment artefacts revealed some place-based learning connotations. However, the teaching programs and lessons observed had no evidence of place-based learning. The local business premises captured in the document artefacts were used as examples for convenience, without any considerable adaptation or emphasis in the enacted curriculum. Only one project sample revealed place-based learning features such as collecting data from business houses in the local town during the student's own time and reporting the findings later in class. In all, as well as bearing witness to past enacted curriculum practices these document artefacts also provides an historical insight to formulate improved curriculum practices in the future (Bowen, 2009). That is, the PNG education system needs to advocate the importance of curriculum policy, and place-based learning as practice with emphasis on creating learning activities.

Lesson observation was the second data type for research question two. All the teacher participants taught a lesson for observation at the researcher's request. Lesson observation is a fundamental qualitative inquiry employed to discover the complex interactions in natural settings such as the enacted curriculum practices in the school settings (Marshall & Rossman, 2006; Patton, 2015). The lesson observations revealed teacher dominated lessons rather than the anticipated teacher facilitated lessons that should foster student-directed learning activities. Teachers raised concerns that large student numbers hindered taking classes out for place-based learning activities. Teachers dominated the observed lessons without student activities or their input. Some lessons had no planned learning activities for students, as revealed by teaching programs, so, teachers just talked throughout the entire lesson. Overall, teachers' practices revealed a gap between the curriculum-as-intended and curriculum-as-enacted.

The study also revealed two teachers employing place-based learning in some way in previous years. The two teachers were not aware of place-based learning as a sanctioned approach. However, the teachers' lived experiences of the current unemployment-related socio-economic problems encouraged the teachers to prepare a better future for their current students (Akinbode, 2013; Dewey, 1934). Hence, the two teachers showed their classes how bookkeeping is done in real-life as in place-based learning, which according to the teacher agency theory, is the configuration of influences from the past, orientations towards the future and engagement with the present (Biesta et al., 2015). The prevalence of about 80% of students leaving school without further education opportunities or jobs influenced these two teachers to encourage small-scale business activities after leaving school.

Place-based education has the potential to develop young people to become valued members of our communities by engaging them in worthwhile place-based learning experiences that contribute to the betterment of their communities (McInerney et al., 2011). However, the teacher participants tended to consider both learners and the Business Studies Teachers' Guides content as fixed, rather than interactive and malleable, and assumed that if something is taught, the students should learn what was communicated (Prawat, 1992). If they did not learn, "then the problem is attributed to the inadequacy of the students' (stable) motivation" (Turner, Christensen & Meyer, 2009, p. 362 cited in Floden, 1996), and not the enactment strategy employed. In other words, if students are not acquiring the intended knowledge, skills and values, then it is because of the curriculum and the students, and not the teaching strategy employed. These perceptions widen the gap between the intended place-based learning as a curriculum enactment approach and enacted practises that unfold.

Post-lesson observation interviews were the third data type generated for research question two. Post-lesson observation interviews enabled the researcher by means of consensus analysis to establish the viewpoints of the participants from the inside out about the lessons taught (deMunck & Sobo, 1998; Kawulich, 2005). Hence, it was an opportunity to explore and explain place-based learning features, which guided the teachers to highlight values and benefits of such approach. In addition, the post-lesson observation interviews provided the opportunity to ask questions to understand more about the lessons, especially about place-based learning considerations, which the researcher was not able to do during the lesson (Kawulich, 2005). The place-based learning values and benefits with "place" as the premise "is a lens through which young people begin to make sense of themselves and their surroundings" (McInerney et al., 2011, p. 5). However, the post-lesson observation interviews identified that the teachers' focus of practice was primarily decontextualised, abstract learning, but, with prompting, some affinity for adopting in the future a place-based learning approach transpired.

Seeing lessons without place-based learning the researcher used the post-lesson interview to discuss the possibilities of enacting the curriculum, including the potential benefits and the barriers to place-based learning. Teachers generally, as revealed through the teacher participants, thought student learning would have been authentic if the place-based learning approach was employed However, large class enrollment with 60 or more students and lack of education department support were recognised as major hindrances in enacting such an approach. With the absence of system support, such as the provincial education division personnel for critical perspectives in the reformed curriculum, particularly the place-based learning concept, teachers were, as anticipated, more inclined to conform to narrow, technicity conceptions of their enacted practices (McInerney et al., 2011). In summary, the teachers' responses to research question two revealed that:

- Place-based learning approach lessons were taught the previous years by some participating teachers and were informed by their own lived experiences and local awareness priorities than nationally prescribed curriculum intent.
- The enacted curriculum (in the form of document analysis artefacts and the lessons observed had little place-based learning connotations (Section 8.2).
- Teachers' lack of awareness of the national curriculum intent, coupled with their beliefs about the curriculum, led to enactment according to their beliefs about the curriculum (Section 6.6).

8. 3 Dilemmas in curriculum implementation

The dilemmas and tensions impeding curriculum implementation discussed in this section were outlined in Chapter Seven in response to research question three. The study revealed five key dilemmas. The first two listed below relate to what the teacher participants perceived to be issues. The next three were tensions created by the PNG education policies that came into conflict with practice. The dilemmas and tensions identified are as follows:

- Unavailability of recommended support curriculum materials.
- Lack of provincial education support in teaching place-based learning.
- Tensions in big class sizes and curriculum goals.
- Tensions in aligning assessment and curriculum goals.
- Beliefs and sense of 'worthwhileness' of place-based learning.

Teachers believed the lack of recommended support textbooks to be a dilemma because the prescribed Business Studies teachers' guides the teachers used only provided units to cover without detailed learning activities. Consequently, teachers sought and used the recommended support textbooks as teachers' guides because those textbooks provide detailed learning activities. The support textbooks are resources designed and recommended to help translate the prescribed curriculum intent into interesting, effective, relevant and inclusive learning activities in the classroom (Stabback, 2016). However, teachers substituted the teachers' guides with the recommended support textbooks without exploring the reasons as to why the teachers' guides are without detailed learning activities. The lower secondary teacher guide provides only sample programs for each unit without detailed lesson plans and expects teacher to develop them in alignment with the local environment (DoE, 2006) (Section 7.1).

Participating teachers who used the support textbook, "Business in Melanesia", stated that almost everything in the Business Studies Syllabus and Teachers' Guides were in the textbook with detailed learning activities and most teachers in those school were using it for teaching. Even the teaching programs analysed in this study had the textbooks listed as references. Instead of mediating (Pinar, 2000) between the syllabus and teachers guides as the intended curriculum, the students they are to teach, and the local context, the participating teachers appeared to be following textbooks. In other words, the practising teachers were mediating their own school experiences, and the school environmental factors became dominant rather than the prescribed curriculum. The implication is that without finding out why the teachers' guides provide only the units without detailed learning activities, teachers enacted the

curriculum according to their belief of how the curriculum should be. There is evidence in this study which indicates teachers curriculum practices being highly influenced by their beliefs linked closely to their values and views of the world as well as their understanding of the places they dwell in (Xu, 2012), including the enacted curriculum practices. These issues transpired because of the teachers' unawareness of the prescribed curriculum intent which created a gap between curriculum intent and practice (Section 7.1).

The lack of support for teachers from provincial education divisions to help implement the reformed curriculum was another teacher perceived dilemma. Provincial education authorities rarely visit the schools, the teachers claim, and when they do visit the schools they do not talk about place-based learning. This concurs with what Rogan and Grayson (2003) noted, that many times the attention and energies of government officials and politicians focus on the 'what' goals desired from the curriculum changes, while neglecting the 'how' (implementation) strategies, leaving teachers with little or no idea of what the reformed curriculum entails. Though provincial education support is vital, the basic information teachers need to implement the intended curriculum is in the curriculum documents that teachers already have in the schools.

Large or overcrowded classes surfaced as a tension to achieving the desired curriculum goals through place-based learning. Teachers around the world face many obstacles when attempting to teach overcrowded classes that exceed the generally accepted ratio of 40 students per teacher (Benbow, Mizrachi, Oliver, & Said-Moshiro, 2007). Class enrolments in PNG schools are driven by the government's TFF education policy to increase, which impedes effective teaching and learning. Large classes or overcrowded classrooms are those with enrolments exceeding the ratios recommended by educational policies of a country (Asodike & Onyeike, 2016). For example, the National Education Plan 2015-2019 stated the teacher-student ratio for grade 9 to 12 by 2014 onwards should be 1:31; yet, the grade 9 and 10 classes in the participating schools had more than 60 students. Epri's (2016) recent study on student absenteeism in PNG revealed schools with class sizes that ranged from 50 to 88 students (Table 8.0 below) making it difficult for both students and teachers to move around freely in the classroom. Large enrolments affect teaching and learning creating difficulties in achieve the desired curriculum goals.

Table 8.0: Class enrolments in three grade nine classes in Port Moresby, PNG.

	9B	9C	9F	Total
No. on class list	85	75	87	247
No. during day of class observation	54	67	76	171
Number absent	31	8	11	50

Source: Epri, (2016, p.16).

