

Situating the Countried Existence of Critical Indigenous Pedagogies & Aboriginal and Torres Strait Islander Students' Ways of Learning

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Abstract

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The Countried experience of Aboriginal and Torres Strait Islander Peoples of (Australia), ground a resilience and strength in sovereign thinking through the Stories we share laterally with family and inter-ancestrally through our connections to the Dreaming. The stories we share develop a sense of inalienability we have that is connected to the Countries of origin we share and identify with across the continental scape of Land, Water and Sky Country. As a formative philosophical assumption, the Countried existence that this dissertation develops, illuminates the significance of this research thinking to contribute to the continued development of Indigenous education for Aboriginal and Torres Strait Islander students attending secondary high schools across (Australia). By attending to the ways Elders as significant Indigenous leaders describe and develop their storied lives through lived experience, this Countried philosophy emerges through the Storied knowing of Country. By examining the approaches to learning Aboriginal and Torres Strait Islander students adopt, further evidence can be contributed to the research surrounding Indigenous thinking and cognitive approaches to thinking through education learning tasks. By examining the perceptions and beliefs of non-indigenous teachers, this dissertation aims to contribute evidence to Indigenous pedagogies that teachers can deploy in the delivery of meaningful Indigenous Knowledge curricula content. Summatively, this thesis found that when deep engagements are made into the notion of inalienability of Countried experience, salient avenues of thinking and learning and teaching emerge surrounding the ways education can continue to elaborate and relate meaningfully to the First Peoples of Australia.

*'Man, I goin Eglan to speed up what empire start – that scorn, self-love and pride, I will put
together with humility' (James Berry, 2007, p. 73)*

Honouring the Windrush Generation; and my sisters' island home

For Maria, Judy, Sarah, Louise

And Mum

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Abstract

The Countryed experience of Aboriginal and Torres Strait Islander Peoples of (Australia), ground a resilience and strength in sovereign thinking through the Stories we share laterally with family and inter-ancestrally through our connections to the Dreaming. The stories we share develop a sense of inalienability we have that is connected to the Countries of origin we share and identify with across the continental scape of Land, Water and Sky Country. As a formative philosophical assumption, the Countryed existence that this dissertation develops, illuminates the significance of this research thinking to contribute to the continued development of Indigenous education for Aboriginal and Torres Strait Islander students attending secondary high schools across (Australia). By attending to the ways Elders as significant Indigenous leaders describe and develop their storied lives through lived experience, this Countryed philosophy emerges through the Storied knowing of Country. By examining the approaches to learning Aboriginal and Torres Strait Islander students adopt, further evidence can be contributed to the research surrounding Indigenous thinking and cognitive approaches to thinking through education learning tasks. By examining the perceptions and beliefs of non-indigenous teachers, this dissertation aims to contribute evidence to Indigenous pedagogies that teachers can deploy in the delivery of meaningful Indigenous Knowledge curricula content. Summatively, this thesis found that when deep engagements are made into the notion of inalienability of Countryed experience, salient avenues of thinking and learning and teaching emerge surrounding the ways education can continue to elaborate and relate meaningfully to the First Peoples of Australia.

Preface

Works completed prior to beginning PhD and cited in text where appropriate:

Lowe, K., Backhaus, V., Yunkaporta, T., Brown, L., & Loynes, S. (2014). Winanga-y Bagay Gaay: Know the river's story. *Curriculum Perspectives*, 34(3).

Additional work created during the PhD and cited in text where appropriate:

Backhaus, V., Horton, D., Szucs, R., Thring, H., & Tindale, N., B. (2016). Cartographic Map - Polygonal custom tile conic projection - Lambert Conformal Conic GIS overlay of river systems and traditional territorial boundaries. Created by merging existing maps developed by David Horton, Norm Tindale and GIS software coding by Hayden Thring. GIS, Borneo, Indonesia: GrasshopperGeography.com.

Additional works created during the PhD and not cited in this dissertation:

Hurdley, R., Biddulph, M., Backhaus, V., Hipwood, T., & Hossain, R. (2017). Drawing as Radical Multimodality: Salvaging Patrick Geddes's Material Methodology. *American Anthropologist*, 119(4), 748–758. <https://doi.org/10.1111/aman.12963>

Grant application research contributions to non-government Indigenous community organisations:

2016	The Streets Organisation, "Mulumlung International Study Initiative" Grant Thornton
2017	Boonwurrung Foundation, Victoria Health, University of Melbourne "Caring for Country: Associations between Land, Water and Health in Urban development"
2017	The Streets Organisation & Queensland Prisons, <i>Standing Up</i> prison pre- & post-release men's program
2017	Boonwurrung Foundation, "Reading the Country" High School Academic Program Melbourne, International Gateways College
2017	The Streets Organisation & Education Queensland "Step Up" High School engagement program
2017	The Streets Organisation & Education Queensland "Bounce" mentoring program
2018	The Streets Organisation & Education Queensland "Retain" High School Student suspension re-engagement program
2018	The Streets Organisation and Education Queensland "STRIVE" Re-engagement in vocation or education for young people in the juvenile justice system

Note: Morphological invariance through the use of capital letters, bracketing, pronoun usage and semi colons.

This dissertation employs at times an inventive morphological regime to disrupt, unsettle and at times contain meanings within a border through the use of brackets. The standardisation of capital letter usage and brackets around some normally unbracketed words and non-capitalised words, is to typographically challenge assumptive meanings as text is written down. This is a result of engaging in the temporality of writing to affectively respond to the meaningfulness of writing down. The form and shape of meanings as and when they are affectively engaged during the research and writing process, connects to deep personal, lateral and inter-ancestral processes of relational meaning. Additionally, semi colons strategically accompany prepositions such as ‘with’ and ‘to’ to give the reader ample time to pause on different meanings syntactically negotiated in the development of meaningfulness. This emphasis is purposeful in conjunction with the glossary to impress upon the reader meaningful stances regarding definitional position, word deployment, syntactic grievances in sentences for the sake of meaningful Indigenous Knowing. The dissertation at times deploys the pronouns *we* and *our* as a purposeful and respectful call to fellow Indigenous and Indigenist researchers to be mindful of the ways *we* conduct Country Indigenous Research and work with Communities in and across the (Australian) Country continental *scape*. *Scape* in this sense being Land-scape, Water-scape and Sky-scape. The use of ‘our’ and ‘we’ at times, also means a temporal juncture. This reflects the relationality of identifying with; alongside; and connected to the notion of Indigeneity. It is expressed through shared living experiences the author called upon through the meaningfully memorialised meanings saliently upheld during the *writing down*. In this way, honouring and respecting connections between Land and Water – the writing down, connecting with Story – Sky – the upheld memories and the cyclical temporal processes that occur *in-between* such named places.

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Chapter 1

Introduction

This dissertation contextualises the research problem in three ways. Firstly, Indigenous Knowledge exists as Countried Knowing of ways of learning and teaching. Secondly, the Storied Knowing that develops conceptual relatedness between Land, Water and Sky Country as Countried existence, guides the development of Indigenous Education in Australia. Thirdly, the development of sovereign thinking venerates the inalienability of Countried experiences as a resistive and counter intuitive refraction of the ontological alienability proffered by non-situated ways of meaning. These salient assumptions inform the overall breadth and depth of this dissertation and attempt to develop both the literal and conceptual grounding intimated through the notion of Indigenous Education.

The prevailing assumption suggests Aboriginal and Torres Strait Islander students are expected to attend formal institutions of education, achieve learning outcomes, and graduate with the expectation that they will pursue post-secondary forms of social engagement be they familial, employment, vocational, or university studies (Ford, 2013;

Hughes, 2015). This assumption is predicated on the belief that Indigenous (Australians)¹ are a homogenous group of Indigenous Peoples. The assumption propagates the belief shared among educators that Aboriginal and Torres Strait Islander students can be acculturated away from any evolving intelligent design situated within Countryed ways of knowing, being, learning, and thinking. Such beliefs of settler colonising educational, learning and thinking inform the continuance of alienating Aboriginal and Torres Strait Islander Peoples. Instead they are grounded in Land -Water - Sky forming conceptual and physical links. These links are held through the Stories and resilient familial and personal histories and experiences.

Not engaging pedagogically and perceptually with the ways Aboriginal and Torres Strait Islander Countryed Identities are thought about, sustained, maintained, created, propagated and Storied intergenerationally means the educational outcomes assessed and generated for Indigenous students will continue to disconnect, acculturate and disseminate inauthentic and tokenistic forms of knowing for and with (Australia's) First Peoples. Furthermore, the nuanced and creatively unique and evolving ways of Aboriginal and Torres Strait Islander Peoples continue to define the sovereign thinking of our being. By accounting for and acknowledging the Countryed existence inalienably formed within a personhood of Indigeneity, scholarship connects to a greater and foundational part of Indigenous thinking and identifiability within the wider mainstream conceptualisation of (Australia's) First Peoples.

Chapter 1 will develop the argument for the notion of Countryed experiences. The notion of Countryed thinking as a significant perception of the Countryed self, highlight how stories told laterally and inter-ancestrally foster meaningful relationships between People and Country. Secondly the review will position learning through the theoretical constructs understood by educational psychology to develop critical forms of contribution to Indigenous ways of learning. Thirdly the notion of Countryed Pedagogies as a Critical Indigenous Pedagogical turn towards identifying pedagogies cognisant of both teacher and learner in a relational process of instruction and achievement of Indigenous Knowing.

The Chapter also identifies the significant Indigenous Research method design that invites the development of Storylining Research Inquiry (SRI) to respond to the ways

¹ Bracketing develops the awareness that Indigenous (Australian) Knowing originates from a suggested base of hundreds of different language groups that shared distinct *Countries* of origin and meaning across the continental and island landscape see also Figure 1 (Diaz, 2016; Eseli, 1998; A Moreton-Robinson, 2015)

Stories are told, *yarned up* and experienced through the meaning making process of connecting with; to; and alongside; Country.

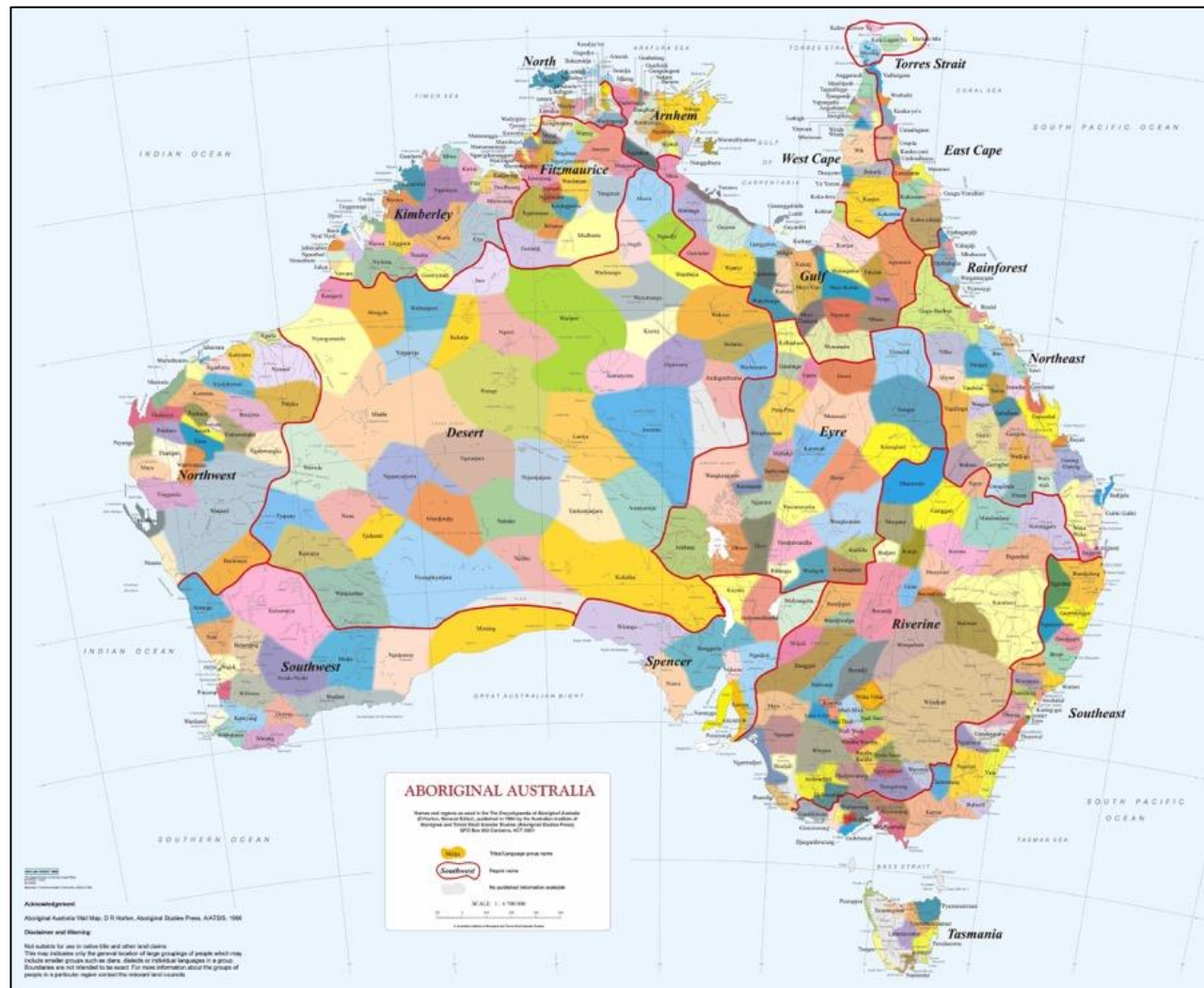


Figure 1: The suggested notion of Countries across the (Australian) continental scape with distinct and relatable ways of Knowing and Being.

1.1 Countried Experience

Indigenous theorist have argued that the very nature of non-situated theory production and subsequent activity upon Indigenous Knowing, is the realised and identifiable living trauma of becoming aware of the way we continue to be situated in research and Country² (Hau'ofa, 1993; K. L. Martin, 2003; M. A. Meyer, 1998; A. Moreton-Robinson, 2016; A. Simpson & Smith, 2014; L. T. Smith, 1999). Isolating ourselves from such institutional and academic theorising mechanisms assumes an antithetical resonance to the continuity of our Countried existence (A. Simpson & Smith, 2014). However, the ways we emerge from our Indigenised Scholarship ought to identify the specificity of our distinctness, that leads not to uniformity, but to universality in respectful and relatable ways to our Countried spiritual and humanly existent experience (M. A. Meyer, 2008)

Storied Country and the Storytelling of such Countried experiences to our children; our children's children; our children's, children's, children; attends to the notions of intellectual sovereign thinking. This awareness of knowledge sharing is about growing scholarship in Education towards the teaching of Indigenous Knowledge in meaningfully aligned ways that attend to our growth and continuance. Further it affords the positive contributions that support the assumption that: *[T]here is a danger in allowing colonization to be the only story of Indigenous lives* (Corntassel, Chaw-win-is, & T'lakwadzi, 2010, p. 139). 'Indigenous Knowledge is reason-able; deliberate, and useful for making sense of life' in meaningfully pragmatic ways (Doxtater, 2004, p. 620). It is this vein that guides this thesis while mindful that 'One of the canons of good research is that it should never hurt the people studied' (Peacock, 1996 cited in; Crazy Bull, 1997, p. 1). Indigenous research is "speaking back" while contributing respectful creationary and productive outcomes from research writing as Indigenous scholars (Bang, Warren, Rosebery, & Medin, 2012; Calderon, 2014, 2016; A. Simpson & Smith, 2014; A. Smith, 2013).

1.2 Countried Thinking

The Being of Indigenous Knowing has not been and never will be passive (Diaz, 2016; Hau'ofa, 1993; K. L. Martin, 2003; M. A. Meyer, 2008; Mosby, 1998). Ownership and

² 'Country' as capitalised denotes the ways the term honours Place defined through Indigenous Knowing.

research scholarship inalienably, has never been ceded from our Being (K. L. Martin, 2003; Mowaljarlai & Malnic, 1993). Our Beings may well have experienced the settling of *non-situated*³ processes with; through; on; or connected to our Countries. Yet our capacity for continuance through; with; and connected to; being Placed by Storytelling, enacts the continuity of resilient Story Work. This resilience is evidenced within our living and existing experience as Storytelling beings who not only are holding values but also “they are lived values” of a Countried existence (Corntassel et al., 2010, p. 138). This Countried existence will always be an affective enculturation of identifying Indigenously through the literal and conceptual relatedness of Land, Water and Sky Country to our learning being.

1.3 Countried Pedagogies

Countried Indigenous pedagogies represents the continued development of educational language and practice around how Aboriginal and Torres Strait Islander ways of learning and thinking could best assist Indigenous students to enculturate meaningful ways of engaging identifiably with the inherent Countried existences they hold (N. Harrison, 2005; Hughes, More, & Williams, 2004). Indigenous pedagogies also represents the continued engagement with Indigenous Knowledge by non-Indigenous (Australian) secondary school teachers, as the largest population of teachers tasked with delivering cross curriculum priorities for (Australian) secondary schools (Biermann & Townsend-Cross, 2008; Boon & Lewthwaite, 2015; Lewthwaite et al., 2015; Lewthwaite, Owen, Doiron, Renaud, & McMillan, 2014; Yunkaporta & McGinty, 2009).

The domination of non-situated conceptualisations of knowledge in Australian education, has shaped the colonising expectations and habits of Aboriginal and Torres Strait Islander Peoples understanding of learning (Rahman, 2013). Further, such hegemonic claims to knowing learning, and achievement have also shaped researchers tasked with the notion of undertaking ethical Indigenous research (Kovach, 2009; K. L. Martin, 2008; L. T. Smith, 1999; Wilson, 2008). Such contested spaces of knowledge production reflect the concealment of distinct Aboriginal and Torres Strait Islander ways of learning (Hughes et al., 2004); but also the contemporaneous maturation of such assumptions to push against dominant boundaries of meaning. In order to gain formal

³ Non-situated is developed in lieu of traditional ‘Western’ notions to contextualise ways of thinking as westernised rather than a geo-located ‘western’ territories (refer also Mignolo, 2002, 2009; Rhea, 2018; Richardson, 2011)

education, the resulting argument suggests Indigenous students ought to be understood and recognised for the inherency and coherency of their ways of learning by others, including teachers and institutional places of learning (N. Harrison, 2008).

1.4 Research Design

The project employed blended qualitative methodologies to answer the research questions posed from the literature review. The project also deployed and developed further Indigenous research methodologies to ensure account for the responsibility and protocol of undertaking relation building between the research, researcher and co-participants throughout the research project. Such ethical assumptions guide the overall structure of this project and the interactions with Aboriginal and Torres Strait Islander Peoples as Community Elders and Students. Elders and students had a yarn with the researcher which is a recognised form of semi-structured interviewing. Non-Indigenous school teachers tasked with teaching Indigenous Knowledge as part of cross-curriculum priorities were also interviewed at a metropolitan secondary school.

Storylining Research Inquiry (SRI) as a distinct form of blending qualitative research methods guided data analysis as a contributory addition to Indigenous Research Methodology. This was accomplished by employing heuristic analysis for the Stories shared by Community Elders. This analysis resulted in two parts for heuristic analysis which employed phenomenological and hermeneutic descriptions and interpretations. Phenomenographic analysis was employed for Aboriginal and Torres Strait Islander student and non-Indigenous Australian secondary school teacher data sets. In this way the blending of methods provided a broader scope with which to generate Storied Knowing.

Two previous studies were identified from the limited prior research where heuristic analysis was undertaken with Indigenous peoples and accomplished by Indigenous researchers who reflexively weaved their personal experiences into the research method. In these instances, both studies focused on Hawaiian, Native American and Maori Aotearoa/New Zealand participants (Kū Kahakalau, 2004; Peters, 2011). Phenomenographic analysis has been undertaken previously on Indigenous Australian undergraduate participants with varying degrees of transparency regarding the research findings on senior secondary students. Further, no explicit Indigenous Research

methodological assumptions were identified in the research outcomes (G. Boulton-Lewis, Marton, Lewis, & Wilss, 2000a; N. M. Purdie, Hattie, & Douglas, 1996). Despite these limitations, the exploratory nature of the overall study initiated the selection and choice of these methods as appropriate for qualitative data analysis within this project. Interrater reliability tests were also undertaken with the phenomenographic data sets, with 90% rater agreement between two independent raters. Cohens Kappa was also calculated as part of the reliability measures for phenomenography.

1.5 Conclusion

The current chapter has discussed the need for a greater salience of critical thinking surrounding Aboriginal and Torres Strait Islander ways of thinking, knowing, learning and teaching. By introducing the notions of Countryed Experiences, Countryed Thinking and Countryed Pedagogies. The Storied living experiences contributed by the research findings of this dissertation, develop the latent qualities that define both Story and perceptual conceptualisations of the notion of Indigenous Knowledge. By conceptualising the formulations and constituencies of Indigenous Knowledge, the relationality that emboldens and evidences the Storied capacity of Indigenous Knowledge; translates this Countryed experience and Countryed thinking into critical junctures of emerging Countryed Pedagogies.