Table 8.0 demonstrates ratios of 75 to 85 students per teacher contrasting the latest class enrolment policy of 1:31 teacher to student ratio of the 2015-2019 National Education Plan (DoE, 2016). The teacher participants raised concerns that large classes would be difficult to manage if students were going out to a market or shop for place-based learning activities. Research from several countries revealed that overcrowded classroom conditions hinder the teachers' attention to individual students for one-on-one interaction that, in turn, slows down the progress of students' learning (Epri, 2016; Yaman & Uygulamada, 2009; Earthman, 2002; Burnett, 1995). The tension between large classes and the achievement of the curriculum goals will continue to prevail in PNG for as long as the government TFF education policy continues to exist (Section 7.3) without boosting the teachers with the appropriate resources to address the class sizes.

Another tension that surfaced was between assessment and achieving desired curriculum goals. Assessment, in this context, is the attention paid by the schools in preparing for the grades 8, 10 and 12 national examinations. Teachers experienced in preparing students for examination carefully study the patterns of examination and then concentrate on teaching those areas, by going through old examination papers at the expense of the prescribed curriculum content (Hedwick, Mavies, Madungwe, & Mandiudza, 2013). This surfaced during the interviews when teachers talked about grade 10 examinations. PNG has a two-fold curriculum goal, to prepare majority of the school leavers for their return to rural communities, and to prepare those with academic capabilities to pursue further education and training for employment (DoE, 2003). However, the national examination results in grades 8, 10, and 12 are the deciding factors for entry into these two pathways. Those who pass the national examinations transit to the next level while others exit the formal education system. The grade 12 exit point is crucial because only 20 percent enter tertiary institutions for further education and training as indicated in Table 7.0. The

remaining 80 percent leave the formal education system because of limited spaces for further education and training opportunities. The government's concern is this 80 percent of school leavers who usually migrate into urban areas searching for the limited jobs instead of returning to their rural communities. Despite this 20/80 percent segregation, schools strive to send as many students as possible for further education by adequately preparing them for examinations rather than covering the intended curriculum and this creates a tension. Schools should concentrate on covering the curriculum to encourage rural living through place-based learning, rather than focusing on national examinations for the benefit of only few students (Section 7.4).

Moreover, this study revealed a very important relationship between the teachers' beliefs about the curriculum and their curriculum practices. Many teachers revealed having diverge beliefs of the curriculum and conceived personal goals rather than the prescribed curriculum intent that emphasises place-based learning. Teachers were found to consider both the learners and the subject content as fixed entities rather than facilitating interactive place-based learning activities for authentic learning (Turner et al., 2009; Prawat, 1992). In other words, teachers believe in covering a fixed curriculum without exploring and creating meaningful learning activities as desired. This implies that the teachers' enacted curriculum practices deviate slightly from the intended place-based learning curriculum policies for practice, which makes it difficult to achieve the desired gaols. Place-based learning therefore needs wide advocacy and professional support to shift the teachers' beliefs about the curriculum (Section 7.5). The summary of findings for research question three were:

- Teachers perceived a lack of support from the education department in implementing the curriculum as a dilemma without reading the curriculum policy documents thoroughly.
- Teachers also perceived the lack of support curriculum materials, especially support textbooks as a dilemma.
- Large class enrolments proved difficult for teachers to employ place-based learning as a curriculum enactment approach.
- Preparation for national examinations defeats the purpose of teaching the prescribed curriculum using place-based learning to achieve the overreaching curriculum goals (Section 7.6).

8.4 Conclusion

The core activity of any education system is the enacted curriculum. Curriculum policies designed to achieve the desired goals shape the enacted curriculum process; hence, curriculum policy and practice go hand in hand to achieve the intended goals. Some of the participant teachers' beliefs about the curriculum, such as developing students' literacy skills base and passing of many students to continue their education, were not trivial compared to the prescribed goals. However, others, such as preparing students to start their own business, matched part of the national curriculum goal. Yet appropriate practices to achieve the curriculum goals is lacking. The sanctioning of place-based learning as a curriculum enactment approach was to achieve the national curriculum goals. However, teachers lacked knowledge about place-based learning, and there was little or no evidence in the enacted curriculum practices except for two teachers who taught a place-based learning lesson each in previous years informed by their lived experiences. The teachers who participated in this study expressed willingness to adapt place-based learning in their future curriculum enactment practices; they requested support from the department of education. Dilemmas, such as overcrowded classrooms, examination preparations, lack of support from educational authorities, and searching for textbooks for abstract teaching and learning instead of place-based learning need redress. If stated as a national intent, place-based learning as a curriculum enactment approach requires advocacy and adequate support for teachers to embrace and enact it. Chapter Nine takes up these challenges and addresses them as specific implications and recommendations for the different stakeholders involved in curriculum reform in PNG.

Chapter Nine

Implications and future directions

9.0 Introduction

This concluding chapter which continues from the summary of findings in Chapter Eight discusses the implications of the findings to complete this dissertation. The chapter also discusses the contribution of these findings for improving curriculum practices in PNG. A brief revisit of the study's intent, background of the study, and methodology is made to situate these implications and foreshadow future directions. This chapter also draws into question whether place-based learning is a realistic goal for PNG and whether the PNG Vision 2050 is even a realistic endeavour.

Education is not static but developmental by nature and, thus, complex both as a phenomenon and process (Kumar & Ahmad, 2008). Despite its complexity, education always ascribes to 'a curriculum in text' that, when enacted, helps countries realise their unique developmental aspirations through an educated population. Curriculum can reshape a country (Pinar, 1995) and develop its economy to improve the people's way of life (Alvior, 2014) through the enacted curriculum practices of teachers. Despite developmental aspirations of curriculum as text, the teacher is the key player who transforms curriculum into learnable activities that can bring about the aspired changes. Official PNG curriculum advocates place-based learning, which teachers should adopt in their enacted curriculum practices to prepare students for life. This study notes the realities of the enacted and lived curricula was not the curriculum as intended regarding recent national curriculum reform efforts in PNG, especially in the area of enacting place-based education.

In summary, this study explored selected Business Studies teachers' enacted curriculum practices and whether these aligned with the PNG education goals that encourage place-based learning considerations. The findings provide a foundation for informing current curriculum enactment directions to address contemporary impediments and improve future curriculum practices. This study also contributes to the current scholarship, both in PNG and internationally in implementing place-based learning. Figure 9.0 illustrates where this chapter is situated in relation to the other chapters of the thesis.

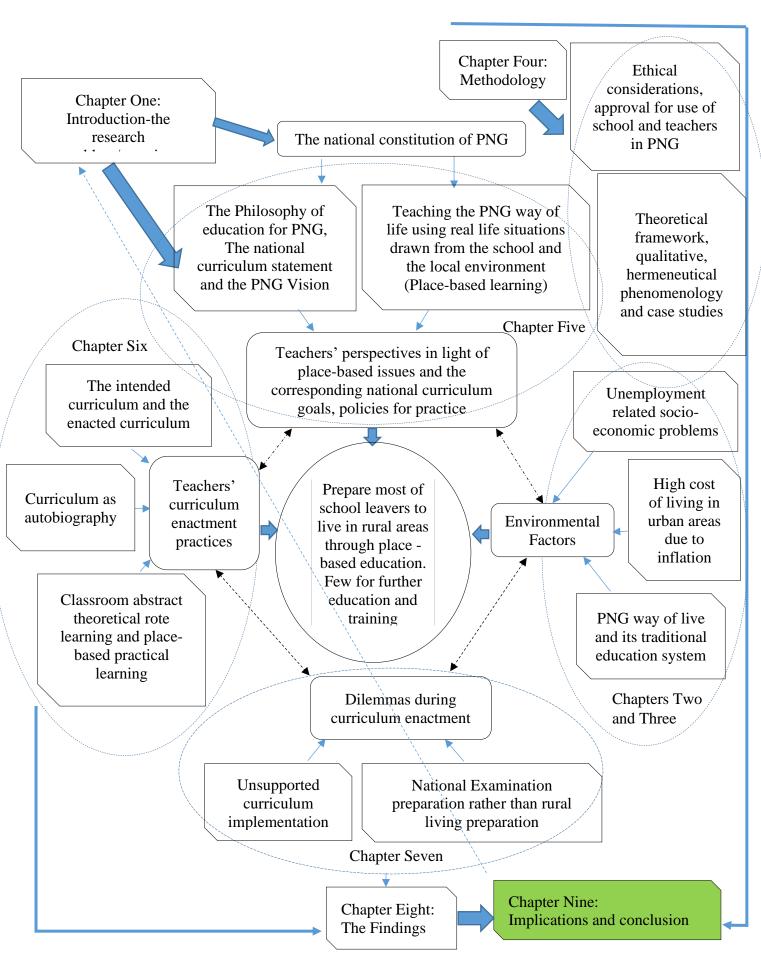


Figure 9.0: Theoretical framework situating Chapter Nine in the thesis

9.1 The intent and context of the study

The aim of this study was to explore the enactment of place-based learning as a curriculum reform policy. PNG reformed its education system to provide basic relevant education for rural living as a progressive nationalistic goal in response to the colonial and post-colonial education systems in use before the reform. The education reform was twofold: a system restructure and the curriculum reform (DoE, 2001). This study focused on the reformed curriculum and its enactment efforts. The study began by contextualising curriculum reform looking at PNG's geography and history, its social, economic and political challenges and the legacies of previous educational policy. The influence of colonisation is evident in both PNG's history and, ultimately, the reformed curriculum expected to be enacted at the classroom level.