Countryed Pedagogies contribute to the continued development of Indigenous identities within the distinct way's relationality is held by People and Country. Furthermore, Countryed Pedagogies assist non-Indigenous Teachers and educators to continue their educational and developmental growth of relationality to not only Aboriginal and Torres Strait Islander Peoples, but also to the sustaining connections we all hold to Country and the ways Country holds connection to us.

The subsequent chapters are structured as follows: Chapter 2 provides a review of the literature in the areas of Indigenous ways of thinking; ways of learning; and ways of teaching. Firstly, thinking is conceptualised as ways of thinking about lived experience as an emergent form of Indigenous Knowledge related to Indigenous Countryed existence. Secondly the chapter reviews the literature on learning theories as well as the context for distinct Aboriginal and Torres Strait Islander ways of Learning. Finally, Indigenous Pedagogies is reviewed and contextualised both internationally and domestically for Australian preservice and in-service teaching. Each section of the three-part literature

review will provide a research question. These research questions will also be listed at the end of the chapter and again in the Method chapter as a research framework.

Chapter 3 presents and justifies the study's design and methodology. It begins by developing the rationale for Storylining Indigenous research methodology. The rationale argues for the qualitative research method choices without precluding the interactive potential of quantitative methods. This is followed by a rationale for choosing each of the data collection methods in the study. A description of the participants, setting, and procedures is provided. The final section of the chapter presents the more detailed procedural aspects of the data analyses and concludes with interrater reliability methods and a discussion of ethical considerations.

Chapters 4 to 6 report the findings of the study. Chapter 4 uses the Storied yarns provided by Indigenous Community Elder. This data is deployed to share, frame and scaffold the different ways of thinking about Indigenous Knowledge as a Countried form of spiritual and human existent experiences. The second part using hermeneutic interpretations, explores three storied experiences of the researcher as a transparent, reflexive exploration of situated placeness of Countried existence as an Aboriginal and Torres Strait Islander and Malaita researcher. Both sections conform to the methods of heuristic analysis as well as previous examples of heuristic analysis with Indigenous co-participants.

Chapter 5 examines the research question of Aboriginal and Torres Strait Islander student conceptualisations of learning. This research question is answered by a phenomenographic analysis of student data to develop findings that explore distinct Aboriginal and Torres Strait Islander ways of learning.

Chapter 6 examines the research question of non-Indigenous secondary school teachers' conceptualisations of teaching Indigenous Knowledge. Again, the teacher data is examined by phenomenographic analysis to develop ways of teaching Indigenous Knowledge.

Chapter 7 reviews the study's three research questions by integrating but also discussing individually the research findings of the three previous chapters (4-6). All findings are examined in relation to existing literature in the fields of Indigenous lived experience, Place as well as Indigenous curriculum development. Further, the discussion will consider

literature on personal epistemologies, approaches to learning, and situated perspectives on learning and cognition.

Finally, Chapter 8 will discuss the limitations and conclusions of the research project. The limitations will attend to methodological and epistemic assumptions of Indigenous research, methods and the settings where institutional forms of research are produced and privileged. The limitations will also discuss two implications for future research. The conclusions will highlight key contributions of the study and discuss the significant relationships evident between the three research question areas explored.

Appendix A contains a glossary of key terms identified throughout the research project and contextualised within the dissertation.

Appendix B contains additional research information related to teacher pre-service training in Indigenous Knowledge curricula and teaching processes and contextualised within research question 3

Appendix C – F contains information pertinent to the ethical engagement with research participants as part of ethical clearance of the project within the University and the appropriate parental/Caregivers, and adult participants

Chapter 2

Literature Review

2.1 Introduction

Chapter 2 Introduces the structure of the literature review through three guiding research questions. In the first instance **Research Question 1** develops the argument for Countried experiences. Countried experiences are a potential formulation of the ways Indigenous lives and Storied histories share through the notion of Indigenous Knowledge. In other words, research question 1 raises the salience of defining what Indigenous knowledge is and how do Countried experiences account for the constituent aspects of Indigenous Knowledge.

Research Question 2 develops the argument for Countried thinking as an inherently and implicitly grounded relationality between Peoples and the identifiability with; and through; Country in perceptually and cognitively developed ways. Aboriginal and Torres Strait Islander students potentially approach the ways they learn to experience in perceptually different ways. How this is understood and why relationality between the approaches they reproduce to learn are an important conduit of meaning making for this section of the literature review.

The final section of the chapter, **Research Question 3**, develops the argument for Country Pedagogies as a critical juncture in the continued development of Indigenous pedagogies. Indigenous education has slowly developed the emerging notion of Indigenous pedagogies and this section of the literature review suggests further contributions to both pre-service and in-service professional teacher training. Building on existing literature this chapter summatively aims to position the significance and contribution of three key research questions. These research questions are scaffolded by the understanding of Indigenous Community Elders, researchers and teaching professionals tasked with the continued development of meaningful engagement with Aboriginal and Torres Strait Islander students specifically but the wider education of non-Indigenous students.

2.2 Country Indigenous Knowing

2.2.1 Introduction

The aim of section 2.2 is to introduce a review of the notion of Aboriginal and Torres Strait Islander living experience as an inherent foundation of the notion of Indigenous Knowledge. This section of the review will position research question 1 through the associated literature review. Defined through epistemology, ontology and axiological assumptions; such guides frame the core beliefs, values and ways of seeing and doing in our⁴ worldviews (Eseli, 1998; Hau'ofa, 1993; K. L. Martin, 2003; Mosby, 1998).

The nature of intergenerational Indigenous Knowledge transmission has effectively operated over a significant period (Agrawal, 1995). Problematically, the impact of colonising processes has been felt on the connection between people and the grounding of stories that make meaning of Indigenous living experiences. However, Story does continue, because we still share our stories. This section will develop a critical analysis of Indigenous Story work as a form of learning and teaching protocol for Knowing and Relating.

The section will review the notion of Classical thought. At this juncture the section will unsettle the literature review and move into interpretations of the notion of Place Thought; Trade Thought; Land Thought; Water Thought; Fire Thought and Sky Thought. These elemental notions of Indigenous Knowledge respect, maintain and generate the

⁴ The use of 'our' and 'we' by the author at this juncture reflects the relationality of identifying with; alongside; and connected to the notion of Indigeneity expressed within the research agenda and throughout the living experiences shared as knowledge-able.

potential of seeing Indigenous Knowledge as an epistemological and ontological meaning making constitution of teaching and learning and thinking about the ways we situate our living experience. These sections of the review develop distinct and relatable communities of understanding about Indigenous living experience as constructed through distinct elemental notions of understanding Country. By developing this guided review of different ways of thinking about Indigenous living experience, the review will thoughtfully develop the notions of 'ethical relationality' between different meanings conceptualised (Donald, 2012, p. 543). The theoretical story developed as part of this review is argued as a meaningfully grounded and empirically structured and modelled body of Storywork (Peschard, 2007).

2.2.2 Classical Thought

Classical thought surrounding phenomenological points of views, would suggest methodological approaches emphasize first-person experiences and explicit research programs to incorporate a set of tools and concepts for analysing the structure of first-person experiences (Heidegger, 1927; Husserl, 1913; Merleau-Ponty, 1964; Sartre, 1943). Phenomenology asks us to question the way we experience the world - to want to know the world in which we live in as human beings (Giorgi, 2009; Linschoten, 1968; Moustakas, 1990a, 1994; van Manen, 1977, 1990). The structure of these forms of experience typically involves what Husserl called 'intentionality' of *personal features* or *properties of characters*, which suggests the directedness of experience toward things in the world as part of our consciousness of or about something in relation to the context (Husserl, 1913, p. 261). In other words, appearance as opposed to reality in what we come to understand as existence guides us to think about what are noticed experiences and the ways they motivate us (Kockelmans, 1967; Moustakas, 1990a, 1994).

As a starting point, following the Husserlian tradition, 20th century phenomenology has branched into various forms. An encyclopaedic account suggests (1) transcendental phenomenology studies eidetically how objects are constituted in pure or transcendental consciousness, setting aside questions of any relation to the natural world around us (Kersten, 1997). (2) Naturalistic phenomenology also eidetic in nature, takes consciousness to be a part of nature as a natural attitude and studies how consciousness constitutes or takes things in the world of nature (Embree, 1997). (3) Existential phenomenology studies concrete human existence, including our experience of free choice or action in concrete situations (Compton, 1997). (4) Generative historicist

phenomenology studies how meaning is generated in historical processes of collective experience over time (Steinbock, 1997).

(5) Genetic phenomenology studies the genesis of meanings of things within one's own stream of experience (Welton, 1997). (6) Hermeneutical phenomenology studies interpretive structures of experience, how we understand and engage things around us in our human world, including ourselves and others (Nicholson, 1997). (7) Realistic phenomenology studies the structure of consciousness and intentionality, assuming it occurs in a real world that is largely external to consciousness and not somehow brought into being by consciousness (B. Smith, 1997).

Despite these contemporaries in scholarship, the term phenomenology was used as early as 1765 with occasional use in Kant's writings. Hegelian influence on phenomenology suggested an *immediacy* of knowledge as it appears to consciousness. In other words, the science of describing what we perceive and sense to know in rational logics of noticing. The process leads to an unfolding of phenomenal consciousness through science and philosophy 'toward the knowledge of the absolute'⁵ (Kockelmans, 1967, p. 24). These introductory notions of what constitutes classical thought have scaffolded assumptions regarding developmental and cognitive psychology as forms of dialectic thinking about experience as a reductive synthesis of thinking about how we experience (Hwang, 2006) .

Displacing such thoughts and unsettling assumptions from this body of literature entangled within Indigenous ideas and expressions of living experiences; is where Indigenous Knowledge continues to develop (Donald, 2011, 2012; Hau'ofa, 2008; K. L. Martin, 2008; M. A. Meyer, 1998; L. G. Phillips & Bunda, 2018; Sundberg, 2014; Todd, 2016, 2018). Indeed these authors acknowledge the contextual nature of being colonised and to alternatively orchestrate more *emancipatory* (Rigney, 1999), *positional* (Foley, 2003; Moreton-Robinson, 2003; Nakata, 1998; Paradies, 2006) or *decolonising* (Tuhiwai-Smith, 1999) contextualisations that speak independently and away from non-situated notions of experience. These research orientations can be seen to alienate Indigenous thinking from the academy (A. Simpson & Smith, 2014) or alternatively as a form of knowing that critically heightens the incommensurability evident in epistemes (A. Moreton-Robinson, 2016).

⁵ This thesis asks whose absolute?

Reflexively, Indigenous knowledge rose through the academy, fostered in alternative ways of resistance (Abu-Lughod, 1990; Agrawal, 1995; Cook-Lynn, 1997). Indeed being *resistant* (Alfred & Corntassel, 2005), *sovereign* (Aileen Moreton-Robinson, 2007) and encompassing *refusal* (A. Simpson, 2007) as frameworks to engage in *damage centred* (Mignolo, 2009) theoretical assumptions that continued to excavate and appropriate Indigenous thinking by the same institutions; practices; and processes. What evolved in some areas was the promotion of being *actively unsettling* (Baldy, 2015; Bang et al., 2014; Calderon, 2016; A. Smith, 2013; Tuck & Yang, 2012).

Resistance as a Counter intuitive consciousness emerged out of the challenge to the dialectics of what non-situated ideas thought of through the relational qualities between noticing, experiencing and the promotion of synthesis in logics of reason. In this sense, raising questions regarding the notion of a *kind of* authenticity to conscious reasoning currently accepted (Cooper, 2012). Such sensibilities proffer the assumption that experiencing as a function of conscious reasoning ought not to be assumed based on the reductive argument phenomenology presents as legitimate to Aboriginal and Torres Strait Islander thinking. In this way the examples of settler colonising ideas, logics, and relations could be seen as a predilection of *false consciousness* towards experiencing relatedness such canons of thought offer (Holmwood & Stewart, 1991). In this way this predilection could be seen as antithetical to Indigenous knowing, being and experiencing. Yet its pervasiveness entangles and entraps Indigenous thinking through forms of ontological alienability. This alienability propagates a notion of lived experience and a mimicry of being for an accepted and standardised version of *Aboriginal-and-Torres-Strait-Islander-ness*.

A useful example is *Karrabing* thinking around ‘object ontologies’ (Povinelli, 2016, p. 84). *Karrabing* is a group of critical thinkers that live with, through and within community in and around Darwin in the Northern Territory of Australia. They suggest a counter to reductive awareness of the ways we limit and constrain what we relate to as distinctly human *and* separate from the non-human. In this sense we are entities both human and nonhuman that always ‘manifest and withdraw’ but are always *present-in-relation* (Povinelli, 2016, p. 84). This sense of being present or as (K. L. Martin, 2008) suggests being *ever aware* of relatedness attempts to counter the way we are expected to access relationality through formalised reductive praxis to experience. Povinelli’s (2016) example of geontopower critiques forms of reductive canons through highly contextual Indigenous beingness to situate the ways such counter intuitive forms resist the temptations

of being made *phenomenal* without the implicit noticing of the everyday presentness of relatedness that contextually occurs between *Karrabing* and Country.

Additional examples of counter intuitive forms are also evident in the literature. The notion of naïve dialecticism in *Confucian* thought situated contradiction and congruences of experience, holding both in relationality, while not seeking to marginalise contradictions from the overall synthesis non-situated ideas tend to profess (Hwang 2006). Alternatively, *Indigenous Métissage*, for *Metis* situates the imaginative language of the metaphors in hermeneutic circles of noticing occurrences and theoretically building on such occurrences relationally and conceptually through Indigenous meaning making (Donald's, 2012).

In *Quandamooka* contexts, work on Country relationality and *ever awareness* is reflective of the ways Knowing is situated to Land and Water (K. L. Martin, 2003, 2008). In *Ngarinyin* contexts the *everythingness* of Living Country within a continental scape, shapes the connections and movements of Stories through living conceptions of relations between Land, Water and People (Mowaljarlai & Malnic, 1993). Furthermore, Water and Ocean relationality, scaffold meanings of the sea and ocean Knowing as generative, dynamic, familial to the movements of sea currents and the families and languages that *moved with* the continental ocean currents (Diaz, 2016; Eseli, 1998; Hau'ofa, 2008; M. A. Meyer, 1998; Mosby, 1998).

Counter intuitive ways unsettle, rally, intellectualise, grow and concern Indigenous and Indigenist scholars with disentangling the self or historical selves from the legacy of damaged research (Mignolo, 2002). In this way, to disobediently layer in our own Knowing and Thinking about relatedness and experiencing as opposed to the structurally systemic and epistemic violent process embedded into our being through colonising interpretations and the ways we are called to imitate and propagate such trauma (Mignolo, 2000, 2002, 2009). The example of the discursive project of 'Indigenous knowledges' being seen as a way to rupture the sense of comfort and complacency in conventional approaches to knowledge production, interrogation, validation and dissemination in non-situated educational settings - highlights how Indigenous knowledge contributes to critiques of the epistemic trust placed within the hegemonic conceptualisations of Indigenous Being (George Sefa Dei 2000, p. 111).

Thinking through and with Story we can argue, *sometimes Stories are awake, while some are sleeping*. In other words when we think relatedly, we see the animativity in ourselves just as we see and feel within the surrounding world that shares the same

autonomous immanence as our awareness or thinking. In this way, Indigenous thinking through and with relatedness to the external as a shared aspect of our thinking through and with Country and place, is where we existed and continue to exist. These thoughts run counter to scholarship that suggests ‘philosophical thinking as a kind of thinking can generate thought for *all* beings without engaging most’; and such assumptions, predicate the ways we begin to universalise as opposed to first situating or contextualising (Povinelli, 2016, p. 85). Summatively, it is the power of universalising without first Knowing and situating contexts rather than the process of universalising itself that Indigenous thought critiques within non-situated knowing contexts (M. A. Meyer, 2008).

2.2.3 Place Thought

Place-thought is an Indigenous conceptualisation of situating knowledge. The concept describes Indigenous situativity as an active dynamic meaning making of knowledge, thinking and learning with; through and connected to; related self-in-place (Watts, 2013). Place-Thought enacts a meaningfulness upon the idea that a Thought is located in a Place. Situativity in Watts’ (2013) example, locates *Haudenosaunee* and *Anishnaabe* cosmology and experience in-place. In Anishnaabe meaning, the Seven Fires of Creation, share the story of the ‘Fifth Fire, *Gizhe-Mnidoo* (the Creator)’ who placed his/her thoughts into seeds. In the ‘Sixth Fire’, *Gizhe-Mnidoo* created First Woman (Earth), a place where these seeds could root and grow (L. Simpson, 2011, pp. 41–49).

Similarly, *Haudenosaunee* – ‘Sky [World] Woman’ fell from a hole in the sky. On her descent, Sky Woman fell through the clouds and air towards water below. During her descent, water fowl could see this falling creature and saw she could not fly. They came to her and helped to lower her slowly to waters beneath her. The birds told Turtle that she must need a place to land, as she possessed no water legs. Turtle rose up, breaking through the surface so that Sky Woman could land on Turtle’s back.

Once landed, Sky Woman and Turtle began to form the earth, the land becoming an extension of their bodies (Mohawk, 2005, pp. 10–12). Relatedly, other indigenous examples of Place Thought assumptions evolve from: Eseli Peter’s (1998) description of relationality of Land, Sky, Water and Family to Mabuiag Island in the Torres Strait. Knowing is placed in the Torres Strait Islands (Eseli, 1998). Further, *Djaringgalong* Story locates *Gularabulu* in-place (Roe, 1983); just as *Nyitting* locates *Noongar* in Place Thoughts (Nannup, 2017).

2.2.4 Land Thought

Building on the notion of Place Thought as an inalienable assumption of Indigenous thinking and learning with; through; and connected to Place; Land Thought aspires to identify, situate and connect Land as both concept and Country in (Australian) continental scapes. *Country* is better understood as a vital interconnected web of social, ecological and spiritual relationships that Indigenous (Australians) begin to spatialise and identify with their sense of being related to Place (Whitehouse, Watkin Lui, Sellwood, Barrett, & Chigeza, 2014). (Australian) landscapes are Countried by Indigenous peoples. These Countries are reflective of the distinct pre-invasionary language groups estimated at over five hundred that held title to land through language (A Moreton-Robinson, 2015). These Countries are also reflective of the Land thoughts we hold as First Nations Peoples through the memorialised displacement of post-invasionary trauma (e.g. Loos, 1982) but also the continuity of existing in our Storied lives (e.g. Somerville, Somerville, & Wyld, 2010).

Despite colonial disruptions that displaced and unsettled these titled boundaries, the ontological relations still hold deep significance to the ways Indigenous peoples identify with Country of origin or still have and continue to live across the continent identifying geo-spatial localisations to Land and Water boundaries on Country. As an example, I identify as a situated Kalkadoon, Kiwai and Malaitan attributing assumptions to specific Land locations across (Australia, Torres Strait and Solomon Islands). While my existence as a product of multiple colonial incursions into the waterscapes and landscapes have scaffolded into my being different intergenerational movements; I still ontologically relate and acknowledge these Places as significant to my identifiability and inalienability as an Indigenous being. This large spatialised and relational Place Thought of my own Storyline, describes and holds my thinking of how I came into my Indigenous being and how my Storyline connects to those around me through; and with; the places I visit and the inevitable experiences I inhabit.

Thinking through the ways this spatiality has been developed and described as Land thoughts, we can begin to understand the distinct ways land thoughts aligned proper relationships between people, places and entities across the continental scape (see Fig 1). Storying of Land thoughts enacts intellectual meaningfulness. As an example, *Kanaka Maoli Schola* Manu Aluli Meyer suggested: *knowledge and spirituality interwoven into almost every description of how [we] view intellect, skill acquisition, wisdom, learning, knowledge, and understanding* (M. A. Meyer, 1998, p. 22). Errol West described such

proper meanings as: cultural, spiritual, secular, intellectual, political, practical, personal and public (West, 2000). *Quandamooka* shares: we develop an awareness and sense of self, of belonging and for coming to know our responsibilities and ways to relate to self and others (K. L. Martin, 2003, pp. 5–6)

Storying our land thoughts, and the storylines we create as lines of thoughtful significance maintained between people and communities, help to contextualise the different ways we can read about storylines in previous literature. The relationship between situated Storylines and the geo-locations expressed within Stories also guide the meaningful expression of Knowing and Being as related to people, places and the knowing of such relations (see *Fig. 2*). While these specific examples contribute to salient meanings held within the English language, such storylines are expressed in variously distinct ways and in various Indigenous languages that populated the continent prior to invasion (A Moreton-Robinson, 2015). In previous research such storylines have also been described as *dreaming paths* or *trading routes* (Amundsen-Meyer, 2015; Kerwin, 2010, 2011) *digital songlines* (Abdilla, 2017); *Songlines* (Chatwin, 1987; Glowczewski, 2005; Ingold, 2007; Mackinlay, 2002; Norris, 2016; Pawu-Kurlpurlurnu, Holmes, & Box, 2008; Poirier, 2005; Somerville et al., 2010; Tobler et al., 2017; Trigger & Martin, 2016); as well as *trauma trails* (Atkinson, 2002).