It also investigated the more recent developments in PNG's history and their influence on the national curriculum. Recent developments indicated that the national curriculum reform efforts were a response to current economic and social concerns. Moreover, during colonisation of education in PNG the local people were introduced to the employment benefits of going to school which local people embraced as a 'ticket to paradise', a deeply rooted concept embraced today (Section 2.3.2). However, from just before independence in 1975, jobs did become scarce and, today, less than 20 percent of the year 12 leavers are able get a job. As outlined in Sections 1.0 & 2.9, jobs are no longer plentiful in PNG. Furthermore, with almost 80 percent of school leavers searching for jobs: socio-economic problems have escalated (Sections 2.3.2 & 2.4). The job scarcity is an impact of PNG's declining economy which is not on par with the growing population and the increasing number of school leavers every year. However, the education system aspires to prepare citizens to counteract these socio-economic challenges by encouraging sustainable rural living through place-based learning. Thus, the PNG curriculum reform effort is a political push based upon changing social and economic issues. Curriculum, as Pinar (1995) inferred, is deeply political in a formal sense, which is bound up with values and ideals and aspirations of what education should be and should do. However, education and/or curriculum policies in the political arena in many countries including PNG are more for political gratification such as the TFF policy than societal benefit. Even though free education is seen as a development goal and societal benefit from an international perspective, the way it is played out in PNG is for political gain. For example, the then Prime Minister of PNG, Sir Mekere Morauta bid for the implementation as a free education policy as an election campaign in 2002 (Abady, 2015; Marshall, 2002). The TFF education policy, which continued since then, continues to increase enrolment that compromises quality education with quantity, is a political gimmick to popularise the political party in government for its return during election than providing quality education through manageable enrolment figures that PNG aspire. In other words, the TFF policy as currently implemented and resourced as well as other policies such as teacher-student ratio which is ineffective impede effective curriculum implementation. Even though UNESCO's sustainable development goal four advocates access to quality education, it is a tension in PNG where class enrolments are large that quality education suffers while quantity increases. The government therefore needs to address the conflicting policies and support teachers in their enacted curriculum practices to achieve the desired goals. Hence, the teachers' perception of the curriculum, preparedness for enactment, and the enacted practices were explored according to the methodology outlined in Chapter Four to see how place-based learning was adapted. Data collected were analysed and presented in three chapters per the three research questions in Chapter Five, Six and Seven. Chapter Eight discussed the major findings while this chapter discusses the implications.

9.2 Contribution to knowledge

This study has contributed an understanding of the enacted curriculum practices of selected PNG Business Studies teachers using hermeneutic and case-study approaches. The exploration of the teachers' lived experiences of the enacted curriculum practices was in response to the PNG government's agenda of encouraging rural living through place-based learning. The study is based upon a premise that place-based learning is a realistic approach to help, in the long run, transform PNG Vision 2050 into reality. However, teachers need constructive support to understand and implement place-based learning effectively. Place-based learning includes purposeful authentic learning experiences and practices that connect contexts, people, and places through constructivist teaching approaches grounded in the local phenomena of the students' lived experience (Best, MacGregor, & Price, 2017; Gruenewald, 2003; Grunewald & Smith, 2008; Smith, 2002; Snape & Fox-Turnbull, 2013; Sobel, 2004). Despite this aspiration, there is a large amount of effort necessary to see this curriculum-as-text become the curriculum-as-enacted.

Place-based learning has always been the practice in PNG that has been sustained as a livelihood for centuries through subsistence farming to this day (Section 2.2). As indicated in the

literature review, it has received some attention in the past national curriculum but is now an explicit feature of the reformed curriculum. This study helped to realise that the place-based learning approach is potentially thwarted because the intended curriculum is not what the students are experiencing as the lived curriculum. For example, the teachers' enactment decisions are largely influenced by a preoccupation of preparing students for national exams rather than teaching the designated curriculum. Hence, the major determining link between the curriculumas-text and curriculum-as-lived by the students is the teacher. The curriculum's intent, as Pinar (2000) suggested, "emphasises the social, historical, cultural and political embeddedness of all personal and academic knowledge" (Sharma, 2012, p. 144). Curriculum and curriculum policies are all politics based on cultural, social, and historical factors that can, or cannot be implemented, depending on the political will and support from the government. It is evident that the PNG government fails to provide appropriate support to implement the place-based learning concept and amplifies the situation by allowing conflicting policies and practices. The curriculum advocates for place-based learning in response to the socio-economic challenges PNG is experiencing, however, teachers find themselves responding by perpetuating the emphasis on exam preparedness.

Teacher agency is the crucial link in the curriculum change process, transforming curriculum text into learning experiences (Biesta, et al., 2015). Hence, the curriculum activities that students experience reflect the teachers' beliefs about the curriculum. They are the result of what teachers ultimately determine should practically unfold. This posits the teachers as the key agents who determine the quality of place-based learning experiences that are provided for students learning.

Other countries, as indicated in section 3.7.2, have numerous studies in place-based learning, while in PNG (section 3.7.3) previous studies have been of curriculum implementation in general (Joskin, 2013; Kekeya, 2013). However, no study has investigated how teachers perceive the curriculum intent and enactment of place-based learning in PNG, thus, the findings of this study provided some significant understanding of the influences on translating official curriculum intent into teacher curricular intent. That situates this study as the first to explore curriculum enactment practices using place-based learning and the findings call for primarily greater advocacy and support in order to see the aspiration become reality.

9.3 Implications for pre-service teachers

The pre-service teacher education program is an important vehicle to improve the quality of education offered in schools for a better society (Dwivedi & Singh, 2012). The two key components of most teacher education programs according to Kleickmann et al., (2012), are the subject content knowledge and the pedagogical content knowledge; the latter attests to the curriculum enactment processes. Guerriero (2014) ascertained pedagogical content knowledge, which enables the teacher to facilitate the enactment process more effectively, has more impact on student achievement than content knowledge. Concurrently, Crowther (2016) said pedagogical content knowledge is a 'personal pedagogical gift' in a teacher's professional life, which forms the knowledge base for creating effective teaching and learning environments for the enacted curriculum. In other words, a teacher's subject content knowledge is important, but the pedagogical knowledge and skills are equally important.

However, regardless of its prominence, many teacher education institutions tend to omit substantive consideration of pedagogical knowledge from their preservice teacher preparation programs (Silberstein & Tamir, 1986). This omission during the crucial initial teacher training contributes to the teachers' tendency to abdicate their responsibility in implementing the prescribed curriculum specifications and substitute the official curriculum with the recommended support textbooks (Silberstein & Tamir, 1986; Grant & Melnick, 1978). This describes precisely what UoG did. The only curriculum course that incorporated pedagogy: "Curriculum change in contemporary society", taught within the pre-service teacher training program was omitted from 2009 onwards as witnessed by the researcher who was a member of the teaching staff then. UoG teaches distinct pedagogical content in the courses including 'basic teaching skills' and other curriculum and instruction courses. However, the distinct pedagogical content courses are found to be insufficient, or the students are reluctant to incorporate the skills in practice as revealed by one former student in this study. Place-based learning experiences, incorporated within pre-service teacher education programs or courses, will enrich pre-service teachers' learning across all aspects of professional practice, knowledge and experience in preparation for the real world of teaching (Best et al., 2017). What this means is that:

Opportunities for collaborative and knowledge-rich learning experiences for pre-service teachers can occur through place-based learning experiences that are embedded within higher education course content. The application of place-based learning provides an

authentic means to cross and strengthen the boundaries between a university and the wider community. (Best et al., 2017, p. 96)

Hence, there should be at least two or more curriculum-related pedagogical courses, inclusive of place-based learning, incorporated into the pre-service teacher education program at UoG. The graduate teachers would then be better equipped to enact place-based learning approaches to advocate and lead change by recognising the barriers they may face (Crowther, 2016).

9.4 Implications for in-service teachers

Teachers need to be 'up to date' with societal and policy changes including curriculum reforms for effective implementation. Studies have revealed gaps between the current state of changes in schools and the relationship between teacher education and the processes of change in schools, which yields a weak impact on improving professional practices and teachers' learning (Grossman, 2008; Pereira, 2011). Moreover, "this difference relates to the actual effect of in-service teacher education in changing educational practices in the classroom and in school" (Pereira, 2011, p. 48). In other words, there needs to be well-coordinated in-service programs for teachers to address contemporary issues that impede effective classroom educational practices. The teachers are the most important factor in the education system who implement the curriculum to fulfil the values of societies (Atac, 2008; Tarhan, 2015). The researcher was surprised to see most of the in-service teachers were not aware of the PNG NCS and other related policies such as the place-based learning concept when teaching them at UoG. In-service training for teachers is fundamental for effective enhancement of curriculum policies and teachers' professional development in relation to their vision to improve the quality of student learning (Omar, 2014).

Teachers serving without any form of in-service training may lack awareness of the changing curriculum policies and goals, leading to practices that defeat the achievement of desired societal goals. The absence of teachers' in-service training will hinder their professional growth, and the achievement of the desired goals (Omar, 2014). In addition, this study found serving teachers to be confined to systemic practices such as: preparing for examinations that work against the contemporary realities (for example, the 20/80 percent segregation of post school pathways) and the unavailability of curriculum materials that schools are assumed to have

received. Improvement of these practices depend largely on the serving teachers' attendance in professional development programs, such as in-service training. In-service education programs are designed for the manpower development of the schools and the education system as a whole to meet the growing needs of education in a global economy; hence, it is imperative that sound in-service education for teachers is provided to update their skills, knowledge, and experience for effective policy enactment (Osamwonyi, 2016).

9.5 Implications for the researcher as a teacher educator

A teacher educator's engagement in research activities is a fundamental component in their professional development (Lunenberg et al., 2014; Tack & Vanderlinde, 2014). Teacher educators are the "teachers of teachers and students of teaching (Klecka, Donovan, Venditti, & Short 2008, p. 84 cited Loughran, 2006). The researcher in this study is a teacher educator of both in-service teachers and pre-service student-teachers of the University of Goroka. While undertaking this study the teacher educator came to realise curriculum research as vital for a teacher educator because curriculum research and practice go hand in hand for informed and improved practices (Gall et.al, 2007). Isolation of curriculum practices and curriculum research both contribute (Battista & Clements, 2000; Clements, 2007; Clements, 2002) to disadvantage teacher educators and other practitioners.

An academic's role as a researcher as well as a teacher educator, according to Cochran-Smith (2005), function simultaneously. Though education has always been considered a powerful and indispensable tool for bringing positive change in the social, political, economic, and cultural life of people, teachers and teacher educators stand to be the most crucial amongst the many agents who contribute to the change agency (Boudersa, 2016). Teacher educators have a sense of responsibility to see both pre-service and in-service teachers receive "adequate educational and professional training to possess adequate knowledge and teaching skills and to be able to dedicate themselves to the teaching profession" (Boudersa, 2016, p. 1). Teacher educators need to function as effective researchers to improve quality training and production of teachers. Teacher educators as researchers play:

a key role in the development of new approaches to curriculum, teaching, learning and teacher education in an era of globalisation, undertaking research collaboratively with teachers to identify problems encountered by learners in mastering new skills and content and to find ways of overcoming them (Power. 2007, pp 92-93).

Having taught teacher education courses at UoG for seven years before taking up this doctoral study by research in 2015, the researcher was embarrassed to find a former student who participated in the study not practicing place-based learning. The researcher realised that the former student was influenced by teacher beliefs and school enculturated practices to enact curriculum without consulting the NCS. These will now be addressed through teacher education and curriculum courses the researcher will develop and teach. For example, student teachers will be informed to consult the curriculum to guide their curriculum practices which may be modified for contextual and authentic learning, in line with the curricula intent.

The researcher as a teacher educator will use this study's findings to plan and execute strategies for improved future practices. For example, the dilemmas and tensions impeding curriculum implementation and the teachers practising curriculum without consulting the NCS are major areas the teacher educator will adapt in developing new curriculum and teacher education courses or modify the existing courses. Some of the major issues include adapting place-based learning in curriculum enactment practice, developing more learning activities and covering the curriculum rather than preparing for examinations. Curriculum is a complex process of which the researcher focused on the implementation phase in this study. Curriculum as autobiography, teachers lived experiences, teacher agency and teacher beliefs shaped perceptions and practices, as the researcher came to grasp in this study. Hence, the researcher will inform the teacher trainees about these processes and encourage them to read and actively mediate the curriculum documents sent to their schools, reading and research contributes to effective practices.

9.6 Implications for the DoE and the provincial education divisions

The PNG DoE and provincial education divisions have a crucial role in supporting the implementation of the reform curriculum which is centrally developed. PNG uses a centralised curriculum development process where all curriculum materials are developed in Port Moresby (DoE, 2003). Centrally developed curricula are less sensitive to local needs, which teachers find difficult to use in alignment with the local environment and need support from the educational

authorities who developed the curriculum (Eunitah et al., 2013; Stenhouse, 1975). This study's participating teachers raised the lack of support in curriculum implementation from the education department as a dilemma. The education department is obliged to provide that necessary support in curriculum implementation through the provincial education divisions. In Australia, for example, each state and territory's education department are responsible for supporting teachers to implement a new curriculum when introduced (Barton et al., 2014). Sometimes, as Gao and Wang (2013) claimed, the kind of support rendered by the provincial education divisions to implement a new curriculum are not beneficial to the teachers. The PNG National Department of Education should also liaise with the 22 provincial education offices to support and monitor the implementation of the curriculum throughout the country. The provincial education divisions also need to play their part in advocating and supporting teachers to implement place-based learning.

9.7 Implications for school principals

School principals are the final authority at the school level in terms of curriculum implementation. The manner in which the principals lead in the school curriculum "impact(s) students' educational lives on many fronts, including the instruction they receive as well as the curriculum and assessments used to determine their growth (Lenner McDonald, 2014). School principals are responsible for all curriculum activities in their schools including receiving, procuring, stocking, and supplying the teachers with all their curriculum needs. A lot is desired from principals when the participants in this study had never heard of or heard of but never practised the PNG national curriculum statement which was distributed free to all the schools (5.3.2 & 5.4.1). Principals are expected to prioritise creating and sustaining a student-centred learning environment by motivating the teaching staff to keep their teaching practice current through the use of research and new technologies, and develop a robust approach to reviewing the curriculum and pedagogy to ensure a consistently high-quality environment for learning (Australian Institute for Teaching and School Leadership (AITSL), 2014). This involves the issuing and discussing of what the curriculum entails which appears to be lacking according to this study.

School principals need to be more proactive in ensuring the teachers' curriculum practices are in accordance with the national curriculum policies to achieve desired goals. Principals should take a leading role in collaborative planning, joint work, curriculum redesign,

school-based inquiry and deep conversations about teaching and learning represent different delivery strategies for meeting teachers' needs" (Bredeson, 2000, p. 396). This defines the key role that principals are expected to play in the curriculum implementation arena. Moreover, this is necessary because teachers curriculum needs and their level of professional expertise in curriculum varies and the principals is expected to help individual teachers by guiding them to design appropriate learning activities with relevant content to achieve desired national curriculum goals (Bredeson, 2000). Curriculum leadership in PNG schools according to this study needs to be improved.

9.8 Summary of the implications

The PNG vision 2050 is an ambitious political and economic statement announced in 2009. PNG vision 2050 is flavoured by the new Marape-Steven government's (30 May 2019) ambitions. It was recently reported that "Papua New Guinea's new Prime Minister (Honourable James Marape) has an ambitious - cynics would say far-fetched - objective of turning one of the world's poorest countries into the "richest black nation" on Earth in just a decade" (South China Morning Post, Agence France-Presse, Published 12:51pm, 16 June 2019). PNG's aspirational visions will remain illusions if implementation of policies, such as the place-based learning initiative remain ignored as noted in this study. The place-based learning concept needs to be developed into several curricula and teaching courses for the in-service and pre-service teachers at UoG. The National Department of Education should also liaise closely with the provincial education divisions to monitor and support the implementation of the place-based learning concept or any other curriculum changes. School principals as curriculum leaders should guide teachers to implement the curriculum at the school level in accordance with the curriculum policies and goals. PNG's education system still operates with the view of everybody getting a job after going to school and examinations that filter students preoccupy the minds of teachers, students, parents, and even education officers to this day. Even the Secretary for Education reiterates the importance of examinations through the media, while knowing the 20/80 percent segregation of post school pathways and the place-based learning intent. Curriculum policies as theoretical guides for practice are social, historical, cultural and political (Sharma, 2012; Pinar, 2000) that need constructive advocacy and support to implement and achieve PNG's dreams.

9.9 Limitations of the study

This study's anticipation to cover a much wider population was reduced by financial and time constraints to a sample of only two provinces. It covered two rural and two urban schools in Madang and the Western Highlands provinces. The study would have covered more schools and teachers to gather more data pertaining to their curriculum practices. Since resources were limited, only five teacher participants were involved.

This study noted that all curriculum documents are issued freely to schools and anticipated that teachers were using them. However, curriculum policy documents such as the NCS are unfamiliar to most of the teacher participants. The study would have been provided with more data of teachers' unfamiliarity with the NCS of more teachers were involved. In addition, if time and other resources allowed, the researcher would have interviewed curriculum officers within the National Department of Education about the evaluation of curriculum implementation. Do National Department of Education Officers visit the provinces and schools to assess curriculum implementation? It would be interesting to establish what the DoE does in evaluating curriculum implementation throughout the country.

9. 10 Implications for further research

Several significant areas need further research to supplement the findings of this study for improved place-based learning enactment practices. Two key factors revolving curriculum implementation that require further study are:

- 1. How schools receive, stock, and use all curriculum materials distributed freely to all schools in the country by the education department.
- 2. There are tensions between place-based learning goals and examination driven goals. Teachers are committing many resources on examinations that benefits only few students rather than covering the curriculum using place-based learning that would benefit majority of the students. Hence, a study into how assessment can support and drive place-based learning would be essential.