These paths are subsequently understood and followed by people as meaningful lines for Knowing, Walking, Trading, and Talking where communities of knowledge situate and attribute relatedness across various geo-situations of experience ontologically enacting and emplacing Story. The examples of *Pidgeon Story*, *Nanganarri Story* and *Two Dog Story* can be thought of as lines tracking and noticing the alignment between meaning and meaningfulness across the continental scape in guided but infinite ways of making meaning of particular places (see *Fig. 2*) (Kerwin, 2010, 2011).

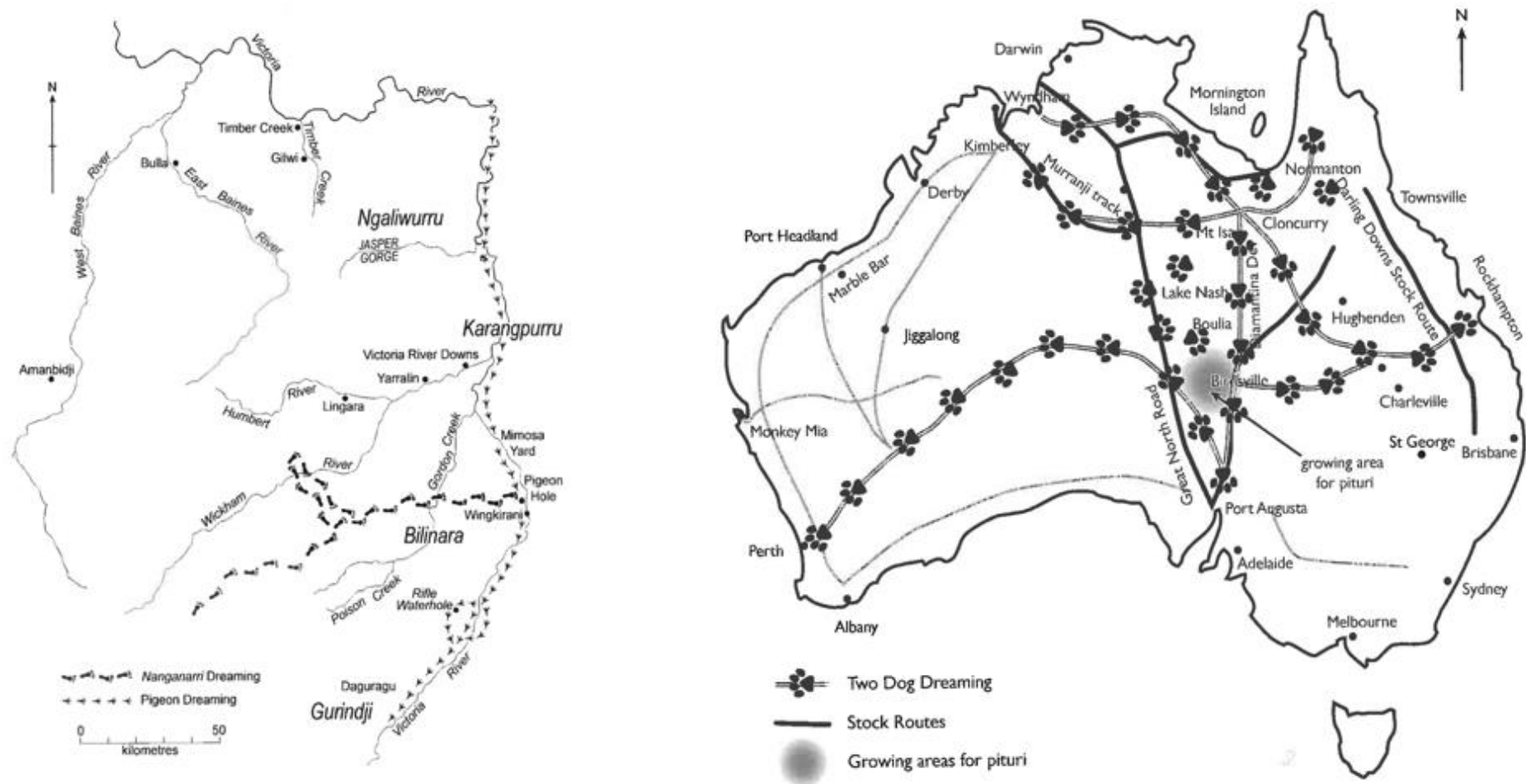


Figure 2: Relationship between Storylines and situated Land Thoughts (Kerwin, 2010; D. B. Rose, 1992)

Mowaljarlai and Malnic, (1993) conceptual thinking of Land thoughts through a sketched map of the (Australian) continental scape (see *Fig. 3*); evidences the body of relatedness of Stories, Places, and Storylines across the continental scape. This conceptual depth of related meaning making informs Indigenous Knowing within; through; and relatedness to Country as both theoretical Story and relation to continental scape contexts:

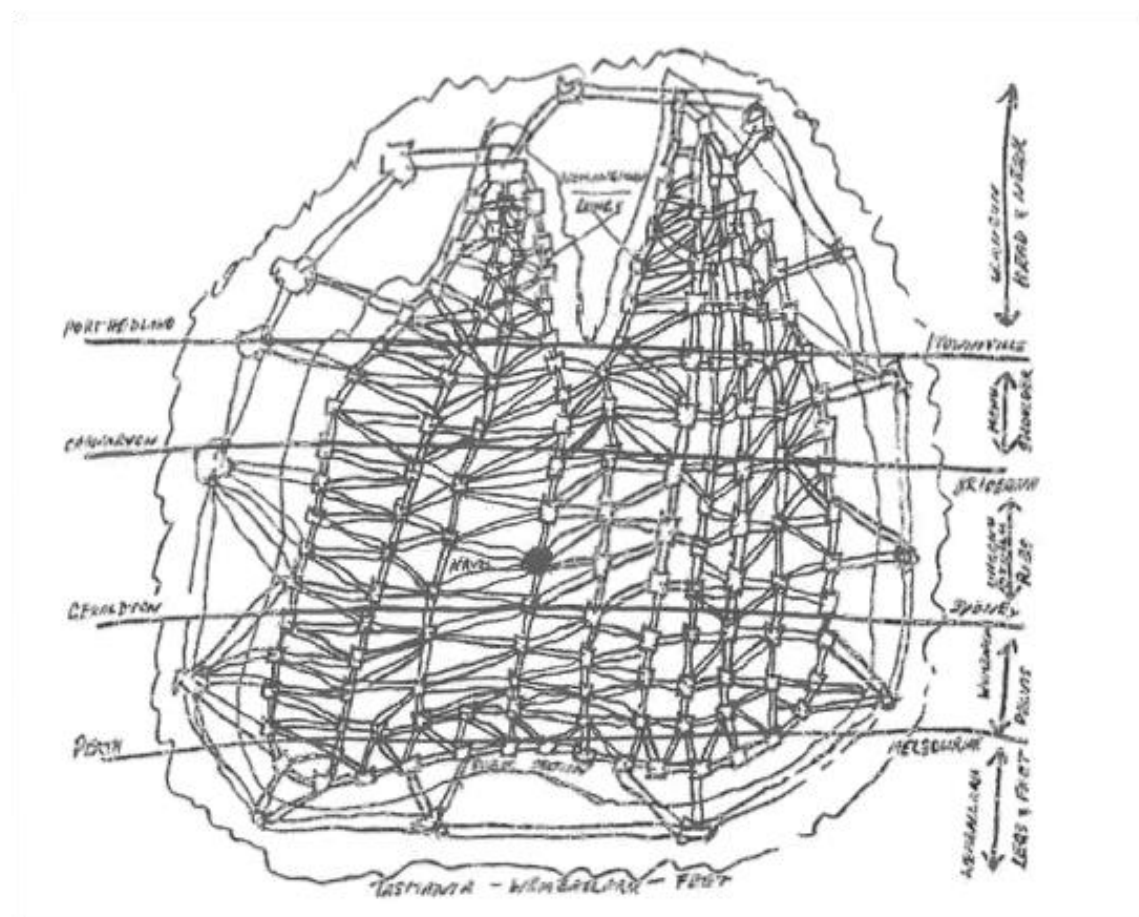


Figure 3: Visual description of interconnected relatedness between people, land and knowledge (Mowaljarlai & Malnic, 1993, p. 190)

Mowaljarlai sketched an outline of Australia and filled it with a crisscross pattern...he then gestured to lift the latticework, the image of Australia with the scoop of his hands. Showing a three-dimensional continent. "I want to show you something. I want to show you how all Aboriginal people in Australia are connected...the squares are the areas where the communities are represented, and their symbols and languages of the different tribes, in this country long time ago. The lines are the way the history the stories travelled along these trade routes. They are all interconnected; it's the pattern of the sharing system." (Mowaljarlai & Malnic, 1993, p. 190)

The words of Story highlight the ways Knowing enacts a memorialising of Country with Story. Story in this way contributed to a person's cognitive map of the physical and mental in deep relations describing and informing being-in-the-world. Knowing of personhood interconnected and related with and through place. This focus on place and space, what Swain (1993, p. 25) has termed "geosophy," is knowledge and wisdom derived through the

Dreaming and the Story-lines that guide transmission of Knowing and Being. Country and Story are placed significantly by land thoughts that hold and gather subject to subject relationships. These relationships through the physical spatialisation, ground the subsequent onto-epistemic identifiability to meaningfully align meaning and identifiability of Peopled Countries and the relationships that share with each other.

2.2.5 Water Thought

Building on Place Thought and Land Thought, Water Thought holds similar assumptions. As an example, When I think of my mother's people, on the islands of *Parama*, *Erub*, *Daru*, in the Torres Strait and the *Malaita* in the Solomon Islands - I think of Oceans and Seas and the Water thoughts - generative to my sense of being. Epeli Hau'ofa shared a *Sea of Islands*, which conceptually traces the ways passages are created between peoples, places and entities. By suggesting we are not isolated islands in the sea as we were seen through colonial eyes he suggests we are rather, part of a large network of islands interconnected through negotiated borders of meaning and language and people (Hau'ofa, 1993; 2008).

Manulani Aluli Meyer (1998b, pp. 22, 24, 27) contributed:

It is the ocean in which Hawaiian culture and beliefs swim...Hawaiian understanding of land, ocean, moon, place, and language and on proper protocol. Useful knowledge like which wood is best for bowls, what psychic force is needed to heal illness, what ocean conditions are best for deep sea fishing, which day of the moon is best for planting sweet potato, are all aspects of a utilitarian expectation. It is a world that requires significance to be remembered, and significance is tied to the many faces of usefulness.

Eseli Peter (1998) shared his Story on; through; with; Mabuiag Island within; through; and connected to; Sea Country in the Torres Straits. Describing genealogical connections between marine life, situated places and people; it was akin to Bani's (2004) descriptions of relationships between protocols for gathering food and the source of food within Sea Country. Mosby (1998) showcased *Ilan pasin* as a significant artefactual knowing of Sea Country stories, to guide the knowing of creationary and spiritual meanings that informed Torres Strait Islander colonial engagements and the broader cosmological understanding of the world. Whitehouse et al. (2014) refined the understanding of Water Thought to suggest:

“‘Sea Country’, also known as ‘Saltwater Country’, is an imperfect English translation of very old, extant and now flourishing Torres Strait Islander concepts and practices concerning care for saltwater ‘land’ that extends beyond littoral boundaries to the continental shelf and oceanic horizons.” (Whitehouse et al., 2014, p. 58)

In *Figure 4* below the situating of Sea Country described through Torres Strait Islander voices, Story the sea, the currents and seasonal effects of water colour, waves and the shape of the sea surface, together with the impact of these characteristics and qualities on the movements of boats - moving, and voyaging peoples. Such stories told to me were echoed in scholarship (Bani, 2004; Fuary, 2009; Lawrence, 1998; Lawrie, 1970; Nietschmann, 1989; Shnukal, 2002).

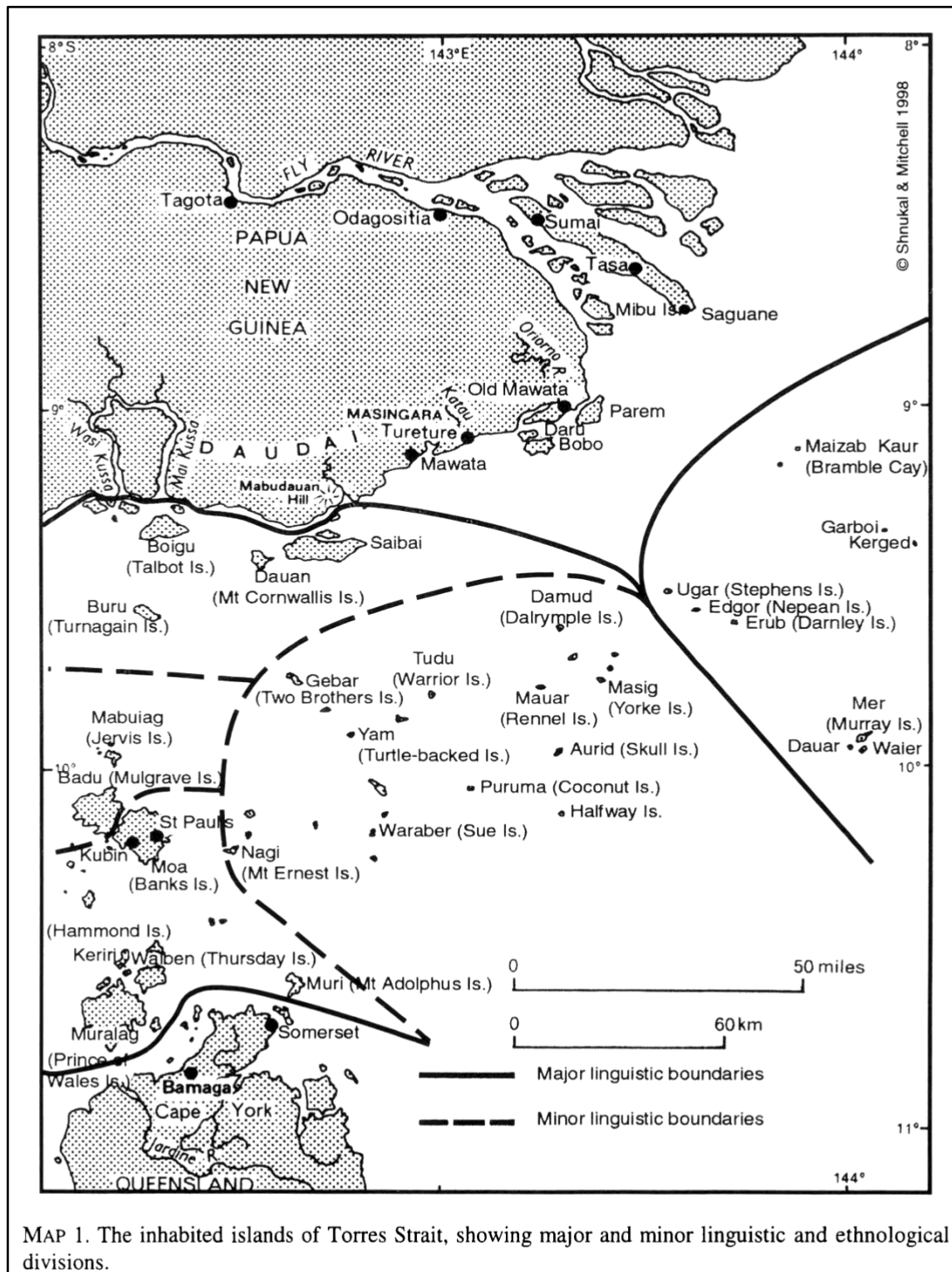


Figure 4: Situating Storied Sea Country through languaged Sea Country (Eseli, 1998, p. 4)

Diaz, (2016, p. 136) extended these conceptualisations of Sea Country to greater spatialised and situated areas of language knowing (see figure 4). He described the extent language plays; connects; maintains; respects; protects and honours the sea faring passages

Story travelled across; above; through; Water. The expansiveness of Sea Country is also evident in the deep relatedness between people and canoe (Diaz 2016). The name given to a chief: 'Mata'pang' and the lexical item /Mata'pang/ are cognates found among a number of dialects among the Austronesian language group (Fig. 5). This language group is considered one of the world's second largest and most geographically dispersed languages (Diaz, 2016, p. 119). The *Indigenised* form of Knowing relatedness is much more complex and generative of meaning than is typically assumed to be present. Epeli Hau'ofa contributed the assumption that '*The world of Oceania is not small; it is huge and growing bigger every day*' (Hau'ofa, 1993, p. 7).

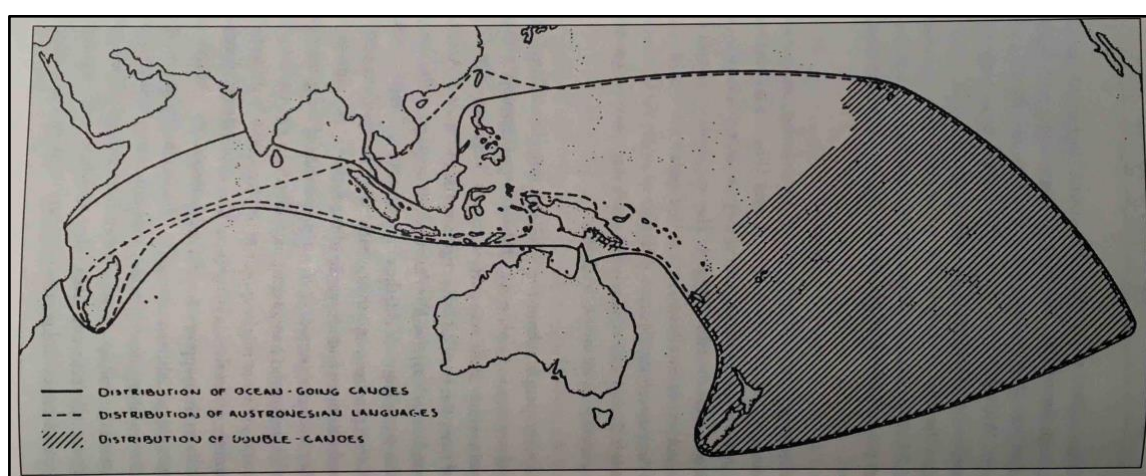


Figure 5: Visual area showing the expanse of the lexical frame of Storied Sea Country through people and canoe (Diaz, 2016, p. 136)

2.2.6 Fire Thought

The example of burning Country has played a role physically and conceptually for people and land as a way to care for Country across the Australian Continental scape (George, Steffensen, Musgrave, Claudie, & [and 15 others], 2013; Langton, 2006). The physicality of starting fires according to seasonal protocols of understanding meteorological patterns, life migrational movements, and vegetational growth - all informed the ways Elders burned Country. Fire intimated the ways Country was cleaned, known, related and affectively lived through the creations of new conceptual and physical pathways free of overgrown areas, as well as animating new growth across the burnt landscape and generating food ways and water ways from the ash generating fires (Langton, 2006). Burning Country was understood as a way to care for Country and People through the translations to ways of life, movements and relational pathways of meaningful connection to the Countried existences communities shared with and on Country.

This care conceptually describes the relational transformations between humans and the ecological world. Fire as a conceptual tool, generates dynamic translations through the burning process between people and the places inhabited - to transform, maintain and protect the meanings of life where it existed on Country. In these instances, just as flora and fauna were transformed by the burning of country so the conceptual thinking about land and water was transformed between unburnt and burnt Country. Such land and water thoughts can describe deeper conscious ontological conceptualisations of relation building through the social connections of a Countryed people. In other words, relations to unburnt country were transformed by burning country. Garneau (2012) used the notion of *thought trading* as a referentiality of the ways we think about our relatedness to among other things, Land and people. This provides the grounding of understanding deeply the relationships held by Native North American Peoples. In these instances sovereign thinking about trade is to 'create trade goods that intimate core culture while resisting to fully express informant thinking (Garneau, 2012a, p. 29).

The example of communities in the Laura Basin, (Australia) and more specifically *Olkolo* Elders showing how the burning of country accounted for ancestral practices of Burning Country; but also, the colonial forms accounted for practices of relatedness to Country through frontier wars. Additionally, the literal nurturing of floral forms for cattle grazing areas through burning country (Langton, 2006). Such experiences describe relatedness of people and communities, socio-spatialised to develop among groups various ways of relating to each other and the communities of meaning in place through Fire (Langton, 2006; Trigger & Martin, 2016).