9.11 Conclusion

This study explored the participating Business Studies teachers' perceptions of the national curriculum intent, and their efforts to create place-based learning in alignment with the local environment. The exploration extended further into the enacted curriculum practices to accomplish PNG's twofold overarching curriculum goals. These two goals are: (1) preparing for the return of most school leavers to their rural communities; and (2) the preparation of few with academic capabilities to pursue further education and training (DoE, 2003). The underlying premise upon which these goals and the related policies were framed is that (Alvior, 2014; Pinar, 1995) curriculum can reshape a whole country and improve people's way of life. Aligning this curriculum premise with the place-based learning approach that PNG advocates provides the benchmark that curriculum, if enacted accordingly, can achieve the twofold overarching curriculum goal. The key agent in this scenario is the teacher whose lived experiences in the curriculum enactment phenomenon was the focus of this study rather than the curriculum itself because curriculum cannot impact societal change without a teacher. This study, therefore, explored the teachers' enacted curriculum practices, beginning with their beliefs about the curriculum, their perceptions of the prescribed curriculum intent, and their efforts in the reconstruction of the teacher curricular intent for enactment. The study then explored deeper into the teachers' enactment practices and dilemmas that impeded the enactment process.

The study found teachers lacking awareness of the curriculum policies and goals postulated in the NCS and other related curriculum documents. This included the sanctioned place-based learning approach intended to achieve the twofold national curriculum goals. The study also found that each school is issued with curriculum documents of content and policies freely but lacked advocacy at the school level by the school principals. This resulted in the exposer of teachers construing various beliefs about curriculum and their conceived personal goals that were largely not aligned with the national curriculum goals. That creates a gap between the intended curriculum and the enacted practices.

The teachers had been enacting the curriculum without awareness of the national curriculum policies and goals, but place-based learning characteristics were evident, though rare and somewhat superficial. The teachers' lived experiences influenced their enacted curriculum practices. After learning about place-based learning during data collection, the teachers indicated willingness to adapt place-based learning in their enactment practices, however, they need support from the education department and the school principals. The dilemmas discussed

provide clear evidence that there are factors impeding effective curriculum enactment. Hence, the implications identified, and the future directions proposed, need careful consideration to achieve PNG's Vision 2050.

Place-based learning was a sanctioned national curriculum policy before this study. This study has revealed issues associated with the enactment of place-based learning approach. The findings assert place-based learning as the appropriate approach to achieve the desired curriculum goals. The key challenges that need redress to implement this approach successfully is providing adequate support for all schools and teachers to incorporate place-based learning in their daily teaching and learning activities. The achievement of PNG's Vision 2050 rests on how teachers enact place-based learning in their day-to-day curriculum practices.

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Appendix 1

MT HAGEN SECONDARY SCHOOL BUSINESS STUDIES DEPARTMENT GRADE 10 BUSINESS STUDIES- TERM 2, 2016

WEEK	UNIT/TOPIC/LEARNING OUTCOM	MES CONTENT	TEACHING & LEARNING STRATEGIES/ RESOURCES	ASSESSMENT	EVALUATION
Unit10.2:	: Starting a small \business Enterprise	Broad Learning Outcome: Write, imple busing	ment and manage a small business pla ness enterprise, applying ethical busin	n, individually or in teams & ess practices	t run a small
1	Sub Topic: The Business Idea Learning Outcome: Analyse their strengths & weaknesses, personal skills and ideas on establishing a business idea.	 ❖ A New Business Idea -assessing personal skills and ideas(SWOT Analysis) -Brainstorming personal business idea - Case studies 	Reading and explain with the aids of handouts by; 1. Defining the terms: -Business idea, skills, strengths, weaknesses, brainstorming 2. explain what a SWOT analysis, S-strengths, W-weaknesses, O-opportunities, T-threats 3. Identify some characteristics in self-assessment -hard working, talk with people, planner, etc Bus. Studies for Melanesia. BK2	Business calculation Test 5 20 marks	Lesson tengle Boufcome achieved Take home to was given Most stals and very w
2	Sub Topic: Ways of Setting up a Small Business Learning Outcome: Established some ways of getting into a small business	 Ways of getting into business Starting a new small business Purchasing an existing business Franchising Starting a new small business advantages and disadvantages start-up capital market research choose a legal form/structure plan how to use the profit 	1. Define the terms: Franchising, franchiser, franchises, franchisees, start-up capital, debtors, creditors, assets, liabilities. 2. Outline the different ways of setting up a small businessstarting up a small business, purchasing an existing one & franchising. 3. state the advantages & the disadvantages of starting a new small business		Jesson tang 2 outcome achieved
			Bus, Studies for Melanesia, BK2 Pp.50-73		

3	Sub Topic: Ways of Setting up a small business	Location-factors to consider	1. State the different factors of considering the location of your business	Assignment# 3: ways of getting into business - Franchising	TOPIC & lesson
	Learning Outcome: Understand the other factors of establishing a small business	 Finance for small business Identifying sources of finance Filling application forms for 	- closeness to the market, assess to transport infrastructure, closeness 2. compare different methods of	20 marks	achieved
		personal loans, hire purchase, etc - Borrowing money to start a business	getting finance from financial institutions -hire purchase, leasing, bank loan,	The assignment	
		 Reasons for success and failure what makes a business successful? factors of business failure 	RDB, Stret Pasin Stoa Scheme 3. outline the reasons for success or failure in operating a small	week 4 mondai	
			Bus. Studies for Melanesia. BK2	The assignment was given in week 4 monday Tuesday	3-
4	Sub Topic: Insuring the business	❖ What is insurance?	Pp.73-81 1. Explain the importance of		
7	Learning Outcome: Know and appreciate the	-purpose of insurance Types of insurance	insuring the business. 2. List the types of insurance - Compulsory & voluntary	Test topics: Business Idea & Ways of setting a business	April 8 lesson try
•	importance of insuring business	Compulsory insurance Voluntary insurance identifying and using insurance documents	3. Outline the different steps in getting insurance & compensation.	20 marks	Tests will be Swences wiks as perthosology schedule
		 ❖ How to obtain and claim for insurance cost of insurance 	-Filling proposal, signed policy, premium paid, claim form filled, compensation claimed		as perthosologi Schedule Topics:
		- policies and claims	Bus. Studies for Melanesia. BK2 Pp.82-89		Smail (ausiness)
5	Sub Topic: My Small Business Project	 Self assessment Assessing my attitudes to business 	Define terms: self-assessment, attitudes.	Project	insureng the or
	Learning Outcome:	- Assessing my business and management skills	management skills, challenge 2. Explain each of the steps in	Writing up a business plan	Lesson faight Soutcomes achieved
	Assess strengths & weaknesses and write up a business plan.	Assessing my personal financial situations The challenge of starting my business	writing a business plan Brainstorming, writing a business plan, starting your business.	40 marks Work in group of 6	
		- Business and wantoks Writing my business plan -identifying the components of the	7. Specifies a second of the steps in a business plan. Brainstorming, write-up,	Duz jogassigen	in wiss
		business plan - presenting the plan and starting the project	recording, reporting, Bus, Studies for Melanesia, BX2 - Pp.91-97	المرابع والمرابع المرابع المرا	

Sub Topic: My small business project Learning Outcome: Develop the skills to perform the duties of running your small business.	 Keeping the records identifying other records Importance of business documents in record keeping Reporting on my Projects writing a simple business report declaring & reporting of the simple business profit & loss statement. business evaluation 	1.Define the terms: Record keeping, reporting, business evaluation etc. 2. discuss the content of a business plan -Mission statement, the business, 4Ps, and Financial plan. 3. Classify different records kept in a transaction - cash book, P&L statement, Balance sheet, & business report Bus. Studies for Meianesia. BK2 Pp.98-102		Lesson taught & outcome achieve in Weeks. Unit 10.3 was introduced in	C.
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Unit10.3: Keeping Accounts for my Business	
Broad Learning Outcome: Keep accurate records of any small business activity & apply bookkeeping skills in a range of sm	all business situations

					Test#7 was
7	Sub Topic:	❖ Introduction	Reading and explain with the	Test # 7	given in week
	Bookkeeping in small business	- Importance	aids of handouts by;	Test topics: Insuring the	
		- Financial recording &	1. outlining the importance of	business & My small	\$
	Learning Outcome:	reporting	bookkeeping	business project	Started this
:	1. Outline the reasons for bookkeeping	- Decision making	2. identifying the types of		topic in week
	2. Identify and list the different documents		documents used in cash paying	20 marks	Topic in was
	used in business transactions.	Buying and selling goods-			T.
		pay cash	3. Briefly explain each of the		Due to suspension of clarges on w
3		- Use of cash sales book	documents.	(week 7)	
		- Documents used	4. state the reasons why money	•	of classes in w
			is taken out of the cash box		& Ougas E barterd
		❖ Taking money out of the	5. describe the process in		Carry 5.
		cash box	buying and selling on credit.		on Monday w
		- Reasons for taking money	n C ' ' C 16' 1 2'C		- we arestyll
		out	Bus. Studies for Melanesia. BK2	<u> </u>	1
		- Recording owners wage.	Pp.107-126		Dehind our less
		drawings, transfer to			- 11 sell continue
		savings, etc			- well continue on this topic, a war q
		*Buying & selling goods on credit			on this topic is
		I		9 4	wcq.
	·	-credit buying - documents used		-	
		- decaments asea			