These ways of sovereign Countryed thinking, these *thought trades* - describe how Elders in these situated regions managed both ancestral and colonial forms of Storying the Burning of Country. Elders expressed through Story - Sovereign *thought trades* of determining relatedness to Country and trading between the thoughts of ancestral thinking about for example - Burning Country and the colonial thoughts of burning country, ensured levels of relatedness to Country and life could be protected and maintained (George et al., 2013; Langton, 2006).

Fire thoughts themselves cannot be touched nor cannot be held by others, they can only be guided with deep respect of the integrity, wholeness and transformation they bring about both physically to the land and water and conceptually to our sovereign thinking about land and water thoughts. In a comparative example of understanding fire thoughts, Zoe Todd, (2018, p. 164) identified such complexity in understanding relatedness when she developed

her sense of *in-betweenness* as careful ‘thought trades’ through her thinking through of the dynamic *Metis* storytelling of moving between Scotland and Canada literally during fieldwork but also conceptually during her dissertation write up. Storying the ways, she was being respectful of places and the social relations that meaningfully guide the relationships she fostered in places and in-between through the translations through multiple places. When she made conceptual trades, she identified specifically with different spatialised locations and meanings bound in the historical legacies of her meaning making and the dynamic sovereign thought trades between places.

Reflectively, we can think of fire thoughts across the (Australian) continental scape as the conceptual Stories that ground Country core beliefs and values that; *respect fire thoughts* (Elders, 2003; George & Musgrave, 1995; George et al., 2013); *trading fire thoughts* (Kerwin, 2010, 2011; Pascoe, 2014); *moving with fire thoughts* (Nannup, 2006a, 2006c, 2006b; N’arweet, Gukka Briggs, 2008; Roe, 1983; Roe, Benterrak, Muecke, & Nangun, 1996); *creating with fire thoughts* (Goobalathaldin Roughsey, 1975; M. D. Harrison, 2003, 2013; Mowaljarlai & Malnic, 1993; Neidjie, 1985; Oodgeroo, 1970).

These exemplified variations of relatedness to sovereign Country thinking, express the conceptual variations and grounded significance of fire thought to Country peopled places. Trading thoughts through songs, ceremonies, goods and technologies as both literal and conceptual meaning making – guided; situated; and respected the boundaries and the transformations to Knowing Land and Water and the ways Fire thoughts transformed thinking on Country. Fire trading in sovereign thoughts or being ‘free traders’ - were; are; and; continue to maintain relationships with; to; surrounding communities through the stories shared together to make meaning of the lived experiences shared together – *David Garneau cited in* (Todd, 2018, p. 164).

2.2.7 Sky Thought

Stories we tell and share and the ways Stories move across; under; through; and over Land and Water can be thought of as the ways we intellectualise the telling of Knowing and Being (Bessarab & Ng’andu, 2010; Christensen, Cox, & Szabo-Jones, 2018; Christensen et al., 2018; Geia, Hayes, & Usher, 2013; Kovach, 2009; L. G. Phillips & Bunda, 2018; Todd, 2016, 2018; Watts, 2013, 2013; Wong, 2018). In the same way when we uplift our Country knowing into the heavens and into the surrounding air we breathe; Story becomes an expression of Sky Country - the Story-telling where the oral tradition dominates (Geia et al., 2013; Langton, 2006). Storylines are often aligned with the same

meaning and intention as storytelling in that the telling or aligning meanings in significant ways guides the intentions of placing Story on Country (Clandinin & Connelly, 2000). In this way the generation of ‘three-dimensional inquiry space[s]’ in research method to assist in revealing how people tell and live their stories (Clandinin, 2006, p. 44). However, Storytelling doesn’t privilege the identity of a researcher or a participant, Story is a process that cuts across the formality of identity and demands the human to human interaction (Bessarab & Ng’andu, 2010; Spradley, 1979; Yunkaporta, 2014; Yunkaporta & Kirby, 2011).

Problematically, for Indigenous Stories when we make the distinctions between *Narrative* and *Story*, we begin to gain a sense of the ways master colonising narratives manifold the breadth and depth of Indigenous Storying capacity (Archibald, 2008). Both can be seen to have two different ways of expressing and aligning meaningfulness (Halverson, Goodall, & Corman, 2011a). One way is Master Narratives, which talk about a system of stories that can be employed systemically – guided and regulated in specific ways.

Storied systems control Stories in certain ways by adding stories, subtracting stories or swapping stories out when a systemic notion of growing and maintaining a system for the sake of systemic existence (Halverson, Goodall, & Corman, 2011b). The example for Australian contexts would suggest the Master Narrative of storying Australian nationhood and the ways such historical legacies story ‘discovery’ of Australia; while restricting the locations of Indigenous stories that talk about invasion, massacre, segregation, politics’ and intergenerational trauma. This resilience of the system to survive through the meaning of Narrative, creates a *Master Narrative* over Story. (Halverson et al., 2011b). Reflecting on this difference, Leanne Betasamosake Simpson (2014, p. 7) suggested:

‘theory’ isn’t just for academics; it’s for everyone. And so, the story of maple sugar gets told to (some of) our kids almost from birth. “Theory” within this context is generated from the ground up and its power stems from its living resonance within individuals and collectives’.

The significance of making this distinction is to ensure clarity around Story as framed through grounded Indigenous Knowing; and Narrative as framed through the hegemony of language ideography and the notion of a Master Narrative (Hymes, 1996; Mumby, 1989; Silverstein, 1976). Notwithstanding this semantic distinction, narratives and stories are important because without them our ability to make language more meaningful, is the work of storytelling to Storyline our experiences. Storytelling itself as opposed to Story reading also has been suggested to have a greater impact on learning and executive function

development (A. Diamond, 2013, 2018; Gallets, 2005). Certainly this has translated into understanding that oral storytelling is connected to modes of understanding that have been recognised by theorists to be intrinsic to the way we think – we are literally hard wired for story (Bruner, 1990; Egan, 1989; Hibbin, 2016)

Indigenous Knowing educationally, understands the ‘meaningful kind of work’ of Storytelling (Osborne, 2013, p. 173). Story Work is a form of situated living experience of beingness. This beingness is shared by participants involved in the Storytelling of Story. Teller and Listener, engaging in meaningful transfer of understanding and experience to create and produce a meaningful and purposeful living experiences - composed of individually valued and purposefully integrated elements. Peschard, (2007) highlights the notion of a theoretical story. Here, Story work operates to both resource and constrain Story. Eventually, revealing the construction and assessment of a model whereby phenomena can highlight the nature of values and value judgment in scientific activity (Peschard, 2007).

Educational domain specific examples highlight the significance of Story in various ways. Bueno & Krause, (2007) suggest the semantics of *metamathematics* used to elaborate these models. Metamathematics often impose restrictions on the resulting models. Rosales, (2017) adds for mathematical elements, narratives function as integrating devices of the mathematical components. Story holds them together as pieces in the investigation of the same complex process. Value dependency questions the value in this way of ‘traditional’ ways of teaching about phenomena and then identifying the cognitive value within such assumptions to develop alternative ways of pedagogically conveying meaning – Story being such a valued alternative (Peschard, 2007, p. 162)

Story is developmentally constructive, informative, protective, and an organically biological entity - hardwired into our psyche for learning and intergenerational knowledge transmission (Bruner, 1990; Egan, 1989; Gallets, 2005; Hibbin, 2016). Story Work highlights the significance of learning to coherently convey meaningfulness but also to listen and learn. Story is about being with; alongside; and connected to; individual storied elements which ought to be learned through Story Work by significant Story tellers rather than the ‘plainness’ of traditional moral philosophy (C. Diamond, 1991, p. 371). As Shannon, (1995) suggests, it is about the telling and believing the value in the world through; with; connected to; and developing in; Story. Furthermore, it is also about the ways Indigenous Storied Country is lived and expressed daily within the meaningful engagement in life and Country (Corntassel et al., 2010)

2.2.8 Situating Research Area

Indigenous Knowing and relating is cognisant of entanglements we face by classical thought and the broader non-situated ways of thinking about the world. Research ought to be able to enact resistance towards the ways Indigenous thought is concealed or covered over. The critical junctures we can notice in our vigilance is respondent to the ways we can respectfully share such wisdom. In doing so, Indigenous research can confront, negotiate and enter into dialogue with the manifestations of dominating non-situated persuasions from a sensitivity to the 'feeling space' of domination (Sharp, Routledge, Philo, & Paddison, 2000, p. 22). It is within this latter space for Education at least; that we can situate pockets of resistant thought and action to be engaged, nurtured and mobilised as forms of epistemic disobedience (Bridges, 2006; Mignolo, 2000, 2002, 2009; Sharp et al., 2000). Indeed, a comparative Native American assumptions by Cajete & Pueblo, (2010, p. 1131) responded with the idea: "*theory for Indian education that evolves from them and their collective experience*".

Suggesting these assumptions, the question still remains for this significant section of the literature review and that is to question what Indigenous theory as forms of *Place Thought, Land Thought, Water Thought* and *Story Thought* or indeed relations to *Classical Thought* inform the emergence of [Indigenous] research growth areas. Indeed, the suggested areas detail broad areas of scholarship and impact formal educational settings in a multitude of ways. Available literature would suggest the building of deeper critical frameworks that inform Indigenous Education and the resultant flow on would be to provide forms of parity in achievement for contextually situated Indigenous and non-Indigenous students (Biermann & Townsend-Cross, 2008; A. Day, Nakata, Nakata, & Martin, 2015; Hughes et al., 2004; Klenowski, 2009; Lewthwaite et al., 2015).

Explicitly there is a desire to respond to broader institutional governance mechanisms like '*close the gap*' and other institutionally privileged governing mechanisms (Altman & Fogarty, 2010; MCEECDYA, 2008; TCGCSC, 2018); that identify ways education can attend to the most marginalised and under-served students across the Australian educational landscape - which invariably locate Indigenous student achievement (Walter, Martin, & Bodkin-Andrews, 2017). Implicitly, the assumptions attempt to grow the institutional forms of Indigenised Knowing (Foley, 2003; K. L. Martin, 2008; D. M. Mertens, Cram, & Chilisa, 2013; A. Moreton-Robinson, 2016; M. Nakata, 2007; Rigney, 1999; L. T. Smith, 1999; Wilson, 2008).

These scholarship forms invariably predicate their existence on the validity and verifiability of what we mean by an alternative situated epistemic and ontological way of thinking; derived and socio-culturally contextualised as forms of meaningful meaning making (Harding, 1987; Hymes, 1996; Longino, 1990; Mumby, 1989; Sayer, 2011; Silverstein, 1976). Such forms, institutionally contextualised, guide institutional referentiality accordingly towards enacting reconciliatory translations on behalf of prior and continuing invasionary and colonising regimes by dominating, non-situated forms of epistemic and ontological reference. In other words, growing the critique of the institutional form as better able to respond to outliers and tensions within relatable forms of meaning making process (A Moreton-Robinson, 2015; M. Nakata, 2007; L. T. Smith, 1999).

These contingencies invariably systemise and operationalise critiques through the existent social and institutional processes of governance. Such contingent *re-norming*, in effect - the systems of utility; maintain survivability in alternative forms of settler colonising thinking. In other words the settler, the coloniser the invader never leaves but continues to exist in alternative dominant non-situated forms of being - epistemically and ontologically placed regardless of geo-location (Longino, 1990; A Moreton-Robinson, 2015; Wolfe, 2006).

The challenge to such thinking would argue that as Indigenous thinkers we are seeking forms of *equivalence* by appealing to the measures and sanctions that rest upon the verifiability of our thoughts (Garneau, 2012a). Further that as we develop our 'translatory' forms of meaning in the pursuit of equivalence, we are simply scaffolding and strengthening bridges that resource and access the institutional form and such act as institutionalised agents for the sake of formalising Indigenous informal environments (Garneau, 2012a, p. 29).

Accountability to the institution is to seek out novel ways to maintain comprehension, access, availability of resource to commodify, as well as the institutional form assessed as worth recording and saving (Garneau, 2012a). The challenge to institutional forms of Indigenous chirography are to commensurate the forms of knowing with an ancience to knowing that is not unilaterally identified within the institution and its forms of *language* governance of our Indigenous Ways of Knowing and Being (K. L. Martin, 2008).

This research project and this section of the literature review continues within the same vein of meaning that affords significance to textual representations of meaning and

logic. However it acknowledges the implicit tension of the written language to wrest meanings from the senses-*ability* and sense-*making* places that affectively intimate the deeper depths of knowledge transmission (Donald, 2012; Ebersöhn, 2015; Nicholas, 2009). The challenge for this thesis is to conceptually *language* Indigenous Knowing alternatively meaningful forms. Such emergent languaging dimensions speak to the feeling or affective enculturation of meaning as implicitly applied to infinite forms of explicit meaning making.

The example of *Hopi* Youth who *feel* and enculturate *Hopi* ways to a universe of infinite meaning is based on the sensory assumptions of *feeling* connected or *not feeling* connected (Nicholas, 2009). In effect it is no longer about textual representations that claim privileged and evidentiary places of unilateral meaning making; but the implicit, concealed and hidden forms of conscious relatability that are unseen but forever known through the knowing and learning behaviours as active forms of *Hopi* or [other-wised] Indigenous engagement (Chávez, Ke, & Herrera, 2012; Ebersöhn, 2015; Nicholas, 2009; L. T. Smith, Tuck, & Yang, 2018; Tuck, McKenzie, & McCoy, 2014). By intimating the languaging assumptions for the sake of this research project; the project can begin to develop exemplified meanings in dynamically, conceptually, emergent and nutritive forms connected to the representations we already acknowledge as deeply affective. In other words, engaging with the elemental notions of ‘Country’; ‘Water’; ‘Land’; ‘Sky’; ‘Story’ ‘Place’ ‘Fire’ - develops examples of emergent forms of Knowing and Thinking about the conceptually relatable links or taxonomical reasoning identified within the deep assumptions of Indigenous Knowing for educational settings.

2.2.9 Conclusion

‘More research is required not less’ was a guiding thought from Uncle Paul Hughes where and when I sat down with him on his veranda to yarn up ideas about the beginnings of my PhD, and to take ideas forward (Hughes, 2015; Hughes et al., 2004). This intention sets out the Countried scape of this dissertation. Knowing within Story Work by Storytelling Elders can be suggested as a way of developing an understanding of emergent Storylines of meaning. Holding this tentative assumption, this section has contributed meaning towards beginning to understand the continuity of Indigenous living experience as Storied and Countried through ways of thinking for meaningful meaning making. The following research question 1 is developed for the project:

Research question 1: What assumptions are held by Indigenous Elders towards

Learning and Knowing and How do Elders align relatedness to Country Knowledge?

2.3 Learning to Experience

2.3.1 Introduction

The aim of section 2.3 is to develop a literature review for research question 2. Learning theories form part of the extensive literature dealing with the ways people think about learning and intergenerational knowledge transmission. Aboriginal and Torres Strait Islander students continue to be present in educational data sets related to Indigenous education in Australia. The consensus is that educational achievement continues to fall behind and maintain disparities between Indigenous and Non-Indigenous Students (Day, Nakata, Nakata, & Martin, 2015; Lewthwaite et al., 2015; Martin, 2006; Martin, Nejad, Papworth, & Ginns, 2013). Specific Indigenous samples have, are and continue to be present as part of defining conceptual relationships between Indigenous experience and measurable educational psychology constructs (A. J. Martin, 2006). However, limited theoretical work has attempted to create Indigenous learning theory (Hughes et al., 2004).

This section will detail a review on learning theory associated with Barbara Hofer, Paul Pintrich, William Perry, John Flavell and the associated research of Noel Entwistle, John Biggs and Jan Vermunt in *Approaches to Learning*. The section will also detail a critique of Vygotskian and Bakhtinian frames of reference upon student learning in relation to Indigenous Knowing. The limitations of both to fully engage with Indigenous learner experiences have illuminated the need for continued orientations that meaningfully align not only with the existing body of research, but future directions within the small but emerging educational psychology research on Indigenous Knowing and meaning.

2.3.2 Perry's Tradition

Perry (1970) attempted to understand how students interpreted pluralistic educational experiences which led to a theory of epistemological development in college students as a learning theory about student intellectual development. Subsequently research branched into, several areas of learning research. These included understanding developmental sequences, whereby individuals move through a developmental sequence that reflects an evolving ability to coordinate the subjective and objective aspects of knowing (Kitchener,

1983). Building on Perry's work a quantitative measure suggested a predictive upward trend in cognitive performance from first year undergraduate to senior year was observed (Moore, 1989). The test instrument suggested scores of independent student learners are highly correlated with the higher stages of Perry's scheme where students were open to context relativism.

Perry's work also evolved into a branch exploring gender-related patterns in knowing (Magolda, 1992). Here the study suggested ways of knowing for the sample described: absolute, transitional, independent and contextual ways of knowing. Alternative work also considered informal reasoning across the life span (Kuhn, 1991). Highlighting the importance of argumentative reasoning in everyday thought offered educational psychology a theoretical framework for conceptualising and studying thinking as argument and the ways researchers could think about improving the quality of people's thinking.

In other areas Perry's tradition branched into identifying dimensions of epistemological beliefs whereby personal epistemology be considered a system of more-or-less independent beliefs (Schommer, 1990, 1993). Multiple beliefs that compose personal epistemology. And the concretisation of these multiple beliefs may or may not develop at a synchronous rate. The systemic belief system developed the following six features: (a) the addition of beliefs about learning, (b) the identification of distinct beliefs, (c) the consideration of asynchronous development, (d) the acknowledgment of need for balance, (e) the introduction of belief nomenclature, and (f) the introduction of quantitative assessment. Perry's foundational work also branched into the exploration of the relationships between personal epistemology, cognitive and motivational processes (Hofer & Pintrich, 1997; Ryan, 1984). In these areas theories about knowledge may be activated by a variety of academic tasks. These theories then influence how individuals approach these tasks in terms of their motivation and cognition.

2.3.3 Personal Epistemology

Understanding learning experiences can be thought of as identifying the relationship between personal epistemological development and epistemological beliefs (Hofer & Pintrich, 1997). To learn, suggests higher levels of thinking [...] leads to increasing competence, confidence and feeling of being in control in a complex world (Van Rossum & Hamer, 2010). The significance is that epistemological sophistication is as much a determinate of interpreting meaning as opposed to the words spoken to researchers.

Research in this area has focused on how individuals come to know, the theories and beliefs they hold about knowing, and the manner in which such epistemological premises are a part of and an influence on the cognitive processes of thinking and reasoning (Hofer, 2000, 2004b, 2004a, 2008; Hofer & Pintrich, 1997).

In one study, first year university students saw knowledge in science as more certain and unchanging than in psychology and were more likely to regard personal knowledge and firsthand experience as a basis for justification of knowing in psychology than in science (Hofer, 2000). Further, the relationship between education and personal epistemology suggest an associated interaction. Educational influences on epistemological development, fosters a learner's competency to critically evaluate information, resolve competing knowledge claims, and coordinate theory and evidence (Hofer, 2004b). Summatively, personal epistemology has typically been conceptualized in one of two primary ways: as a cognitive developmental process or as a system of beliefs. These thoughts have allowed researchers to think about (i) the way's learners monitor their understanding of new terms or conceptualisations, (ii) judging whether they comprehend what they encounter, (iii) and the ways learners regulate interpretive responses through reading and thinking about task material or activities.

2.3.4 Metacognition

The extensive literature on metacognitive knowledge has been described as the cognition of cognition. The functional aspects of stored knowledge or beliefs about oneself and others as cognitive agents, about tasks, about actions or strategies, and about how all these interact to affect the outcomes of any sort of intellectual enterprise (Brown, 1978; Flavell, 1979). Educational dimensions considered in one area the relationship between Vygotsky's theory of cognitive development and metacognitive work (Bråten, 1991a, 1991b, 1992). In these instances, among a range of cognitive interactions between the internal and the socio cultural; children's memory development through the Vygotskian framework of internal cognitive processes argues children learn to remember strategically and effectively in the everyday instances of school and home (Bråten, 1992). Further the mother child dyad and the instances of metacognitive modelling used by the mothers and the self-regulatory verbal expressions of the children were noted.

Researchers have also explored the relationship between metacognition and affect (Efklides, 2009; Efklides, 2006). Metacognitive experiences (ME) that comprise feelings,

judgments or estimates can be explored to assess the metacognitive interactions between the dual characterisations of cognitive and affective expressions of knowing (Efklides, 2001). Vermunt, (1996) explored the relationship between metacognitive, cognitive and affective aspects of approaches to learning. Here identifying the attributes of each dimension and the ways learning is enhanced or degraded based on the ways the interactions took place between the three dimensions.

Socially shared metacognition developed researcher understanding of social interaction during collaborative solving (Iiskala, Vauras, & Lehtinen, 2004; Iiskala, Vauras, Lehtinen, & Salonen, 2011; Vauras, Iiskala, Kajamies, Kinnunen, & Lehtinen, 2003). In these instances, the aim was to gain awareness of inter-individual learning processes that are evident as a function of the socio-cultural dimensions of learning. Similarly, metacognitive skill and intellect development explores the ways a metacognitively skilled student is likely to focus on relevant information given in the task assignment that is necessary for building an adequate task representation or plan (Veenman, Wilhelm, & Beishuizen, 2004). This is opposed to metacognitive knowledge research which focuses on declarative knowledge a student has and explores the interplay between personal characteristics, task characteristics and the available strategies in a learning situation (Flavell, 1979)

Fox and Riconscente (2008) reviewed the work of William James, Piaget and Vygotsky to explore the relationship between metacognition and self-regulation. Based on the relation of subject and object, they suggested James's perspective on metacognition and self-regulation is aligned with the Self; Piaget's with the other and object; and Vygotsky's with the medium or agency of language (Fox & Riconscente, 2008). The broader implications suggested metacognition and self-regulation ground a person's conscious experience of themselves as knower and actor. Through James, a person is at home in the Self; with Piaget, a person is at home in the world and with others; with Vygotsky, a person is at home in language.

Educationally, James may suggest the fostering of individuality and self-fulfillment. For Piaget, collaboration coupled with autonomy may be the goal. For Vygotsky, mastery of existing cultural tools and openness to the development and use of new modes of language activity and new tools may be the aim. Overall, the nature of inter-relativeness of key terms centre on metacognition, self-regulation, and self-regulated learning that provide the dimensions with which educational research on learning can identify useful avenues of further investigation (Alexander, 2008).

2.3.5 Cognitive Strategy

Cognitive strategy research considers the relationship between instruction and cognition through positive and negative learning experiences and the ways such experiences impact student motivation. Further, some students receive either formal or informal strategy instruction. Sometimes instruction is effective; other times it is not; and students also discover strategies on their own (Day, Cordon, & Kerwin, 1989; Pressley & Levin, 1983; Pressley, 1996; Pressley et al., 1990). Research focused on effective instruction suggested teachers do something every minute of every hour of every school day to motivate their students, using motivational mechanism to do so - from praising specific accomplishments, reminding students how well they perform when they try; to encouraging constructive selves. In other motivating ways, providing explanations for why the material being learned was important, appropriately used extrinsic rewards (e.g., to reinforce behaviours students otherwise would not do), encouraged student collaboration, expressed confidence in student capabilities, providing reassurances as needed (Pressley, 1996, 2005). In this way intrinsically guiding the cognitive strategies students take during an engaging pedagogical instruction.

The relationship between metacognitive development and cognitive strategy research explored the ways mental effort, strategy use and knowledge access developmentally changed between young children, older children and adults (Baker, 1994). The suggestion that deploying strategies that help memory are more demanding for younger children than older participants suggested older participants develop effective cognitive strategies to access knowledge and at times persevere while younger participants find such memory access demands to be too cognitively effortful. Educationally, the suggestion described the impact of schooling on memory development, demonstrating that strategy use was either less frequently or not at all observed in non-schooled samples of children (Schneider, 2015).

Pressley, Duke, and Boling (2004) suggested early reading instruction and cognitive strategy research can benefit further from encompassing grounded theory and correlation studies in conjunction with experimental and quasi-experimental research. This is exemplified by the teaching of phonemic awareness and phonics, as does guided, repeated reading to increase fluency. This is however balanced by skilful instruction in the classroom that also introduces students to the experience of authentic books and writing every day. Overall, cognitive strategy research has provided the scope for understanding

that both, teachers and students are constructing important new knowledge during strategy instruction, and that cognitive strategy instruction assists in this educational endeavour (K. R. Harris & Pressley, 1991).

2.3.6 Approaches to Learning

Student Approaches to Learning (Marton & Säljö, 1976a, 1976b), involving deep and surface approaches to learning, is based on the premise that students approach their studies for various reasons and these reasons influence the way they go about their learning (Murphy & Tyler, 2005; Watkins & Akande, 1994). Learning theorists were embedded in a broad range of areas investigating personal factors such as motivation for learning, environmental factors, effects of curriculum design, institutional and course culture, teaching as well as assessment tasks (Coffield, Moseley, Hall, & Ecclestone, 2004).

The approach to learning a student adopts reflects the interaction between the characteristics of a student and the context and content of the task involved (Phan & Deo, 2007). The framework is derived from qualitative work on student learning (Biggs, 1993; Kember & Leung, 1998; Marton & Säljö, 1976; Prosser, Trigwell, Hazel, & Waterhouse, 2000). Work around conceptions of learning evolved also during this time to focus on Indigenous ways of learning (Boulton-Lewis, 2004; Boulton-Lewis et al., 2000a; Boulton-Lewis, Marton, Lewis, & Wilss, 2000b, 2004; Boulton-Lewis, Wilss, & Lewis, 2001; Purdie et al., 1996; Purdie & McCrindle, 2004; Purdie, Tripcony, Boulton-Lewis, Fanshawe, & Gunstone, 2000).

The dimension of deep learning associated with approaches to learning, demonstrates the intrinsic interest students show towards their work and seek the underlying meanings or relationships in the material they are studying (Biggs, 1999; Prosser & Trigwell, 1999). The underlying feeling consistently associated with deep learning is a sense of affinity with the learning experience (Biggs, 1987). Comparatively, surface learning, is a process of seeing learning as a means to an end. This is exemplified by minimalist methods such as rote learning (Biggs, 1987). Entwistle (1987), provides a useful framework with which the distinctions between deep and surface learner approaches can be characterised (*Table 1*).

Table 1: Characteristics of Deep and Surface approaches to learning (Entwistle, 1987:16)

Deep Approach	Surface Approach
Intention to Understand	Intention to complete the task requirements
Vigorous Interaction with content	Memorise information needed for assessments
Relate new ideas to previous knowledge	Failure to distinguish principles from examples
Relate concepts to everyday experience	Treat tasks as an external imposition
Relate evidence to conclusions	Focus on discrete elements without integration
Examine the logic of an argument	Un-reflectiveness about purpose or strategies

Other areas of the research field have explored the learning person and the environment (Meyer, 2000; Prosser & Trigwell, 1999; Vermetten, Vermunt, & Lodewijks, 1999); student choice of learning approach (Vermetten et al., 1999). Learning approaches and students' reflective thinking (Kember, Biggs, & Leung, 2004; Kember & Gow, 1990; Kember & Leung, 1998; Leung, Ginns, & Kember, 2008) students' beliefs about knowledge and learning (Cano, 2005a; F. Phillips, 2001). Learning approaches, and beliefs about knowledge and learning (Biggs, 1991; Ramsden & Entwistle, 1981; Ramsden, 1988); conceiving and approaching learning in different ways (Dart et al., 2000); selection of learning processes (Entwistle & Peterson, 2004).

2.3.7 Lev Vygotsky

Dialectics in some sense has been suggested as a quest for one-ness through a process of conflict or contradiction in order to explain concepts of the universe (White, 2014). Lev Vygotsky's dialectic thought continues to be a significant foundation for educational theory within teaching and learning. Vygotsky identified the dialect between affect and intellect, which drew on the dynamic interplay between different dimensions of consciousness (inward and outward) and to consciousness as an organisational system (Sullivan, 2010).

Internal reorganisation of consciousness occurs over a series of dialectical steps. Wertsch (1985) pointed out one of Vygotsky's favoured methods of argument was to take two separate elements of consciousness (i.e., thought and language, memory and attention, outer and inner speech) and observe how they interact and play off one another through the course of development. Consciousness (and/or learning) thus is social, in this view, specifically involving an increasingly sophisticated and reflective knowing, from and through the other, as one progresses along a developmental continuum. Through looking at the changes shaped by the dialectic, we can begin to understand and explain why development occurs as it does. Vygotsky's idea accounted for theoretical errors by

explaining the transformations of essences rather than describing outward appearances, and illuminated the self as potentially free from situational constraints through the mastery of social rules (Sullivan, 2010).

Vygotskian thought emerged out of Marxist period of Russian history - productivity was paramount, associated with the activity of labour as a fundamental Marxist tenet (White, 2014). As part of this period the influencing forces of Hegel (1770 – 1831) and Marxist thought brought about a Vygotskian dialectic theory especially concerned with action and therefore activity orientated. In the first instance Hegel emphasised self-consciousness, self-cognition and self-reflection – concepts suggested to underpin Vygotsky's work (Cote, 2000) This led to a focus on teaching and learning as part of Vygotsky's focus on Education through psychological processes. Secondly, Marxist thought, a deviation from Hegelian dialectics, guided Vygotsky towards dialectic materialism. Importantly, dialectical materialism sought to overthrow idealism and maintain a single philosophical framework that would satisfy the populace and as such be delivered through educational processes.

Vygotsky's emphasis was thus politically driven and cognitively oriented. His work around psychological thinking helped to explain ways of learning and teaching through language in order to promote knowledge acquisition - based on these philosophical and ideological influences (White, 2014). His theories, in themselves, are not new but his application in education, through psychology, offers much to pedagogical practice today and is a significant position within broader educational psychology ideas on socio-cultural influences on cognition more generally and also specifically to informal learning.

2.3.8 Mikhail Bakhtin

Comparatively, Bakhtin draws attention to the dialogical within consciousness, and views the word (but more particularly the utterance) as an essential indicator of human consciousness (Sullivan, 2010). He questions the nature of dialecticism, however, as overly theoretical, and focuses instead on the dialogics of the *word* and of the *utterance*, specifically the presence of ideology within the word. Mumby, (1989) provides a useful example of describing the heteroglossia through the social construction of meaning in communication. Here Language ideology plays a significant part in the ways we construct meanings in the words we use. Considering meaning as an awareness, in this view, is a type of knowing that is always refracted (contextually bound) through the particularity of our relationship with the (social) other (Sullivan, 2010).

For instance, our beliefs around learning are refracted through the authoritative tones of our institutional discourses whereby learning is prescribed meaning. What we think is influenced by *who* is speaking as well as the content of what is being said (Kubli, 2005). Bakhtin viewed dialectics, in general, as a surface interpretation of textual nuances inclusive of voice, intonation, living words, and responses and the diversity of consciousness in the immediacy of interaction (Brandist & Tihanov, 2000). Elsewhere, however, he is slightly more accommodating of dialectics: “Dialectics is born of dialogue in order to return to dialogue on a higher level” (Bakhtin, 1986, p. 162). While these seem like mixed signals from Bakhtin, he consistently opposes theoreticism to lived experience and dialectics to dialogics (White, 2014).

These contextual notions of consciousness highlight a more “vertical” continuum between “authoritative knowing” (knowledge tied to a figure of authority) and “carnivalistic knowing” (knowledge that subverts and de-crowns our taken-for-granted assumptions) (Sullivan, 2010). In other words, Bakhtin’s dialogical lens allows him to identify a different kind of continuum to consciousness than a developmental one as noted within Vygotsky. This continuum places consciousness firmly within the domain of the experiencing self and as such it requires much more of phenomenological type of description than that which Vygotsky offers (Sullivan, 2010).

2.3.9 Consequence of Vygotsky and Bakhtin

Holquist, (1990) suggests that Bakhtin’s early assumption of ‘equality’ was a potential weakness in Bakhtin’s theories since, like Vygotsky, he paid little attention to relationships that are characterised by power and control. His subsequent treatment of authorial discourse (Bakhtin, 1984) goes some way to address this, but Bakhtin does not provide a solution to this dilemma except to highlight the important moral role of the author in his earliest works and to introduce notions of discourse in latter writings (White, 2014).

Vygotsky on the other hand, provides specific pedagogical strategies that will lead towards intersubjectivity and positions the novice as one who receives the world via more knowledgeable others, rendering the teacher a complete authority on their subject. This epistemological position may explain the popularity of Vygotsky’s theories in education since he provides satisfying answers to pedagogical questions that seek outcomes i.e. the assumptions around how learning takes place. Bakhtin’s ontological focus though poses only questions and views dialogic agreement as only one of many components of learning.

Problematically, for Indigenous learners this process of connecting to higher psychological functions is determinate on the nature of formal instructional settings and the educational research informing learning. Cook-Lynn, (1997) highlights for Native American ways of meaning, its meaningfulness stems from the challenge to everything that America has to offer in education and society. Further (Bang et al., 2012) argue for the creation of robust meaningful forms of education that engage the non-dominant student in complex learning as empowered makers of meaning. Bodkin-Andrews, O'Rourke, & Craven, (2010) argued for the equivalency in meaning for non-Indigenous and Indigenous Australian students. In other words, the latent measures employed in research testing ought to be cognisant of equivalent meaning for Indigenous and non-Indigenous students but also equivalent in their ability to predict important schooling outcomes.

Bakhtin's notion of two meanings within an utterance raises the question, whose meaning do we attend to and on whose authority do we engage with a learning experience? This assumption has been questioned through work accomplished on, positive sense of cultural identity, future aspirations, and academic motivational tendencies of Aboriginal and Torres Strait Islander students (Bodkin-Andrews, Whittaker, Harrison, et al., 2017). The argument being made is that colonial meanings of Indigenous Identity – which we are expected to accept and acknowledge; is vastly different from the meaning held by Aboriginal and Torres Strait Islander students. The research identified, a positive sense of cultural identity was the strongest predictor of many of the motivational and future aspirational outcomes of Indigenous students (Bodkin-Andrews, Whittaker, Harrison, et al., 2017).

Equally, viewed through Vygotsky's dialectical method, Bakhtin's categories of "authority" and "carnival" can be viewed as types of knowing that dynamically interact between "outer" and "inner" planes of consciousness. Here while co-constructions and variability in meaning reveal difference, Indigenous learning experiences require an adoption of ways of knowing that promote cognitive dissonance between informal and formal learning because of the understanding around authorial intent and authority to reject the deeper forms of learning gained through; with; and connected to; the informal setting.

The risk of dogma in any theory and practice could benefit from active co-construction rather than reconstruction of educational potentialities (Dewey, 1938). Experience is the ground we are born from as such the ground is where learning linked to local community aspirations and values could be a suitable place to start co-constructions (Craven et al., 2016). The focus upon differences in cultural perspective, self-concept and

school motivation (Mooney, Seaton, Kaur, Marsh, & Yeung, 2016), also suggest where formal environments continue to develop cultural competencies towards Indigenous Students while also providing forms of stable learning processes. The intent behind Indigenous Knowing is as much about meaning as it is about meaningfully aligning the developments between informal and formal environments.

2.3.10 Situating the Research Area

These positions illuminate potentialities of understanding the experience of Indigenous learners within settler colonialism historicities. The ideology Indigenous students master is one of understanding the limited and negative depth and capacity their informal learning experiences can be seen to deliver high value meanings for formal educational environments. The examples of teacher racism, academic self-concept, and multiculturalisation research - describe frictions or challenges that Aboriginal and Torres Strait Islander Students must negotiate even before they are able to engage with the challenges of the learning material presented (Bodkin-Andrews, Denson, & Bansel, 2012).

Students internalise ideas that contribute to a 'de-crowning' of Aboriginal identity within their personal development let alone their daily educational learning experience. Learners are required to forget and assimilate to achieve greater homogeneity within the dominant Australian discourse as exemplified by self-concept issues (Arens, Bodkin-Andrews, Craven, & Yeung, 2014); general self-esteem and domain-specific self-concepts (Bodkin-Andrews, O'Rourke, et al., 2010); and academic self-concept and patterns of disengagement (Bodkin-Andrews, Dillon, & Craven, 2010).

Concurrently, educational discourse and structures that scaffold these perceptions ultimately assist in this legitimising process of devaluing the assumptions evident within Indigenous learner informal experiences as exemplified by students' beliefs about the malleability (incremental beliefs) or static nature (entity beliefs) of intelligence and ability (Tarbetsky, Collie, & Martin, 2016). Further, meaningful Indigenous ideas such as; Knowledge-Building about the natural world (Marin & Bang, 2018), situative perspectives (Bang, 2015); learning and relations within social change making (Bang & Vossoughi, 2016); being in relation (Bang, Marin, Medin, & Washinawatok, 2015) evolving beyond mental models of nature (Bang, Medin, & Atran, 2007) guide potential ways for meaningful alignments between formal and informal settings in reflexive, integrational and critical junctures of engagement with; alongside; and identifiability of; with; through; 'theory'.

2.3.11 Conclusion

This section has provided a canvass of learning theory work in relation to environmental contexts and the strategies and thinking processes involved in approaches to learning. Coffield et al. (2004), suggested a framework review that saw learning theory models on a continuum to highlight the variations in research agenda. At the left-hand end of the continuum, theorists based on genetics, fixed, inherited traits and the interaction of personality and cognition were positioned. The right-hand end of the continuum, theorists who focused on personal factors such as motivation, and environmental factors as well as the effects of curriculum design, institutional and course culture and teaching and assessment tasks on how students choose or avoided particular learning strategies were situated. The section has also provided a small critique of Vygotskian and Bakhtinian frames of reference for student learning in relation to Indigenous Knowing and the consequences of these research dimensions. In this review, identifying studies with specific focus on Indigenous samples continues to be of limited development. In effect research question 2 poses the opportunity to investigate further the qualitative dimensions of Indigenous student thinking and learning about the approaches to learning they may or may not take. Complementing this awareness, the investigating the contextual features of such approaches within the learning environment also holds salience to the literature review. The research question posed then asks:

Research question 2: What assumptions do Indigenous adolescent students hold towards learning and how are these linked to ways of learning in general?

2.4 Guiding the Learning Experience

2.4.1 Introduction

The aim of section 2.4 is to develop a literature review for research question 3. This section scaffolds the importance of IK as part of pedagogical theory through a review of some of the assumptions evident within place-based education. The section reviews and problematises the relationship between placed based education and IK when considering Aboriginal pedagogies as distinct situated expressions of IK within social communities where schools exist. The section discusses the transformations within Land Education as

an ethical space where Aboriginal pedagogies can continue to transform school communities for Indigenous students and transform teaching practice through embedding IK from the local community. Indigenous knowledge as a pedagogical pathway is reviewed to highlight four pedagogical pathways where IK is currently situated.

These include: *Learning from Indigenous traditional models of teaching*; *Pedagogy for decolonising*; *Indigenous and anti-racist education*; *Indigenous and place-based education* (see also Appendix B). The section will argue the assumptions surrounding pedagogy for IK requires a review of the conceptualisations that limit and promote the very importance of Indigenous Knowledges. The recent turn towards *Land Education* as a theoretical research position within Australian contexts, as well as the growth in Indigenous Pedagogies - situates the importance of gaining an understanding of secondary school teacher's beliefs and perception of Indigenous Knowledge.

2.4.2 Place Based Education

The emergence and rise of place-based educational theory has brought about a growing interest in schools and classes fundamentally grounding themselves in relation to the communities and places they emerge from (Greenwood, 2008; Gruenewald, 2003a, 2003b). Indeed place-based educators stress the importance of assisting students to become active participants in the interplay of their local communities and environments they inhabit. Notions of place-based educational approaches emerged from the 1990's in North American contexts whereby ecological communities of which people were a part of was a central aspect of systemically approaching educational outcomes for student learning achievement beyond standardised approaches already in existence (G. A. Smith, 2007). In this sense, place-based education situated learning in the local (Gruenewald & Smith, 2008) and the notion of place challenged the frequently – inscribed dualism of culture and environment (Greenwood, 2008). Here classrooms or schools where place-based education is well-established, inquiry into local community concerns and problem-solving in relation to community, heightened awareness of teachers and students and shaped teaching and learning activities more than a standardised curriculum. Teachers and students in this respect functioned more as collaborative team members rather than existing as part of a unidirectional processes for learning i.e. (teacher educator > teacher > student) (G. A. Smith, 2007).

At a similar time the emergence of place conscious educational theory by the same proponents, aimed to address through place conscious educational thinking, 'some of the

complexities that plague the world and the institutions of education' (Gruenewald, 2003a, p. 620). The mode of inquiry attempted to extend the notions of pedagogy and accountability of schools outward to the places they inhabited. It was premised on a realisation of relevance to the lived experience of students and teachers. Thus, accountability is reconceptualised so that place matters to everyone associated with the educational outcomes related to school settings. In this way, the discourse and practice within schools is not isolated from the living world and a rejection of placeless institutions is absolved. Here in a similar fashion place conscious education aimed to employ teachers and students in the first-hand experience of local life and the political process of understanding and shaping what happens there (Gruenewald, 2003a).

The synthesis of these ideas has emerged in notions of critical place based pedagogy (Gruenewald, 2003b). Here the educational concern for local space is overshadowed by both the discourse of accountability and by the discourse of economic competitiveness to which it is linked. Informed by critical theory (e.g. Freire & Ramos, 1996) and synthesising with place assumptions; a formative grounding attends to the politics of school settings in relation to epistemological, ontological, axiological and methodological concerns. Place, in other words, foregrounds a narrative of local and regional politics that is attuned to the particularities of where people actually live, and that is connected to global development trends that impact local places (Gruenewald, 2003b).