9	Sub Topic: Taking stock Learning Outcome: Outline reasons why businesses do stock takes	 Reasons for stock take Keeping relevant records How to take stock take. Drawings of goods 	1. Define the following terms: -stock take, drawings, records 2. State the reasons for stock take. 3. Explain the process of stock taking 4. describe what a drawing is in business. Bus. Studies for Melanesia. BK2 Pp. 127-130	Assignment # 4 Assignment topics: taking stock & Calculating profit.	Lust weeks topic was taught thus week sauf comes Assignment cancelled otent to major Bis Project gives Jesson stopic Lught Soutcome achieved
10	Sub Topic: Calculating profit- cash and credit transaction Learning Outcome: Understand and calculate profit in cash and credit transactions.	 ❖ Cash transaction -cost of goods sold(COGS) Gross profit from cash book and stock records -profit with other expenses(Net profit) -effects of refund, surpluses & shortages ❖ Credit transactions - gross profit using credit sales journal and stock records -writing the journals and the profit statement 	- GP= Sales -COGS, NP=GP- Expense, COGS= OS + P(CIS)- CS 3. Outline the different types of documents used in a transaction -P&L Statement, sales journal etc Bus. Studies for Melanesia. Book 2 Pp.131-135		Losson taught Soutcomes achieved: Turil be suffied f stall obeyinstructi clo exercises is tome works given. stals are not doing Turories and how all her structures? up to individual chals.
10	Sub Topic: Banking Learning Outcome: Recognize the different parts of a cheque book & steps involved in bank reconciliation.	 Use of cheque accounts Identify receipts and payments Using relevant information to complete cheque butts and deposit slips Reading and understanding a bank statement A bank reconciliation statement 	1. Define the term: cheque, reconciliation, payee, drawee, drawer 2. explain how to use cheque accounts 3. Outline steps involved in bank reconciliationcompare balances, tick all items, record un ticked amount in the last cheque butt, etc Bus. Studies for Meianesia. Book 2 Pp.136-14		this part of the lesson was taught a act can so for a sub-spoic achieve Part of the esson ropic will be complete in water - Term 3 Due to exams in wix complete the ropic.

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Data collection Guidelines

Project Title:

Creating place-based learning experiences as a curriculum implementation approach:

A case study of selected business studies teachers' practices in Papua New Guinea. Interviews, lesson observation and artefacts (lesson plans, assignments, tests, projects)

Topic/Activity	Content
Introduction	Introduce the researcher, explain the purpose of the study, explain my
	role as a researcher, briefly discuss what is to follow, interviews, lesson
	observation and document collection. Explain clearly their willingness
	to participate, allow them to read the information sheet and get them to
	complete the consent forms, if the participants agree to participate then
	collect their personal data. Inform the participants that the interviews
	and lesson observations will be audio-recorded. Hand them the outline
	of the interview questions which are the subsidiary research questions.
Interview	Interview the participants, follow notes on the interview questions
	below.
	At the end of the interview thank the participant and inform him/her that
	the next activity will be observing a lesson, thus, ask them to teach as
	they have always been doing.
Lesson	Observe the lesson
observation 1	If there is time, then hold the post observation interview soon after the
	lesson while it is fresh, otherwise the next day.
Post lesson	After observation ask the following sort of questions.
observation	I noticed you do thiscan you explain why you did this?
interview 1	 Do you think the students learnt from what you did?
Interview 1	1
	I am not sure if your lesson related to the local area, can you avalor if there was any reference to the local anyirenment made.
	explain if there was any reference to the local environment made during the lesson?
	These are only guidelines, actual questions will be developed and asked
	depending on the lesson observed.
	Thank and the participant, ask for another lesson observation. Also ask
	for the most recent copies of teaching programs, lesson plans, projects,
	assignments and tests.
Lesson	Observe the lesson
observation 2	
Post lesson	Again, formulate questions in relation to what has transpired in the
observation	lesson.
interview 2	Thank the participant and leave

Interview Questions

Following the research questions are the suggested lead questions that would be used to start the interviews. Probes will be used during the process.

Overarching research question:

What are the practicing business studies teachers' interpretations of the overarching PNG national curriculum goals and their enactment strategies in achieving them?

Subsidiary Questions:

- 1. What are the practicing business studies teachers' perceptions of PNG's National Curriculum goals?
- 2. <u>How</u> do they <u>align curriculum intentions to the local context</u> to create meaningful place-based learning experiences during the curriculum enactment process?
- 3. What dilemmas do business studies teachers experience and how do they address them (if any dilemmas) when implementing a centrally developed curriculum in a country of diverse cultures, values, languages and even the geographical settings?

1. Research question one-Relates to the curriculum and the curriculum goals

- 1.1 The Department of Education has set the national curriculum goals for PNG? Can you describe one or two? Can you tell me how these national curriculum goals are communicated to the teachers? How are these curriculum goals important for teachers? Why do you think they are important for teachers?
- 1.2 Can you describe some of the goals of lower secondary business studies as a subject? What is the relationship between the goals of business studies and the national curriculum goals? Can you describe the relationship between the lower secondary business studies gaols and the national curriculum goals?
- 1.3 From the discussions so far, can you describe how a lesson should be planed and taught to achieve the national curriculum goals? What makes you think that these are the best

teaching approaches that would help achieve the national curriculum goals? What informs you that these are the best strategies?

2. Research question two-relates to planning and teaching

- 2.1 The national curriculum statement expects teachers to teach using "real life situations" (Department of Education, 2003, p. 19). Can you explain what teaching in real life situations mean? What emphasis do you place in using the real life situation teaching approach?
- 2.2 What do you think about the department of education's suggestion for teachers to teach using real life situations? What is the importance of teaching using real life situations? Can you describe an example to illustrate your reason?
- 2.3 Can you describe how the content of business studies syllabus can be aligned to the local environment to create activities to teach in real life situations? Why do teachers have to align the curriculum text to the local environment?
- 2.4 What informs your thinking when you plan for a lesson? What do you really want your students to learn? Can you describe what you really want to see your students learn from teaching using real life situations?
- 2.5 Why do you think the department of education is encouraging teachers to teach using real life situations? What is the underlying reason for teaching using real life situations?
- 2.6 Can you express your personal opinion on the concept of teaching in real life situations?

3. Research question three-relates to dilemmas when teaching using real life situations

- 3.1 Can you describe some of the lessons you taught using the real life situation approach?
- 3.2 If you have not taught any lesson using the real life situation approach, can you describe some reasons why you have not taught any lesson using real life situations?

- 3.3 If you have then, what are some of the problems/difficulties that you experienced?
- 3.4 Were the problems you experienced relate to the classroom level, school level, community level, provincial and/or the national level?
- 3.5 Can you describe how you addressed the problems you experienced? What did you do to overcome these problems?

4. Other related questions

- 4.1 What is your opinion in teaching using real life situations?
- 4.2 Dou you see any benefits of teaching in real life situations?
- 4.3 Can you describe some ways of teaching using real life situations?

5. Lesson Observations

Lesson Observations will be audio taped as well as making notes using the following guidelines. The general layout will be seeking some form of answers to these research questions.

Prior to observing the lesson plans will also be viewed. The lesson plan will be checked to see if:

- Lesson outcomes correlate to the ultimate national curriculum goals.
- This particular lesson has any connection to the community.
- This particular lesson could have applied the creation of real life like learning experience using the community.

When Actual Teaching is observed, the following will be searched:

- If lesson plan is followed.
- If the lesson activities relate to the achievement of the learning outcomes.
- If even the lesson is taught in the classroom; see if there is any attempt in relating to the local environment.
- See if there is any evidence to indicate teacher being aware of the learning outcomes and is working towards achieving them.
- See if the conclusion sum up the main points and evaluating of learning outcomes.

The above will be checked against the checklist below as well as making notes.

Lesson Observation Sheet

Teachers Name	••••••
Date	
School	•••••
Grade/s Teaching	
Subject/	•••••
1. Planning and Preparation: Curriculum Goals	Comments
Meaningful Lesson plans developed using the local environment	
 Lesson outcomes clearly stated aligned to the national curriculum goals 	
 Being creative using a lot of initiative linking the classroom to the community 	
 Preparation of Meaningful and educational teaching aids; or if the real environment has been included in the planning 	
1 5	
2. Learning Activities-Real life like learning Experiences	
 Class activities related to achieving the lesson learning outcomes 	
• Lesson being connected to the real world practically; that is, is there any possibility to take the class out to the real world; or have attempts been made?	
• Lesson being connected to the real world theoretically; in discussions, are concepts discussed related to the local environment.	
• Using the local community to share ideas etc.	
 Generally, are there attempts made to create real life like learning experiences. 	
2 Parklane and CC anking and describe an adult and	
3. Problems or difficulties noted can be recorded here.	
General Observations/comments	

Appendix 22

Teacher One's interview data

Teacher One's data is organised in two sections. The first section pertains to selected aspects of the interview that specifically relate to research question one focusing the participant's awareness of the national curriculum goals. Subsequently, the second section refers to aspects of the interview that sought to understand influences on their curriculum enactment practises. In all the interview dialogues, 'Interviewer' denotes the researcher while 'Interviewee' denotes the teachers beginning with Teacher One.