Articulating a critical pedagogy of place is thus a response against educational reform policies and practices that disregard places and leave assumptions about the relationship between education and the politics of economic development unexamined. Here the contextualisations of 'reinhabitation' and 'decolonising' are framed in reference to processes that aim to achieve an awareness of influencing the assumptive notions of educational places as unitary institutions in their endeavour to educate the next generation. 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, 2003b).

2.4.3 Displaced Place Based Education

In the first instance critical pedagogy theorist's emphasis on social justice issues and the place-based educator's stress on student's becoming active participants in the interplay of their local communities and bioregions has been easily interpreted by science/environmental educators as natural allies in creating a more sustainable future (Bowers, 2008). Secondly, among the key assumptions they share in common are: thinking of change as an inherently progressive force (what the critical pedagogy theorists refer to as 'transformations' and 'transformative learning'); a deep seated ethnocentrism that is now masked by abstract references to valuing cultural differences; a view of language as a conduit – which marginalises an awareness that words have a history and that their meaning needs to be continually updated through what the anthropologist, Clifford Geertz (1973), referred to as 'thick description'; and that critical thinking always leads to overcoming oppression and environmentally destructive practices (Bowers, 2008). Problematically, attention is drawn to concerns within place-based and other forms of environmental education that position themselves as culturally or politically neutral and diffuse notions of settler colonialism, including understandings of Indigenous peoples as repositories of static forms of cultural knowledge (Friedel, 2011).

These reactionary concerns have been noted in relation to the building momentum of place-based education, including how it has been mobilised within the field of environmental education (Tuck et al., 2014). This has in part been inspired by a recognition that the specifics of geography and community matter for how (environmental) education can and should be engaged, as well as the steadily evolving and increasing curricular uptake and empirical research of place-based forms of education. In a strong sense notions of Indigenous Knowledge pedagogical pathways, are predominantly positioned in place-based theorisations and as such with these deep connections to land genuinely cross-pollinate environmental/science educational research positions. Korteweg and Russell, 2012, p. 8) highlight the processes between the two educational positions (place based & environmental) adopt the temptation to 'skip ahead' to 'some neutralized ahistorical, guilt-free, pain-free, "romanticized" version of environmental education'.

The argument suggests a claiming of Indigenous land as 'our' (settlers') 'special places' where feeling connected to the natural world is possible; they also contravene claims that 'gifted/enlightened non-Indigenous environmental or outdoor educators are the chosen ones to learn and pass on Indigenous knowledge and traditions' (Korteweg &

Russell, 2012, p. 8). Previously, Korteweg, Gonzalez, & Guillet, (2010) noted the importance of decolonisation and ‘Indigenising’ meant actively recognising, centering, validating, and honouring Indigenous rights, values, epistemologies or worldviews, knowledge, language, and the stories of the people of the Land in environmental education; toward reconstituting a shared future, or perhaps parallel futures, for settlers and Indigenous peoples.

Smith's (2013) account of critiquing the privilege of self-reflexivity illuminates the nature of current social structures that condition us to exercise what privileges we may have. In her process of questioning the way we self-reflexively acknowledge power structures in play, she highlights we must change the structures within which we live so that we become different peoples in the process. The politics of this position augments the problematic nature of current theorisations in place based education whereby the existing dominant structure integrates notions of decolonisation and reinhabitation without reflexively being aware of the true impetus inherent in these named processes.

Tuck and Yang (2012) also note decolonisation brings about the repatriation of Indigenous land and life, and this process should not be a metaphor for other things we want to do to improve our societies and schools. The easy adoption of decolonising discourse by educational advocacy (place based education) and scholarship, evidenced by the increasing number of calls to “decolonize our schools,” or use “decolonising methods,” or, “decolonise student thinking”, turns decolonization into a metaphor thus weakening the intent (Tuck & Yang, 2012).

These issues ultimately highlight the efforts within educational research which attempt to develop Indigenous theorisations around place, land and cosmology, invariably as a disruption to settler colonialism, can be at risk of being neutralised within broader hegemonic discourse and lose transformational authority (Whitehouse et al., 2014). Indeed the emergent notions of land education within the Australian context and certainly within wider international areas does point to definitive areas where Indigenous educational theorisations can promote the potentialities of Indigenous Knowledge assumptions on learning in broad areas inclusive of pedagogy (Tuck et al., 2014).

2.4.4 Land Education

The notion of land education presents an avenue to critique the assumptions of hegemonic intent educational researchers see in education more broadly in relation to Indigenous Knowledge (Bang et al., 2014, 2007, 2012; Medin & Bang, 2014b; Tuck & McKenzie,

2015; Tuck et al., 2014; Whitehouse et al., 2014). Among Indigenous peoples, relationships to Land and Place are diverse, specific, and un-generalisable (Lowan, 2009).

Gregory Cajete suggests:

Every cultural group established their relations to [their place] over time. Whether that place is in the desert, a mountain valley, or along a seashore, it is in the context of natural community, and through that understanding they established an educational process that was practical, ecological, and spiritual. In this way they sought and found their life. (Cajete, 1994, p. 113)

Land is imbued with these long relationships inclusive of the pedagogies and knowledges that have emerged from those relationships (Tuck et al., 2014). The curricula research example of Whitehouse, Watkin Lui, Sellwood, Barrett, and Chigeza (2014) suggests we need to realistically consider the complex colonial past within the subject matter of environmental education. Land is understood and engaged through recognition of long and vibrant trajectories of Indigenous practice and theory that understand Land as encompassing all of the earth, including the urban, and as much more than just the material. ‘Land’ in this sense is used as shorthand for Land, Water, Air, and subterranean Earth (Whitehouse et al., 2014).

The example of wetlands as places of continual birth, death and rebirth, provide theoretical space with which to ‘re-center’ Indigenous cosmologies or Land based perspectives critical to understanding teaching and learning environments that assumptively reify core dimensions of colonial conceptualisations of land in science education (Bang et al., 2014, p. 37). Alternatively, Sea Country ontologically explores geography and history together in Australia whereby learning must attend to Australian’s continental past where continental Land (inclusive of Sea) inherently has a difficult colonist story (Whitehouse et al., 2014).

Land education research specifically sets out to disrupt colonialist epistemologies that have acted to deny other perspectives within environmental education. Meyer (2008) suggests Indigenous relations to land, where epistemology is integral to being and knowing – and thus being known – in the world; offers alternative viewpoints concealed from broader environmental education assumptions. These words are echoed in more international regions like the US (e.g. New York, Illinois, Virginia, Hawaii, California, Alaska, and cross-state), as well as Brazil. Here Indigenist authors attempt to locate Land education in relation to particular disciplinary and formal education domains: of (North American) K-12 social studies education (Calderon, 2014), K-12 science education (Bang et al., 2014), and K-12 cross-curricular education (Whitehouse et al., 2014).

2.4.5 Indigenous Pedagogies

Indigenous pedagogies represents the continued development of educational language and practice around how Indigenous ways of learning could best assist Indigenous students to learn from more traditional foundations (Biermann & Townsend-Cross, 2008; N. Harrison, 2005; Hickling-Hudson & Ahlquist, 2003; Marker, 2006, 2011; Nakata, Nakata, Keech, & Bolt, 2012; Tanaka et al., 2007; Williamson & Dalal, 2007; Yunkaporta & Kirby, 2011). The domination of non-situated conceptualisations in Australian education has largely shaped the expectations and habits of Indigenous peoples understanding of learning (Rahman, 2013). This loss of distinct ways of learning in order to gain formal education has resulted in the argument that Indigenous students would like to be understood and be recognised for the inherency and coherency of their cultural ways by others including teachers (N. Harrison, 2008).

Scholarship from the 1970's highlighted "Two-way" schooling (focusing on cultural separation) or "Both-ways" schooling (focusing on cultural integration) (Harris, 1980). Further development during the 1990's highlighted by the Aboriginal Ways of Learning project proposed an overlap in cultural learning styles and sought to develop a theory of pedagogy that recognised recurring learning styles of Aboriginal people while still allowing space for individual variations (Hughes & More, 1997; Hughes et al., 2004).

A model was developed grounded in multicultural and Native American education research, with successful results emerging from their trials in South Australian schools (Hughes et al., 2004). The model has been referred to in various educational research domains inclusive of student-teacher dialogue as transformative pedagogy (Biermann & Townsend-Cross, 2008), play and learning (Lillemyr, Søbstad, Marder, & Flowerday, 2011), mathematics (Warren & deVries, 2009; Warren & Miller, 2013), sense of belonging and learning in school (Rahman, 2013) place based educational pedagogies (Yunkaporta & McGinty, 2009).

2.4.6 Pre-Service teaching of IK

Internationally, a systematic analysis of IK pedagogical pathways suggests four localisations (See also Appendix B).

1. Learning from Indigenous traditional models of teaching ITMT (Anuik & Gillies, 2012; Brayboy & Castagno, 2009; Tanaka, 2009; Tanaka et al., 2007)

2. Pedagogy for decolonising (PFD) (Chinnery, 2010; Dion, 2007a; Heyer, 2009; Iseke, 2008)
3. Indigenous and anti-racist education (IARE) (C. E. James, Marin, & Kassam, 2011; Mackinlay, 2012; Mackinlay & Barney, 2012; O'Dowd, 2010; Strong-Wilson, 2007; Tompkins, 2002)
4. Indigenous and placed-based education (IPB) (Chambers, 2006; Korteweg et al., 2010a; Scully, 2012; van der Wey, 2001)

These four dimensions cited above, identify training frameworks for preservice teachers as a precursor to professional pathways in school settings. These pathways demonstrate the possibilities for teacher education, and by extension pedagogical responses towards IK more broadly for both non-Indigenous and Indigenous students (Tanaka, 2009). Furthermore, it also attests to a potential base from which current in-service teacher conceptual beliefs around the use of IK can best be explored for congruity and dissonance. These valuable but not conclusive localisations of Indigenous pedagogical research and professional pathways further the need for equitable outcomes within contemporary educational discourse for Indigenous peoples (Hicks, 1996).

Additional areas of global pedagogical development continue to emerge as part of decolonial critiques of educational frameworks and intercultural ways promoting the value and intentions of Indigenous Knowing (Santana, Mackinlay, & Nakata, 2018). The concept of *buen vivir*, in Spanish, or *Teko' Pora* as *Guarani* say within South American contexts, guide associations of reciprocity and cooperation suggested by Paulo Freire in his dialogic pedagogy (Dolhare & Rojas-Lizana, 2018; Fleuri & Fleuri, 2018). What such evolving formations of Knowing suggest, is a continued desire for critical engagements of; with; to; Place as part of the nature of Indigenous pedagogy to effect positive educational change for all learners (Biermann & Townsend-Cross, 2008). Further, the related example from *Turtle Island* citing fundamental language laws of *Diné* (L. L. Lee, 2013). Ethical knowing of; through; with and connected to; words that promote the values of Indigenous Knowing when engaging with dominant discourse, are an important continued meaning making decolonial process (L. L. Lee, 2013; T. S. Lee, 2009).

2.4.7 Situating the Research Area

Madden (2015), points to a challenge facing teacher educators who are currently tasked with engaging with Indigenous pedagogical pathways. In Canada for example a growing

consensus within Indigenous educational literature suggests most non-indigenous teachers deliver a curriculum that is reflective of and is shaped by Eurocentrism and whiteness (Higgins, Madden, & Korteweg, 2015). In Australian contexts the lack of broader engagement and the slow uptake of IK within curriculum and pedagogical models highlights a significant disparity between existing research and current practitioner utilisation of Indigenous Knowledge (Lewthwaite et al., 2015). One particular response to this as a student voice noted:

“The problem isn’t access to Indigenous content, but appropriateness of content. Although the curriculum acts as a guide in what is necessary to cover for the topic, pedagogical practices must include critical thought so that ignorant and uninformed opinions from teachers, students, resources or syllabus can be transformed from damaging statements to valuable learning opportunities. The unquestioned use of curriculum content reinforces a repetitive cycle of ignorance and confusion (Lowe, Backhaus, Yunkaporta, Brown, & Loynes, 2014, p. 79)

One response to these challenging positions within the Canadian context suggests when teachers explain their approach to teaching and learning, they state that such teaching practices are all they know, want to know, or feel comfortable knowing (Dion, 2007b; Donald, 2011; Strong-Wilson, 2007; Tompkins, 2002). Teachers may also move towards a reliance on those who might be considered cultural knowledge holders. This suggests teachers may not feel philosophically, professionally, and/or practically prepared to work with Indigenous knowledges (Madden, 2015). Alternatively teachers may view any attempt to travel a traditional pathway in the absence of Elders or knowledge holders as disrespectful (Madden, 2015). If for example a teacher wishes to engage with Indigenous pedagogies in some form, how do non-Indigenist teachers transition from the methodological, albeit curricular, unfamiliar to the familiar in practice?

2.4.8 Conclusion

This section has reviewed some of the assumptions surrounding the use of localised social and ecological communities to inform school learning environments. The section has highlighted the problematic nature of current place-based theorisations employing well-meaning discursive processes only to maintain existing structures of dominance rather than seek ethical transformations in teaching practice. The section has highlighted alternative pedagogical pathways whereby Indigenous pedagogies can continue to offer ways of teaching that assist student learning. The section has argued for new research spaces where teacher perceptual beliefs and perceptions around Indigenous Knowledge can contribute the development of refinements to ways of teaching.

Compounding this challenge is the momentum at both policy and research level for Indigenous pedagogies and as such Indigenous Knowledge to reach further into mainstream educational class settings (Lewthwaite et al., 2015). This could move teachers towards a position of *learned helplessness* or further *ignorance*. In this sense teachers may highlight limitations to deliver results or gain a critical and reflexive sense of their own position as educators responsible for the change in student class bodies they are expected to teach. This review has developed and framed a review of placed based relations with Indigenous Knowledge while also discussing the merits of Indigenous pedagogies to further ground teacher engagement. Further, section 2.4 has suggested engagement with Indigenous Knowledge and as such fostering relationships with Aboriginal and Torres Strait Islander Students and communities; requires more than a conceptual awareness of Indigenous Knowledge content. Subsequently this review identifies the continued development of critical junctures in developing Indigenous pedagogies through the following question:

Research question 3: What are the perceived links teachers hold towards Indigenous Knowledge and how are these links reflected in teaching situations?

2.5 Conclusion

Chapter 2 introduced the literature review of this dissertation. Beginning with the notion of Countryed Indigenous Knowing. The chapter developed an area of significant literature that examines the nature of Indigenous Knowledge as a storied experiential form of meaning making. In the first instance by highlighting the contextual features of what we can understand as Countryed meaning the dissertation can systematically identify elemental notions of Indigenous Knowledge forms of meaning. Secondly by exploring the ways Aboriginal and Torres Strait Islander Elders work with such contextual forms of meaning we ought to begin to potentially see how such work meaningfully and relatedly is connecting to the next generation of Countryed beings through the Stories Elders share as part of their living experiences.

The chapter also explored the ways Aboriginal and Torres Strait Islander Students *learn* to experience. This is predicated on the assumption that when formal education and the literary and learning theory of education inform secondary school student perceptions and beliefs, such beliefs and perceptions are shared with researchers interested in learning approaches such students take. The challenge for researchers is identifying the resultant

ways of learning, can be seen as a product of non-situated theories of learning that might otherwise have limited engagement with Aboriginal and Torres Strait Islander student samples and experiential contexts. Notwithstanding this debate, Aboriginal and Torres Strait Islander students are born into settler colonising situations. Learning develops as a function of non-situated and situated research literature regarding effective ways Indigenous students can negotiate the colonising environment. Such a caveat notwithstanding, argues for the imperative to develop relationships further in learning theory research to ensure Country thinking and learning finds significance as an important research dimension for education.

In the final research question, the chapter explored the importance of pedagogy and the relationship to place. In positioning the literature review in place-based education, and Indigenous pedagogies, the critical assumptions of identifying in the literature review areas of continued development, highlighted the importance of non-Indigenous teachers to Indigenous Education growth. This majority stakeholder in the education of all students in (Australia) is tasked with delivering national cross curriculum priorities through the delivery of Indigenous knowledge curricula content. Identifying a systematic and situated framework which can continue to develop the notion of Country pedagogies forms the intention of this section of the research literature review. Summatively based on these three areas: Country experiences, Country thinking and Country pedagogies - The research questions are:

Research question 1: What assumptions are held by Indigenous Elders towards Learning and Knowing and How do Elders align relatedness to Country Knowledge?

Research question 2: What assumptions do Indigenous adolescent students hold towards learning and how are these linked to ways of learning in general?

Research question 3: What are the perceived links teachers hold towards Indigenous Knowledge and how are these links reflected in teaching situations?

Chapter 3

Methodology

3.1 Introduction

The intention of research design is to develop the scope and boundaries of methodology and method in relation to the research project. Indigenous Storylining Research Inquiry charts the development of the ways in which the research engaged with methodological assumptions and methods. The section will explore the importance and clarification of methodological assumptions when working with and as Aboriginal and Torres Strait Islander research(er/s) and participants, and the impact upon research design and resultant descriptors of meaning. The research(er/s) alignments that eventuate need to rest on a design foundation that contributes meaningfully in both research content and process. The following section will also describe the need for blending methods as well as a final section on the research method employed for this study inclusive of Participants, Data collection tools, Procedure and Data analysis for each of the three research questions.

3.1.1 Storylining Research Inquiry (SRI)

Storylining Research Inquiry is reflective of my research(er) understanding of weaving or braiding ways of analysis for meaning making of Indigenous Knowledge (Dion, 2009; Kimmerer, 2014). The latent qualities manifest in the assumptions of Storying as method as a broader term whereby we come to understand Storying as both method and methodology (Christensen et al., 2018; L. G. Phillips & Bunda, 2018; Todd, 2018). Furthermore it situates research relatedness to my researching colleagues in *trauma trail-ing* work (Atkinson, 2002), *trade-ing paths* (Kerwin, 2010) and *heart-lining* work (Mackinlay, 2016) where both Aboriginal and non-Aboriginal researchers make relatable meanings for my research to be guided as an Aboriginal and Torres Strait Islander and Malaitan Storylining Inquiry. Furthermore, my research is sitting in relationship with; and to; Aboriginal and Torres Straits Islander co-participants and co-researchers who also identify with non-Aboriginal heritage as well within their respective Stories. Storylining is an active intellectual skill of working with Knowledge. It involves elements of solitude and meditation and, also just sitting and listening to the instruction and learning shared by Elders and Country during data collection while also being engaged with Community on; with; and through Country.

3.1.2 Storylining and Respectful Relatedness

Being brought into relatedness with Storylining Inquiry for Storied Knowledge is tantamount to respectful scholarship (Christensen et al., 2018; Petit, Mougenot, & Fleury, 2011; L. G. Phillips & Bunda, 2018; Shnukal, 2002; L. Simpson, 2011; Sium & Ritskes, 2013; Somerville et al., 2010; Tocker, 2017; Todd, 2018; Wyld & Fredericks, 2015). The intention of Respectful scholarship is two-fold. Firstly, it is about resisting the critical temptation to replicate the trauma of past research methods on First Peoples and acknowledge deeper ethical treatments of knowing and participating in research agendas as both transformational to community and researcher (Crazy Bull, 1997; Kovach, 2009; K. L. Martin, 2008; Rigney, 1999; G. Rose, 1997; Steinhauer-Hill, 2001; Tuhiwai-Smith, 1999; Wilson, 2008).

Secondly, the notion of Storied Knowledge which describes the knowledge devolved from Storied experiences, acknowledges the way (I) the research(er/s) feel *told* by Eldering processes when Elders share and contribute to ways of thinking about what we ought to mean when we learn from Living Beings through the Storylining assumptions they

activate. Furthermore, bringing Respectful scholarship of people's experience into relation with this research design; (I) the research(er) acknowledge complicity in advocating on behalf of fellow co-participants and co-researcher voices within a Community of Storying. These voices Told me to be respectful and this method design, this project; aims to align with these assumptions at the outset as Communitied Stories of meaning and meaningfulness.

3.1.3 Blending Methods

When we think about what *blending* methods means, it acknowledges the ways of seeing research phenomena as multiple and weaved in ways that make it stronger but acknowledge the weakness and limitations that a single method may have in revealing the *whole* Story. When we interrogate the methodological assumptions from multiple points of understanding -sometimes congruent, sometimes conflicting points arise. This is the nature of Story to situate relatedness regardless of tension or congruency. Indeed, these ways can have various points of view based on the method adopted to see the phenomena (Kū Kahakalau, 2004; Peters, 2011).

The consequence of re-enacting method frameworks that previously may have been employed, is research(er/s) can become methodologically entrapped by certain limitations and weaknesses contained within such methods. Entrapment can be described through the adoptive, replicable or reproductive processes that continue to conceal the notions of important meanings expressed by Indigenous participants but are missed by the researchers. As a researcher, I describe and interpret the eventual findings of research, being reflexively cognisant of different strengths and weakness of methods, helps me to make my research points clearer and more relatable (Barden & Boyer, 1992). Further Manu Aluli Meyer (2008) shares, a theory is what decides what can be observed. Her understanding of the relationship between ways of knowing and how such ways inform the ways of seeing research phenomena do develop a strong relationship.

Kū Kahakalau (2004) shared, the accretive intent within normalised methods, contributed to the lack of distinctions between non-situated and Native paradigms. We can become complicit in contributing to the limiting or constraining ways of seeing our Indigenous meanings and the meaningful points those meanings make when we employ methods that answer questions in the same methodological way. Further, if we cannot make strong distinctions between the paradigms of knowing through our research designs; as researchers we may see what we wish to see based on the epistemological assumptions

that inform our intention to research phenomena through the design of our research (Kū Kahakalau, 2004; M. A. Meyer, 2008; Peters, 2011).

Native Ways of Knowing illuminates the example of Native Hawaiian Peoples experiences and the ways such experiences have been employed in research processes inclusive of the research design framework (Kū Kahakalau, 2004; Meyer, 2008; Peters, 2011). When Hall, (2014) suggests for example, the prepositional impact in research use of *about* rather than *with* she is illuminating the hegemonic intentions in language as much as the desires researchers have when engaging with socially marginalised and powerless participants in the research process. How we collect data and subsequent analysis to reveal results, can argue how a theory can constrain the researchers' ways of seeing data through a particular lens. We need to be mindful of how we set up the research design of a study for collecting the data for our evidence to claim a theoretical position (Andersen, 2013; Hart, 2010; Kovach, 2006; K. L. Martin, 2008; Steinhauer, 2002).

3.1.4 The Impact of Norms

The concerns both linguistic and social have as much to do with standardisations in assessments and evaluation of measures when working within Indigenous research paradigms as it does with the eventual research findings that claim legitimacy as an outcome of the research aims and methods employed (Bodkin-Andrews, Whittaker, Cooper, et al., 2017; Bodkin-Andrews, Whittaker, Harrison, et al., 2017; Klenowski, 2009). Longino's (1990) point on modes of comprehension argues not only to a critique of criteria but to the criteria themselves we normalise. This process of normalisation or finding the norma can be thought of as the patterns we understand to be self-evident in our observation/work/method. Indeed, I could argue if we observe something all the time this can lead me towards or skew my interpretation towards making an empiricist claim on some phenomena. This thesis suggests the epistemic reference here, is knowing what to see, why you see it and when. It can be damaging if you begin to make a theoretical claim that doesn't align and represent the phenomena you are trying to argue as an epistemic claim from the methods we adopt.

Mumby, (1989) contributes the impact of meaning on the constructions of meaning. Being aware of what we mean and how content meaning aligns with meaningful content illuminates our awareness on the methodological alignments that constrain or misalign meanings with meaningfully valued assumptions of research evidence. He argued that when we communicate our ideas regarding epistemic claims, we may replicate the

hegemony intrinsic to the make-up of those meanings we assign to our claims of meaning. He suggested when we communicate our ideas not only through the process of creating meaning, but also the implicit meanings by which recreations of hegemonic ideology exist through those meanings that are produced and reconstructed (Mumby, 1989).

What this argues for in Indigenous Research Methodology, is the need to ensure as researchers, we heighten our awareness of *which* methods and designs as much as the phenomena we wish to attend to in our research and researching questions. The consequence is if we are not aware, that we may skew interpretations towards research outcomes that don't contribute to, but replicate past research trauma. Traumatic consequences result immediately not only for researchers and participants, but also continuing traumatic outcomes that are replicated further in continued research (A. Moreton-Robinson & Walter, 2009; A. Moreton-Robinson, Walter, & Bryman, 2009; L. T. Smith, 1999).

3.1.5 Skewing and Verifiably Evidenced Data

The awareness of skewed interpretations is important when considering Indigenous Peoples assumptions surrounding why, how and when we do research, and the method/s we employ (Kovach, 2009; K. L. Martin, 2003; M. A. Meyer, 2008; Walter & Anderson, 2013). If we choose only one method, we can limit our perspective or more problematically only see one way of thinking about phenomena we are researching. In other words, we can skew our interpretative outcomes from the research data as a form of *gestalten* assumption where we don't necessarily see the whole picture but only see half of the whole (Brockmann, 2011; Cibangu, 2016).

The example provided by Medin and Bang, (2014a, 2014b) shows that science communication (e.g., words, meaning of words, photographs, illustrations, data visualizations) necessarily makes use of *artefacts*, both physical and conceptual, and these artefacts commonly reflect the cultural orientations and assumptions of their creators. Specifically, these cultural artefacts both reflect and reinforce ways of seeing the world (epistemologies) and are correlated with cultural differences in ways of thinking about nature (Medin & Bang, 2014a).

In relation to skewing, research creators can limit their understanding of research phenomena if they don't take account of the orientations, they inhabit in research paradigms. Researchers bring theory their own assumptions of theory and the ways they wish to synthesis coherency between assumptions and theories regarding how and why

phenomena exist and the way such phenomenal understanding fits into the creation of learned ways of knowing and being. Overall, what these thoughts describes, argues that the example of Native Hawaiian research experiences; communication; and science education illuminate the ways theory re-enacts meaning does indeed matter. It matters to the way we work with and talk with the ancestral relatedness of things as Indigenous research(er/s) who exist as verifiably evidenced. It also matters to the legacy we leave and the researchers to follow as we begin to develop the research lens with which we anticipate they shall see our living experiences and the depth of our existence on; and with Country.

3.1.6 Conclusion

This section has discussed the ethical challenges face when accomplishing research within Indigenous lived experiences. Furthermore, the section has also discussed the methodological challenges when attempting to discuss and explore the epistemic notions of Indigenous Knowledges. Researchers simply engaging in western methods for the sake of seeing research phenomenon can problematically replicate previous trauma when making the assessments of knowledge assumptions. Indigenous research methods framed through Storylining inquiry attempts to consider multiple methodologies as a blending process of working with trauma, memory, and the recollection of ways of knowing that is respectful of relational building and respectful ways of working with Indigenous peoples to Story the learning experiences they wish to share and contribute to the research project

3.2 Methods

3.2.1 Introduction

This study blended heuristic, hermeneutic, Indigenist and phenomenographic methods. The following sections will detail the assumptions of each method. Subsequently the section will describe data collection for each research question inclusive of participants, interview schedule and interview setting. The final section will detail data analysis procedures inclusive of interrater reliability for phenomenography analysis. Douglass and Moustakas, (1985, p. 43) have stated that “the most objective assessment is one that takes the personal viewpoint fully into account”.

Embracing the influence of the subjective as it impacts the objective clears the path for personal knowing and opens one to the tacit dimension. Indeed, I ‘epistemically

prioritise Aboriginal and Torres Strait Islander voice’ (Walter et al., 2017, p. 3). Reflexively, I cannot separate myself into the researcher and the Indigenous person from that which is being researched *Indigenously*. I am always going to be and embedded within the process of any qualitative research that I may undertake, regardless of topic, as my own worldview is always part of my cognitive processes, my truth, and is, therefore, integrated into the resultant expression. Having acknowledged that my worldview can be challenged for objectivity, I looked to incorporate and blend what I deemed as *Indigenised* knowing into my methods for research. *Table 2* below situates the design framework that guided method and analysis and the suggested Chapters were outcomes are detailed in this dissertation.

Table 2: Overarching design of methods, analysis and results chapter

#	Research Questions	Methodology	Method	Data Analysis	Chapter
1	<i>What assumptions are held by Indigenous Elders towards Learning and Knowing and How do Elders align relatedness to Country Knowledge?</i>	Blending Storylines	Yarning/semi structured interviewing	Heuristic & Hermeneutic	4
2	<i>What assumptions do Indigenous adolescent students hold towards learning and how are these linked to ways of learning in general?</i>	Blending Storylines	Yarning/semi structured interviewing	Phenomenography	5
3	<i>What are the perceived links teachers hold towards Indigenous Knowledge and how are these links reflected in teaching situations?</i>	Blending Storylines	Yarning/semi-structured interviewing	Phenomenography	6

3.2.2 Heuristic Inquiry with our Elders

(Moustakas, 1990b) argued the method describes, clarifies, and explains the meaning of experience. The importance of knowing as a process rather than a product is crucial in heuristic inquiry whereby the capacity to detail the experience *of* something rather than *about* something guide the researcher through a process designed for the exploration and interpretation of experience, which uses the self of the researcher (Braud & Anderson, 1998). Participants or storytellers closely follow the depictions of their experience, telling their individual stories with increasing understanding and insight. The depictions

themselves achieve layers of depth and meaning through the interactions, explorations, elucidations that occur between the primary researcher and research participants (Moustakas, 1994).

The heuristic researcher also participates in the story telling of life experience. Together with research participants a comprehensive Story is verbalized to inform the overall creative synthesis the heuristic researcher shares with participants (Braud & Anderson, 1998; Brearley & Hamm, 2009; Kahakalau, 2004; Lusseyran, 1985; Peters, 2011; Schenkels & Jacobs, 2018; Tejuosho, 2017). This is especially significant for Living knowledge holders. Kū Kahakalau (2004, p. 21) stresses 'heuristics aligns itself best with native ways of learning and knowing'.

Moreton-Robinson & Walter, (2009, p. 7) situated heuristic inquiry within Indigenous women Standpoint axiology whereby knowledge production involved circuitous process of listening, talking, observing, thinking and clear-sightedness in order to generate a 'problematic'. Peters (2011, p. 75) extended on these assumptions; as it was important for her - to be aware of her own sense of inner knowing and passionate aspirations of seeking answers and resolution for herself. Heuristic Inquiry thus responds well to these thoughts. The method is described as an effort-reduction methodological framework that expediently arrives at composite depictions of co-researchers through the creative synthesis of a researchers assumptions (Kahakalau, 2004; Moustakas, 1990, 1994; Peters, 2011; Schenkels & Jacobs, 2018; Sela-Smith, 2002; Shah & Oppenheimer, 2008).

3.2.3 Hermeneutic Inquiry Through Our-selves

Storylining respectfully brings into relation what Kanaka Maoli scholar Wendy Peters (2011) shared as her *Inner dissertation*. Drawing on Romanyshyn, (2007), her Storylined heuristic inquiry guided the process of researching and experiencing the soul wound of North American, Maori and Hawaiian participants as a Kanaka Maoli scholar herself. The 'tensions, contradictions, ambiguities, and paradoxes of [her] own lived experience' guided the intersubjectivity of Peoples experiencing Peoples both *experientially* and *researchingly* (Peters, 2011, p. 12).

The notion of co-researcher and co-participant suggests I'm sharing in inter subjective valued observational experiences (Kawulich, 2005). Indigenously, I'm holding relatable axiological assumptions that align 'our way of doing, embedded in Indigenous values systems' (A. Moreton-Robinson & Walter, 2009, p. 4). Indeed, these forms of potentially speculative but informative and active forms of knowing scribe my shared

memorialised experiences of being a feeling, living human, holding memories and existing in; with; through and alongside Elders and Country (K. L. Braun, Browne, Ka'opua, Kim, & Mokuau, 2014; Gubrium, 1992; Tomaselli, Dyll, & Francis, 2008).

Co-researchers and co-participants who engage in a Storylining Inquiry of living experiences, express meanings and meaningfulness through lateral and inter ancestral selves. In this way calling upon, believing in, acknowledging with the meaningful of entities both human and non-human to Story knowledgeable content and process. In this way the research inquiry, the Stories expressed and told become alive with detail and illuminate transparent responses to research questions seeking context. The potential processual explanations, can uncover forms of cognitive discrimination as both positive and negative elements of a Story's meaningfulness as well as rules, and norms that underlie the observable behaviours selected as valuable for the research project and shared by the Co-researchers and co-participants. (Brockmann, 2011; Christensen et al., 2018; L. G. Phillips & Bunda, 2018; Todd, 2018; Zahle, 2012). In this way the hermeneutic intention is to define and contextualise the immanence of creating the self within Story as the Storied self through a continuity of evolvment and devolvment capitulating meaning in cyclical meaningful patterns.

3.2.4 Unfinished Business of Being Ourselves

Cyclical meaningful patterns can be understood through Romanyshyn (2007, p. 311) notion of *writing* down the soul in meaningfully purposeful ways that can reflect the implicit, passive, unlistened [Story] in our researching and Storying. In many ways this reflects the *unfinished business* in the process of the conceptual phenomenon within our researching choosing its researcher rather than the researcher choosing the researching phenomenon (Romanyshyn, 2007, p. 92). The intuitiveness of such relatedness grounds not only the logic of why research scholarship is an important investment *in* learning about the world, but also how we are moved by the implicit *to* learn. What the research(er/s) relates to within Storylining heuristic inquiry is a coalescence of intentions from all participants to inform the thesis outcomes in a purposeful presence of searching and learning creationary dimensions of *being* heard.

Being present within the Yarn accomplishes two things. Firstly, knowledge creation as beings share, listen and reflect. Secondly, knowledge production for the notion of 'researching'. When I sit down with Elders we yarn together about things, we talk about research problems also and the ways that we may respond and relate. I bring them into

relation to myself and the research problems of my study and they bring me into relation with the solutions of meaning and the meaningful purpose of those solutions in visceral, intuitive and contiguous ways. Here it is as much about my growth and coming into being as it is the research problems I encounter. In this way we don't separate out, we coalesce into storylines with individual continuities sharing in solution and resolution of aligned meaningfulness through the thought trades and inter-thoughts that guide our creationary; productive Yarns.

3.2.5 Phenomenographic Inquiry

Phenomenography is a research specialisation aimed at mapping the *qualitatively different ways in which people experience, conceptualise, perceive, and understand various aspects of, and various phenomena in, the world around them* (FERENCE Marton, 1988, p. 179). As an approach FERENCE Marton, (1986) argued that it is designed to explore and answer certain questions about thinking and learning. He suggested phenomenography is interested in content meanings rather than assigning people to certain ways of perceiving or conceiving the world.

In this way, thinking is described in terms of what is perceived and thought about as such defining the inseparability of the object of perception or content of thought normally distilled as part of an overarching psychological knowledge claim (FERENCE Marton, 1986). The method achieves its resultant outcome through the description, analysis and understanding of experiences achieved through a sorting process of conceptual categories to subsequently develop an outcome space (FERENCE Marton, 1981, 1986, 1988).

For educational contexts, this style of analysis contributed to theories of learning. Educational phenomenography discussed how students gain knowledge from the world through the variation in ways different people conceive of the learning experience (FERENCE Marton & Booth, 1997; FERENCE Marton & Säljö, 1976a, 1976b). Marton highlighted the structure of variation is the essence. The essence is what is common to different forms of the [learning] experience thereby revealing a structural level that is neutral to inherent psychological differences displayed among research participants (FERENCE Marton, 1988).

This facilitates how educational researchers can come to understand 'relational thinking' for a specific research project (FERENCE Marton, 1988, p. 199). In this way learning, thinking, and understanding are explored as relations between the individual and what is learned, thought about, or understood by identifying what are the relations between [learning] experiences and conceptions (FERENCE Marton, 1988).

Particular examples of phenomenographic research conducted on *indigenous* conceptions of learning have been noted within the literature (Boulton-Lewis, 2004; Boulton-Lewis, Marton, Lewis, & Wilss, 2000, 2004; Boulton-Lewis, Wilss, & Lewis, 2001; Purdie & Hattie, 2002; Purdie, Hattie, & Douglas, 1996). In Australian teaching environments phenomenography has been employed to explore Inquiry teaching in primary science (Ireland, 2011), teacher conceptions of student engagement in learning (L. R. Harris, 2008, 2011), Australian technical teachers' experience of technology integration in teaching (Khan, Bibi, & Hasan, 2016).

3.3 Participants

3.3.1 Introduction

Purposive sampling was employed for data collection through advice from Elders associated with the teacher and student cohorts. All participants in all samples knew of me prior to the data collection process and were aware of my work and how I came into relation with each participant respectively.

3.3.2 Heuristic Inquiry Participants (Research Question 1)

Sampling was effectively determined by Elders and the ways they came into relationship with the research project. In identifying the sampling process while sample was a straightforward process of asking participants on the day about whether they wished to participate or not; relational building with participants took many months and at times years to build trust. In building trust, letting them through distant conversations and face to face interactions to let them know that I was starting my MPhil at Cambridge in 2013; and subsequently my PhD in 2014; and that I wanted to talk about my project when we met again face to face in 2016 for actual data collection. The sampling process rather than the product of who was selected to be interviewed consisted of multiple conversations over days, months and years.

Participants in various yarns both individually and in group situations commented and brought examples into the informing research dimension and the ways the sampling evolved through the different way's participants were selected based on the relatedness of relationships. These ways of sharing interpretation and guiding the verbalised form of

meaning all contributed to the overall interpretation. In this way the organic nature of sampling was a dynamic process of relational building and context dependant on the ways such relational building evolved and formed itself through the experiences shared together as a community.

Six (n=6) participants were selected as the eventual make-up of the phenomenological data set as they were involved with both the student and teacher cohorts engaged in answering research question 2 & 3 respectively as Elders. Additional Elder participants were connected with and throughout the data collection phase. However, the difficulty of language translation, time constraints, spatial barriers, distance and time constraint to sit with the researcher; resulted in fragments of unrecorded dialogue, despite informing the overall intention of the researching inquiry. These Elders over many years informed the assumptions the research(er/s) layered in the descriptions and interpretations students and teachers came to conceptualise and experience Indigenous Knowledge within learning contexts.

3.3.3 Phenomenographic Student Sample (Research Question 2)

The phenomenographic student sample consisted of students from various regional locations within an Australian State. The total consisted of ten students (n=10) willing to sit down and have a yarn about learning. All participants came to a central metropolitan location in Western Australia. All participants identified as Aboriginal and Torres Strait Islander.

3.3.4 Phenomenographic Teacher Sample (Research Question 3)

The phenomenographic teacher data sample set was selected through the invitation of the head principle from a local high school in an urban metropolis. Ten (n=10) teachers were willing to be interviewed for the data set and all identified as non-indigenous.

3.4 Interview Setting

3.4.1 Research Question 1

Data collection employed relation building and participation with Elders in daily social contexts. Participation included travel to medical appointments, shopping, funerals, engaging in work with participants, sharing with participants my research context,

counselling participants, travelling with participants over long distances for work and visiting family, engaging in buying and selling of goods for family, posting goods, cleaning and cooking and home duties.

Duties also included caring for young children, mediating disputes between family members, listening to stories, telling stories, going to social events, discussing Native Title issues surrounding Connection to Country, facilitating educational programs for Community, designing programs for Communities, applying for grants on behalf of Communities, walking on behalf of participants in rally's when they were too sick or unable to attend due to distance. The data collection also involved participating in Indigenous celebrations, singing non-English language songs and learning new ones with Elders, participating in ceremonial activities in an around death, cleansing places and listening to acknowledgement of Country testimonials.

3.4.2 Research Question 2

Conversations occurred between students and the researcher at various times throughout a 10-day camp within a metropolitan centre in Western Australia. Students came together to examine a theme on where students were engaged with social activities that acknowledged aligning identifiability in the community within the meaningfulness of Indigenous Knowledge. Students also undertook and completed a short 1000 words essay of their choosing. Students were tasked with relating and learning about the generic essay structures in conversations with the researcher.

3.4.3 Research Question 3

Following conversations with the school principle, teachers were recommended in consultation between Elders and the school principle. Interviews were carried out at location around the school grounds and sometimes walking through the school grounds to discuss specific locations within the school grounds. Interviews which could not be held during that time were conducted via Skype communication software.

3.5 Interviewing Procedure

3.5.1 Elders

The length and breadth of yarning (Bessarab & Ng'andu, 2010; Yunkaporta & Kirby, 2011) over many hours, days and months limits the ways an 'official' procedural guideline can be verbalised succinctly. Yet Yarning is an organic, emergent yet purposeful (Bessarab & Ng'andu, 2010; Bobongie, 2017; Bodkin-Andrews, Bodkin, Andrews, & Whittaker, 2016; Chilisa & Tsheko, 2014; Fredericks et al., 2011; Geia et al., 2013; Hill & Mills, 2013; Keddie, 2013; Lowe et al., 2014; McGinty, 2012; Munns, O'Rourke, & Bodkin-Andrews, 2013). The organic nature describes that yarning happens, when the timing of the process to share knowledge is contextually meaningful. This emergent nature of yarning can describe as the contextual to situate the context of meaning to be aligned with meaningfulness.

Three examples from data collection time periods of the study highlight emergence processes in the interviewing guide. Emergence describes Indigenous Knowing as participating and observing the day to day imaginaries and contributing meaning if and when necessary. Firstly, a grandchild coming home from school with a story about their day may moderate some pause to Story for a question posed by the researcher previously, during the day, or the experience resonates with the Elder to relate and align meaningfulness and meaning appropriately. Secondly, a death in the family or community could also moderate meaning when an Elder wants to share something regarding a person's life and their relatedness to the Stories they share.