Interviewer:

Are you aware of the National Curriculum Goals that are in the National Curriculum Statement?

Interviewee:

I am sorry I have never heard of the National Curriculum Goals nor the National Curriculum Statement in which they (the goals) are written in.

Interviewer:

Well, if you have never heard of these, the National Curriculum Statement and the curriculum goals, then what informs your teaching?

Interviewee:

The only source of information that I use is the syllabus and teachers' guides, the business studies teacher's guides.

Interviewer:

Okay, I see, now, can you describe at least one of the goals in the syllabus or teachers' guides?

Interviewee:

I am not really sure, but I think the goal is [to] get as many people as possible to be literate, at the moment we have a high percentage of the population who are illiterate.

Interviewer:

In stating that, what really informs you in your teaching apart from the syllabus and teachers' guidess?

Interviewee:

Apart from the syllabus and teachers' guides: it is, what I see people doing every day in life that tells me that I should teach people to be literate, I see many people asking other people to read and explain issues in such things as the print media.

Interviewer:

Going back to the national curriculum goals, these goals are written a Department of Education document titled: National Curriculum Statement published in 2003. You say you have never sighted it.

Interviewee:

As I said earlier, I have never sighted that document which you call, the National Curriculum Statement.

Having noted that Teacher One had never heard of place-based learning as it is stated in the NCS, the interview then probed the teacher's awareness of place-based learning.

Interviewer:

So, what informs your teaching? What sources of information do you use to inform your teaching?

Interviewee:

The book we are using, ah, right now, we are asked to use this outcomes education for PNG business studies for grade nine. Looking at the content I find in here; and the content I find in this other one; business in Melanesia, and also this one. Business practices in PNG, I think this one is more informative for the students, business in Melanesia, this one has so much information in it, some of it I think, I see, not I think, but I see, are irrelevant for grade 9 students. Maybe, as they progress on, it would be suitable so,

Interviewer:

Ah, okay. Thank you. Do you make selection from this resource [business for Melanesia] that you think is appropriate for application to your local context? Is there

any, any reason, any special reason for making the decisions you do in regards to what you emphasise?

Interviewee:

Well, ah, this one here is, it focuses on, I mean for different units, it focuses on a particular topic that is given. Whereas this other one, it has additional given in there.

Interviewer:

Okay, I see, Thank-you, but...using any of the books, how about relating the units to your context?

Interviewee:

The programs we teach, they base them on this business studies for 9 on outcomes based (education). And, from what I have gathered from my other colleagues who have taught this book here, they said they have, for the last couple of years, they haven't been able to cover all these topics in this book. So, when looking at it, I only follow what they have been doing.

Appendix 23

Teacher Two's Interview data

The data presented here are the interview dialogues between the researcher and Teacher Two pertaining to research question one.

Interviewer:

Ah, one or two questions or probably few of the questions that I'll raise. Ah, the area that I am looking at as I explained briefly yesterday, is how, how we teachers are understanding the national curriculum goals, and then using that in our teaching, ah, so, what are your perceptions of the national curriculum goals?

Interviewee:

Yeah, yeah, yeah,

Interviewer:

Ah, the general perceptions of what you or any of our teachers have about the curriculum goals.

Interviewee:

You are right.

Interviewer:

I mean, the government introduced the curriculum reform; the reform curriculum has a set of goals. What is your opinion about the curriculum goals?

Interviewee:

Yeah, yeah,

Interviewer:

Anywhere, keep going.

[Seeing the interviewee becoming confused about curriculum goals, the researcher informed the interviewee about the curriculum goals and paraphrased the questions]

Interviewee:

Ah...?

Interviewer:

We have, the Department of Education has set the national curriculum goals, and they are stated, in the national curriculum statement, a document, printed in 2003, so,

I am wondering if you are aware of some of these national curriculum goals. And, if you can describe one.

Interviewee:

I am not aware of any one of them, eh,

Interviewer:

Okay, so you are not aware of the curriculum goals,

Interviewee:

So, if, if it [goals] can be made, I mean, possible for us to have a look at them it will be alright. But, we were given only the syllabus and the teacher's guides to teach, and that's all.

Interviewer:

The goals in the NCS are to encourage school leavers to return to their rural communities to live rather than going into towns looking for jobs and, you know, when they cannot find a job, they, ah, usually involve in criminal activities. So, the government thinks of teachers to encourage rural living.

Interviewee:

Okay, good, this one, I mean, the aim of the government, as you say, is to send the students back home, that you and I know very well.

Interviewer:

That's right.

Interviewee:

But whatever is put in the book (teacher's guides and syllabus), it doesn't really aim at that one, it's like, you know, study tasol (only), study tasol na (only and), and then it's

useless. So, if the curriculum and teachers' guides aims at developing students' knowledge so that when they go back home, and they use this, em bai nice moa (it would be much better). I think you understand what I am trying to get at.

Interviewer:

Okay, But, but the thing is that, ah, they [NCS] were distributed to the schools but, what has become of them?

Interviewee:

I do not know, as I said, we only have the syllabus and teachers' guides.

Interviewer:

Okay then, I have a copy of the National Curriculum Statement, [But] I did not bring it, and you are not aware of this document, anywhere, the national curriculum goals are stated in there. And, they are also stated in the, ah, syllabus.

Interviewee:

Yeah.

Interviewer:

And the teachers' guides. So...

Interviewee:

But the copy, the copy of that, we don't have it, but if the syllabus, yes.

Interviewer:

So, it [NCS] states that teachers should teach using real life situations, what they mean is that you, ah if you are teaching ah, ah for example, bookkeeping, okay you take them (class) out to a small trade store where....

Interviewee:

Yeah, yeah, yeah.

Interviewer:

... they keep bookkeeping and then let them [student] see, or, if you are teaching about ah, ah poultry, or any, any business activity that is around the community, you have to

ah, take the class out so that the learning will become meaningful to them, so have you attempted this in any of your daily lessons?

Interviewee:

Ah, okay, good, thank you...

So, it (place-based learning) states in the syllabus or teachers' guides, as you say, but, if you look at it very carefully, it is difficult to take the students out. Because of the transport problem, that's 1. Not all the schools are in, you know, town area, where they'll have access to such things, it's difficult, and not only that but the other thing is that, you must get permission from the parents in order to take them out for excursions and research like that.

Interviewer:

Okay, I understand that.

Interviewee:

Hmmm

Interviewee:

Okay.

Interviewee:

That's why most of the time we don't take them, we just teach it, take them out, we give them examples, but our canteen, when had the canteen running, that was one of the things that we use to take ah, especially in book keeping, but the others, it's only in the classroom situation and that's it. Teacher to students...haha...

Interviewer:

Okay, okay.

Interviewee:

You understand what I mean.

Interviewer:

Ah, yeah, well, going back again to the, ah, ah.

The syllabus and teachers' guides. **Interviewee:** Yes. **Interviewer:** Ah, can you describe, if you are able to, can you describe one of the goals that is stated there, or the aim, aim of the national curriculum stated there? **Interviewee:** Okay, just, eh, ah wait, a little, I'll come back... Teacher Two went to collect the Business Studies syllabus and teachers' guides to look for the aims because the teacher was not aware of them, and the researcher waited for about 10 minutes. The interview continued when Teacher Two returned with the syllabus and teachers' guides. **Interviewee:** Ah, teachers' guides, you come here, if I had known that earlier, I would have brought them. Ah, hmmm. **Interviewer:** Ha, it's okay. **Interviewee:** Okay, eh, ahee, okay, no, no, no. good, that's questions, ha, aims, aims, sorry, mi harip, hariap skipim ol wanem yah, (I was in a hurry and I skipped the pages) it should be there in the front page, outcomes... He spent another five minutes searching for the page with the aims....

Interviewer:

Interviewee:

No. ah.

So, the question again?
Interviewer:
No, it's okay, you can have a look at the aims, we'll discuss later, because I'll return again.
Interviewee:
Okay.
Interviewer:
After I observe a lesson, and then well take more discussions, so we leave it like that.
Interviewee:
Okay, okay.

Appendix 24

Teacher Three's interview data

Interviewer:

Thank you, thank you for your willingness to participate, eh, ah, what I am looking at [in my study] is, how teachers work towards achieving the national curriculum goals which are stated in the National Curriculum Statement now, if you are aware of some of them, can you at least describe one of the national curriculum goals?

Interviewee:

Okay, about these national curriculum goals, I never seen one, never heard of any one.

Interviewer:

Ah, okay, we have these policy documents in place at a national level and they have been distributed to all schools, but unfortunately you have not seen it.

Interviewee:

No.

Interviewer:

So, anywhere, how about the curriculum materials that you are using for business studies, what are those materials that you are using.

Interviewee:

We are using the teachers' guides, and syllabus, so, in those syllabus and teachers' guides there are some outcomes like objectives, so we work towards achieving those, ah.

Interviewer:

Okay, can you describe at least one of the goals in the syllabus or teacher guide?

Interviewee:

Okay, for business studies. I can't remember, but, one of the clauses, because each, each unit, each unit has its own, ah outcomes, they have their own outcomes, so, one of the outcomes ah, especially for the unit 10.3, ah, 10.3 it's about ah, it's about

bookkeeping, ah, bookkeeping. And, ah, one of the outcomes, is to help ah students acquire skills of bookkeeping.

Interviewer:

Okay, do you think it [the units] will have any ah, influence, or would it enrich them when they leave school?

Interviewee:

Yes.

Interviewer:

For life out there. Yeah.

Interviewee:

Okay, yah, I think one of the things that will really help the students is to do practical, work. Ah, when it comes to teaching theory, we teach but, when it comes to practical work, like, for example, cashbook, we just have to ask them to draw a cashbook, and then we give them transaction. You do this and that, because in reality, you are going to have, if you have a business of your own, you will have to come up with a cashbook. And then you will see that money is coming in, you are going to record it under receipts, and then money is going out, you are going to record them under payments, so these are basic things that we teach them in class.

Interviewer:

Yeah, thank you, so, ah, in stating that, well, have you really taught a lesson rather than you giving imagination transactions have you used some of the small business around the community?

Interviewee:

Okay, ah, we just follow what is in the textbook. Ah, what ah we do is, we don't ah bring in real life situations, like, giving a business ah. In a community like, someone has this business now, you will have to, these are his or her transaction; you will have to put that into a cashbook, no, we don't do that. We just follow what is in the textbook.

Interviewer:

Okay, I see, I see what you do. So, in effect you have not really taught any lesson using that [place-based learning] approach that I am talking about.

Interviewee:

We just follow what is in the textbook.

Interviewer:

I understand.

Interviewee:

Ah, whatever information like any transaction that is given in the textbook, we then teach them in class, but we don't bring, we don't bring real life situation into class. We don't do that.

Interviewer:

But, but what do you think about the [place-based learning] concept? Do you think it's a worthwhile idea?

Interviewee:

It's very nice, it's very nice but ah, as I see it, we are in Western Highlands, and there are some issues, that we can say constraints ah, that cannot help us to teach, or to bring real life situation into class.

Interviewer:

What would one constraint be?

Interviewee:

We have 60 students in a class; it, it might be difficult to take them out of the school.

Interviewer:

Okay, but it is the kind of life that students will experience later out there in the future.

Interviewee:

Yes, I think ah, real life situation or place-based, ah, place-based learning, it's a good curriculum; we can say that. Though I am not aware of the place-based learning approach being encouraged in the National Curriculum Statement, however, I once, not

this year, but last year, took my class across to the shop near the school gate. After I arranged with, ah, yeah, the owner, the bookkeeper of that shop showed the students how, ah, bookkeeping is done [kept]. Students became interested and asked questions, and the bookkeeper who, is, also the shopkeeper answered. I then took the class back, and, ah, discussed the visit and asked the class to write a report of the visit.

Appendix 25

Teacher Four's interview data

Interviewer:

Yeah, okay, we'll start. We have the national curriculum goals written in the national curriculum statement. Can you describe these goals?

Interviewee:

Okay, ah, I am not sure, of, I do not (know) much of them but...

Interviewer:

Well, just describe anything [goal] that you may be, or are familiar with.

Interviewee:

Yeah, for business study we are training them to at least pass the national exam in grade 10. And, also we are training them as well to, they can, they can use the business study knowledge in their lifetime when they do not get any placement in grade 11, they can use the business studies skills to go back and at least become a businessman or a woman.

Interviewer:

I'll describe these goals. The Department of Education suggested teachers should, should use the, in the PNG we call it place-based, that is teaching in real-life situation. That means taking the class out, and teach them using the real-life (situation), or inviting people to the classroom, what do you think about that concept?

Interviewee:

Ah, actually we were told back in the, in university, we were told, we were taught by yeah, you, our lecturer, to take the students out to the real world, but, ah, today I see that we are not taking students out to the real world.

Interviewer:

So, what are the reasons why you are not taking the students out?

Interviewee:

Yeah, yeah, to teach them because one thing is, there is a lot of students coming in because of free education, ah, we have 60 students in one class, and one teacher, only one teacher is teaching 60 students in a class. So, it's a big problem to control the big number of students to take it (the class) out. Also, some students, most of them, they are having behaviour problems.

Interviewer:

Oh yeah, these days.

Interviewee:

Yeah, it's really hard to control the, if you take them out, they might go, and maybe get easily distracted on the streets and might run away sometime. So, yeah, I think it is not easy to control them.

Interviewer:

Thanks, now, what is your opinion on that, the concept of taking students out to the local environment and use the real-life situation to teach, what is your opinion, do you think it's a better idea? Or what?

Interviewee:

Yeah, I think, ah, to take students out to the real world, ah, and teach, ah, them is better than just the, you know, ah, letting them to stay inside the classroom only. Ah, and, ah, I think ah, if we take them out, ah, I think they are going to learn more and they will get some more knowledge. Ah, when we actually take them out like, for example, ah, taking them to an entrepreneur and ask that person how he or she started his or her business, that would be, ah, much better.

Interviewer:

Okay, now, ah, you have told me already that you haven't really practised by taking them out yet so we leave it like that. But, it is not (about) taking the class out (only), it is also inviting guest speakers; (such as) business people to share their stories, but what do you think that, or have you tried that in any way?

Interviewee:

Ah, I did not try one, I did not invite other people from outside to come in and give them some ideas on how they will start up their business or.

Appendix 26

Teacher Five's interview data

Interviewer:

Ah, now, ah firstly, [the study] is, its relating to the curriculum that we are using, there's a national curriculum statement, and it talks ah, talks about the goals, the national goals, ah, national curriculum goals that ah, teachers should strive to achieve. So, would [can] you be able to describe one of the national goals, curriculum goals?

Interviewee:

I don't think I can, I think I haven't even, ah seen one of those goals so.

Interviewer:

And, that includes the document, ah, the national curriculum statement.

Interviewee:

Yeah, its, they are in here but, I have never had a chance of going through it.

Interviewer:

Okay, but are you aware of some of the goals that are in the business studies syllabus or teachers' guidess? If you are able to, if you are then are you able to describe some of them? One, at least one?

Interviewee:

Yeah, I think in grade ten, yeah, I am taking grade ten business studies, ah, with the syllabus, we are using this outcomes-based syllabus at the moment, Yeah, so, I think I have read through it but, I am sorry, I cannot remember any.

Interviewer:

Okay

Interviewee:

You want me to go and get a copy (syllabus and teachers' guides) of it, and...

Interviewer:

No, not necessary, we are going to have another interview, after observing so, probably we can discuss further.

Interviewee:

Okay.

Interviewer:

What really, when planning for lessons, what really informs you, or, in other words, putting it the other way, what do want your students to learn when you plan your daily lessons?

Interviewee:

Okay, ah, in business studies, like, ah, ah, part of it, it's like ah, a local-based ah, like for example, we have business houses in Mt. Hagen, ah. Okay, in some of the lessons, we are supposed to go and, ah, like, you know, see how they organise their what, their business something like that. Okay, in, in theory, what we are teaching is like, this is what they (business) do so, in actual fact. I am teaching them that, maybe when you fail your grade ten you go out and you can do this and do that, if you don't get an offer to grade 11, so actually we are, like, when I teach them, I tell them like that. I want them back, and either even start a little business of their own. That's my plan of teaching them.

Interviewer:

That's exactly what the department wants.

Interviewee:

Yeah, that's right.

Interviewer:

Now, relating to that, the idea (place-based learning) is that, as I said briefly yesterday, was it yesterday, yes yesterday.

Interviewee:

Yes yesterday.

Interviewer:

I said, we should take the kids or students out, for example, to a small ah, industry.

Interviewee:

Yep, yep

Interviewer:

And, then ah, like, if it is bookkeeping, okay, teachers are expected to take the students out to the real-life situation like a shop or company, or the place-based learning situation. Now ah, have you had any or have you taught any lesson by using that approach?

Interviewee:

No, we really like to, but then, we don't have any opportunities there, that's all, I don't.

Interviewer:

So, you have taught any?

Interviewee:

Yeah, I haven't taught any, any place-based.

Interviewer:

But even though you haven't taught using the place-based concept, what do you think about the idea? The idea of taking the kids out to ...

Interviewee:

Yeah the idea of getting...like for example, when we looked at bookkeeping, my example was that small canteen there. Okay cash book, cashbook, how to keep a cashbook record. Ah, keep a journal of all that, that one I have always referred to that small canteen there, the mission canteen out there for many years I have been teaching here. Thinking that they would have some kind of idea of what's really out there, but only last year, I arranged with the manager of the mission store and took the class out there and they saw how the books are kept for that small store.