Alternatively, a question posed by the researcher may not be responded to until a particular experience arises to relate the question to the experience in a grounding and relatable way of meaning making. This meaningful experience may be that an Elder identifies a forthcoming event and they tell you to attend the event on their behalf. Alternatively, they may send you down to the shop to purchase groceries or purchase something on their behalf and they may or may not tell you which direction to go. In these instances, it is not the mundane everyday that is of significance; but that you can follow their guidance and direction and in a conducive way build trust, dialogue and relations. Further by noticing experiences along the way and raising questions, knowledge is given time to be situated and subsequently emerges from the everyday living experience. As a researcher Elders do not owe you anything, they do not have to talk to you. The privilege of access

that researchers hold ought to not negate the simple act of meaningful engagement with research participants and the everyday of living experience. In this way by sensitising researcher privilege to the everyday, participation in the life of community experience - the nuanced and unseen can begin to be revealed through dialogue and creative experiential situativity.

Yarning for this study also describes the different ways of aligning meaning with meaningful expression if not audio recorded but Orally discussed. These processes of relatedness draw on note-taking, illustrating and photographing meaningful alignments and relating such meaningful alignments with meaning conveyed by Elders through the researcher seeing, feeling, doing listening through; and with; the stories shared, and experiences experienced.

3.5.2 Student Yarns

Parental and student consent was gathered from the cohort with the assistance of the organisation that held the academic camp. Within the learning activities set out, students were provided with various newspaper, policy document, articles examples related to the overall theme of *Growth*. Students could choose a specific research question they developed. Students read the selected package of information to write and comment on and employ the literature as a supportive referencing document to their arguments. Students were given the option to write, draw, perform or create an example of meaningful engagement with the literature content. At the end of the 10-day program students shared an oral presentation to convey to the group their conceptualisation of the given critical reading/writing task.

During the Yarning process, students wanted to talk about learning experiences while: (i) tasked focused on a critical reading activity of an article of their choice and how they attempted to construct an essay from their reading, (ii) a broader conversation away from any reading material focused on life experience relationships in general, (iii) while doing a shared activity between researcher and student like walking, fire-making or having a meal. Contextual conversations also crossed over in that a conversation may have started in a general fashion then moved into sitting down about a critical reading of an article or doing a shared activity and then moved back to a more general conversation again or stopping due to meal breaks or free time breaks. The researcher also guided the leadership of the camp activities and relationships with students and group mentors more generally while also participating in data collection.

In more focused activities like discussing the development of a personal point of view on essay construction and critical reflection on a reading, more interrogative mentoring questions were raised to gauge whether students understood what they were tasked to read. Students were asked why they thought about the ideas they identified, how this related to their personal experiences, why they projected this relationship onto the articles and also reflective questions on identifying particular thesis statements for their essay question constructions. Students were also guided to talk about the various camp themes they had been previously engaged with and what this learning experience consisted of and felt for their overall understanding. All students participated in the three contextual interview settings i.e. (i) focused critical reading activity, (ii) broader non-reading activities, (iii) broader life experience relationship yarns with the researcher.

Interview questioning was in line with Yarning protocols in that non-direct and semi structured interviewing ways of conversing guided the ways knowledge was thought about and eventually spoken about. Specific interviewing questions thus were purposive in their intention and responded to both what the interviewee and interviewer were talking about. All students and community members present at the beginning of the camp and throughout, were aware of my intentions to both guide the camp program but also my research intentions. In this way they knew who I was and what I was doing and could gauge the ways they responded to me, the learning experiences they spoke about in learning settings situated in (i) high-school (ii) in the community or (iii) with family members more generally.

- You remember that camp on XXXX, what did you like about that one?
- What was that first time like, when you have been here?
- How do you see it?
- Did it make sense or...?
- Why do you think it's important?
- So now the main body will be a paragraph on each of these ones, you reckon?
- Did a good lesson come out for you - What was one of them you reckon?
- How does it teach you things?
- What you think you learned that day?
- Uncle has a deadly way of explaining things, doesn't he?
- How you make that connection?

- Does coming here still give you lots different ways, or does it just depend on who you are?

3.5.3 Teacher Yarns

Post informed consent from School principal, consent was gained from each teacher. Face to face interviews (30-40 minutes) were conducted with teachers using semi structured interview questions allowing for organic questioning based on contextual information shared during the interviews. Teachers were asked in the first instance to talk about a memorable experience with Indigenous Knowledge as part of a class lesson. From this starting point more, interrogatory questions were asked as the conversation grew to encompass more specific instances with which teachers could contextualise their understanding IK as both a concept and an experience. Teacher were also given the opportunity to reflect more broadly on the Indigenous Knowledge as an aspect of cross curriculum priority within schools.

Some participants wanted to also workshop curricula and pedagogical examples to develop their practice with Indigenous Knowledge. Interviews were conducted via skype, face to face during the school lessons or at various times during curricula student excursions. Some interviews were conducted statically in a room and other times teachers preferred to walk around the school guiding the interview, pointing out various school projects within the school grounds emplaced within the school grounds as part of remembering relatedness between pedagogy and IK.

- What is a memorable experience about engaging with IK?
- What challenges have you found teaching IK?
- Can you show me?
- What was that like?
- How do you see IK in those instances being important or not?
- How do the students respond?

3.6 Data Analysis

3.6.1 Introduction

The following section will describe the blending process of using multiple qualitative research methods through (i) heuristic, (ii) hermeneutic, and (iii) phenomenographic data analysis respectively. The broader assumptions of Indigenous Research methodology also

describe the significance of relatedness between methods used and subsequent data analysis to describe the research findings (N. K. Denzin, Lincoln, & Smith, 2008). This ethical assumption is predicated on the historical legacy of research accomplished *upon* Indigenous Peoples and the resulting research findings. This distinction is important as it highlights that merely collecting data through Indigenous methods is not enough. We need to be more distinct in what we perceive as analysis and how we transparently arrive at the conclusions we make as researchers engaging with Indigenous peoples and communities. The resulting emancipatory assumption of deeper relatedness between methodology, method and analysis infers how we analyse data sets in related ways allows us to be critical of *where* we analyse data as a situated ethical assumption too (Kovach, 2009; A. Moreton-Robinson et al., 2009; Rigney, 1999; Wilson, 2008).

3.6.2 Blended Heuristic Data Analysis

Table 3 adapted below describes and sets out the process of heuristic analysis (Moustakas, 1990b). Heuristic analysis defines 6 significant stages which are part of a process of sitting with and thinking about data. Employing Indigenous Research Method assumptions can suggest a circular and cycling process of attending to the research and Place of a researcher as much as it is to the data set under analysis. A seventh stage not explicitly suggested in the data analysis but suggested here is the assumption of a *Return to Country*. This stage is never completed and is the continuing process of ensuring that when the dissertation is submitted, the awareness of ensuring any future work contributes back to the health of community needs to be made explicit. Researchers in many guises have undertaken research with Indigenous peoples and communities and have limited acknowledgement in any subsequent research related or unrelated to Indigenous people's lives. This explicit assumption hopes to guide future research to think about when you work with Indigenous peoples, always be mindful of the ways they helped you create your research and teach you things that otherwise you would not have known prior to the research project. Indigenous communities also provided the opportunity for you to come visit and share with; and alongside *Storied Country* maintained for generations and continues long after the researcher has left the place. In this way, your ways of thinking are always returning back to *Country* and relating *Country* to your future research projects in meaningful ways of valuable contribution.

Table 3: Illustrating the stages of Storylining heuristic analysis

#	Heuristic Analysis Stages	Description of Stage	Timeline Engagement within the Stages	Time Period
0	<i>Data Collection</i>	Traveling and working across, with and to Country	February 2016 - July 2016	6 months
1	<i>Initial Engagement</i>	The task of the first phase is to discover an intense interest, a passionate concern that calls out to the researcher, one that holds important social meanings and personal, compelling implications. The research question that emerges lingers with the researcher, awaiting the disciplined commitment that will reveal its underlying meanings.	July 2016 -December 2016	6 months
2	<i>Immersion into Topic and Research Question</i>	The research question is lived in waking, sleeping and even dream states. This requires alertness, concentration and self-searching. Virtually anything connected with the question becomes raw material for immersion.	October 2016-February 2017	5 months
3	<i>Incubation</i>	This involves a retreat from the intense, concentrated focus, allowing the expansion of knowledge to take place at a more subtle level, enabling the inner tacit dimension and intuition to clarify and extend understanding.	February 2017-July 2017	6 months
4	<i>Illumination</i>	This involves a breakthrough, a process of awakening that occurs naturally when the researcher is open and receptive to tacit knowledge and intuition. It involves opening a door to new awareness, a modification of an old understanding, a synthesis of fragmented knowledge, or new discovery.	July 2017 - August 2017	2 months
5	<i>Explication</i>	This involves a full examination of what has been awakened in consciousness. What is required is organization and a comprehensive depiction of the core themes.	August 2017 - December 2017	5 months
6	<i>Synthesis</i>	Thoroughly familiar with the data, and following a preparatory phase of solitude and meditation, the researcher puts the components and core themes usually into the form of creative synthesis expressed as a narrative account, a report, a thesis, a poem, story, drawing, painting, etc.	December 2017-May 2018	6 months
7	<i>Returning to Country</i>	An extension of the verifiability of Heuristic analysis is the sharing of the research Story with Community on; with; alongside Country in related forms of meaningful alignment. This gives Country and Community the opportunity to accept, change or reject research. This process affords community the opportunity to participate in the research outcomes of the project as much as the researcher themselves	September 2018 - present	Ongoing

3.6.3 Stage 1 and 2

Conversations were transcribed and reading, and re-reading of transcripts began as part of the first stage of *initial engagement*. The second stage of *immersion into topic and research question* began with also considering the spatial location of where this immersion process should take place. I completed my studies in England and my data collection was located across Australia. This necessitated a return back to country again after data collection. This Story cycle of leaving Australia and studying in England, then returning to Australia was evident each year of the research program. I sat and listened to the voices in the transcript as well as participated with Community on Country.

Post 6-month data collection in 2016, I returned for an additional 10 months in the following year for data analysis and active participation in developing and delivering related and independent programs for Community not explicitly tied to the PhD research project but implicitly informing awareness. This ensured that whatever assumptions I became aware of through shared experience with transcript analysis or Community participation, were weighted accordingly such that the formal data analysis process together with the informal community participation shared a collective Community experience in my ways of thinking about *data* and Community. Furthermore, Elder stories are not independent of the communities where they live. Elders are present in and through and with and across Communities. As such relatedness between data and Community is a significant form of grounding descriptions and interpretations.

3.6.4 Stage 3 and 4

The depth of these first two stages, ensured the third and fourth stages of heuristic analysis, *incubation* and *illumination* resulted in deeper intuitive and relational interpretations during data analysis (Moustakas, 1990b, 1994). My ways of knowing and being could speak to both my active engagement with data analysis and Community in ways that respected both spaces. Incubation itself involved a retreat from the intense, concentrated focus upon data, allowing knowledge growth to take place at a quieter level. This Sitting and Listening enabled the inner tacit dimension and intuition to clarify and extend understanding fostered and guided by Community engagement. Illumination itself reveals ruptures when sitting and listening or *a-ha* moments. This process of awakening occurred naturally when I was open and receptive. It involved opening passages of meaning to new awareness, variations of an old understanding, a synthesis of fragmented knowledge, or new discovery.

Being a participant within community enacts meaning and meaningful interpretation with data and community reflexively. In other words, what meaning I interpreted from the data set is relational to the meaningful engagement I held with Community while being on Country as well as for the Elders that guided my interpretations. This daily experiential process of the story cycle saw me move between data set and Community in a heuristically reflexive way. If you imagine a stream of flowing water, the PhD represents a single water current within a larger watered and bodied experience. The emergent water eddies and whirlpools represent these smaller story cycles swirling within the main current of the whole process as community engagement emerges and returns to the larger body of water flow. This ensured that my learning about meaning from data and my learning about meaningful engagement with Community weaved strong currents of interpretation for co-creative data analysis conceptualisation. Further, the conceptual claims from the resulting thematic codes were grounded in an enactment of being with community just as community enacted meaning with data.

3.6.5 Stage 5

The fifth stage *explication*, derived from the selected six stories, involves a full examination of what has been awakened in researcher consciousness (Moustakas, 1990b, 1994). This required a descriptive and systematic organization and comprehensive depiction of the core themes within the data set. Braun and Clarke, (2006) also provide guidance in this area when I attempted to make determinations between themes/codes created *inductively* versus themes/codes created *theoretically*. The process of developing a systematic and consistent representation of the relationship between a verbal statement and a theme/code was assisted by Nvivo 12 software but also rested on the idea of prevalence of transcript statements that formed patterns of meaning in the data when working with the data set (Braun & Clarke, 2006).

Initial inductive analysis was employed to develop semantic or explicit themes from reading and rereading the data set which meant the creation of codes or themes was very much data driven. Indeed, in relation to *prevalence* providing my analysis with sufficient data extracts as evidence within a theme to demonstrate the existence of a pattern of meaning was inherent in the creation of themes across the entire data set (Braun & Clarke, 2006). A semantic approach required identification of themes within the *explicit* or *surface* meanings of the data. In this case not looking for anything beyond what a participant has said or what has been written. Frith and Gleeson (2004), provide the example of showing

how this analysis involves a progression from description, where the data have simply been organized to show patterns in semantic content, and summarized, to interpretation, where there is an attempt to theorise the significance of the patterns and their broader meanings and implications.

Contrastingly, theoretically developed themes/codes describe an analysis process that suggests the development of *latent* themes/codes (Braun & Clarke, 2006). Latent themes describe analysis which extends through the semantic content of the data to identify underlying ideas, assumptions, and conceptualisations that are theorised as shaping or informing the semantic content of the data. This approach considers specific aspects that tend to cluster together in the data set when reading transcripts. Boyatzis (1998), highlights the example of how latent themes go further than the semantic or explicit level to assist interpretation of the various aspects of a research topic.

If we consider IK as a *bodied* knowledge whereby *bodies* share knowledge in relation to Ways of Knowing and Being, then the semantic approach would provide the skin while the latent approach develops the particular form and meaning of the body of knowledge discussed. Indeed, my challenge as a researcher is to understand and work with these universally unique bodies of knowledge that sit in deep relation to each other. If we imagine a flowing stream or creak, then the eddies and currents that emerge and rupture the flow in unique directions we can relate to how unique bodies share relation to the overall flow and passage of meaning that they are *embodied with*. In this way relatedness is always preserved as part of First Peoples ways of understanding.

In sharing this context, I can argue then for Indigenous Research Methods (IRM), we need to work with both semantic and latent interpretations in our explication. Thematic analysis needs to work with both in relation to each other by showing how from specific inductive process created when sharing yarns; theoretical analysis is dialectically and dialogically worked into meaning making represented in the Stories we share. As storytellers we cycle in and out of theoretical analysis and can be seen in when we grow into theory but also return back to inductivity of interpretation thus never resting statically in one frame of reference. In noting the nature of either inductive coding or theoretical coding Braun and Clarke (2006) discuss, by blending I am able to respond to both analysis processes as part of my explication process.

Thirty-two (32) overall themes were established through the process of incubation and illumination. Further reading within the thematic codes, resulted in merging similar codes together to be expressed in 19 specific codes that aimed to encapsulate the entirety

of the data set considered. Composite descriptions subsequently were developed for co-researchers to describe co-participation as part of the heuristic analysis (Moustakas, 1990b). Composite descriptions aim to give a sense of the co-researchers and co-participants who are embedded in relational contexts to myself as a co-researcher and co-participant.

3.6.6 Stage 6

The sixth stage *synthesis* involves being thoroughly grounded and familiar with the data set, then as suggested, to put the components and core themes into the form expressed as a 'narrative' account, a report, a thesis, a poem, story, drawing, painting, etc. (Hiles, 2001; Moustakas, 1990b, 1994). (Romanyshyn, 2007, p. 310) speaks about 'writing down the soul' as part of an exegesis of origin-al experience guiding the co-relational projection of participant voices and research(er/s) experience. Kanaka Maoli Scholar Wendy Peters, guides this understanding of vulnerability. Exposure invariably opens up research(er/s) to critiques of research assumption just as research participants are expected to expose their Story's for the sake of research. This vulnerability is expressed as wounds, scars, tensions that exist and are an experience of and flowing through being doctoral research experience(s) (Peters, 2011). Furthermore, it expresses a level of honesty regarding research(er/s) intention to share with co-participants and co-researchers in ways that honours and acknowledge shared ancestry on and with and through Country as both displaced and emplaced Beings.

3.6.7 Stage 7 Returning Back to Country

The extended stage of this blended data analysis process and an extension of the verifiability of heuristic analysis is the sharing of Storylines with Community on, and with Country in related forms of meaningful alignment. In the first stage of *Initial engagement*, spatiality was raised as a concern for the research(er/s). Responding to this concern a contribution back to reinforce again the story cycle created by the research(er/s) moving experience. Furthermore, relatedness is expressed as between forms of spatialised production of knowledge and forms of spatialised creation of knowledge. Furthermore, the research interpretation is also open to correction, the holding of tension and meaningful variations that the research may have overlooked and holds the accountability of the research experience through lifelong connections when the doctoral program ends.

The continuity for meaningful content understands this process as always ongoing prior to, during and after undertaking a doctoral dissertation. Heuristic analysis method in its desire to show a linear development of data analysis method will always be limited by these assumptions as they swirl around the method frameworks. By blending method, the research project can amiably contend with tensions like this when engaging with institutional learning environments or for that matter methods of research that don't respond to alignments between Aboriginal and Torres Straits Islander Peoples lived experience. As Peoples, we hold to place and people over time and continue to maintain through our intersecting Storylines. Kanaka Maoli Scholar Wendy Peters continues with this understanding by wisely sharing:

"Recognizing that I live within my ritual space all the time, something very characteristic of a person with an indigenous worldview [...] A whole was assembled from the fragments and other disparate elements generated and collected throughout the course of this search for essence and meaning. The challenge and the key to this phase of the process was in creating meaning beyond a mere distillation of themes and patterns or an organized recapitulation of details."(Peters, 2011, p. 88)

3.6.8 Conclusion

This section has described the phases of data analysis through the blending of heuristic analysis, Indigenous Research Methods and hermeneutic analysis for result interpretation. Through the stages of (i) *initial engagement*, (ii) *immersion into the topic and research questions*, (iii) *incubation*, (iv) *illumination*, (v) *explication*, (vi) *Storylining* and (vii) *returning back to Country*, the section has attempted to give a concise understanding. Much of the data analysis phasing developed overlapping layers whereby heuristically reflexive thinking processes enabled the creation of a coherent, consistent and relatable data analysis design for the subsequent results section below.

3.7 Phenomenographic Data Analysis

3.7.1 Introduction

This section describes the data analysis phases for research question 2 and research question 3. Student and Teacher phenomenography was adapted from Larsson and Holmström, (2007). The analysis process was amended accordingly, and the data analysis stages below detail the analysis process to arrive at the categories of description forming the understanding that each phenomenon, concept, or principle can be understood in a

limited number of qualitatively different ways (Marton, 1981, 1986) regarding Ways of Teaching and Ways of Learning.

3.7.2 Student Data Set Analysis

Interviews were transcribed for the 10 participants and then read a number of times before rereading for the development of the main themes evident in the data set. During coding of transcription statements, 16 conceptions of learning were highlighted as the main areas where transcript statements could be categorised accordingly. From the 16 conceptions further analysis was undertaken to establish a phenomenographic outcome space or second order interpretation that could collapse the conceptions into a limited number of qualitatively different ways of 2-6 Ways of Learning.

3.7.3 Teacher Data Set Analysis

Interviews were transcribed for the 10 participants and then read a number of times before rereading for the development of the main themes evident in the data set. During coding of transcription statements, 21 conceptions of teaching were highlighted as the main areas where transcript statements could be categorised accordingly. From the 21 conceptions further analysis was undertaken to establish a phenomenographic outcome space that could collapse into the potential representation of 2-6 Ways of Teaching.

3.7.4 Data Analysis Stages:

1. Read the whole text
2. Read again and mark where the interviewee gave answers to the questions regarding learning
3. Define the learning phenomenon under study by paying close attention to semantic markers of meaning in the interview transcripts
4. In these passages look for what the focus of the learner's attention is and how they describe their way of working or negotiating meaning from a learning experience.
5. Group the descriptions into categories, based on similarities and differences
6. Formulate categories of description.
7. Look for non-dominant ways of understanding as markers of mutual exclusivity of categorisations formulated
8. Find a structure in the outcome space.
9. Assign an overarching metaphor to each category of description

10. Develop a learning pattern for the ways of learning evident in the participant sample
11. Assess intercoder reliability (Percent Agreement and Cohens kappa)

3.8 Student and Teacher Data Inter-rater Reliability Analysis

3.8.1 Introduction

Interrater reliability is a critical component of content analysis. When not established properly, the data and interpretations of the data cannot be considered valid (Lombard, Snyder-Duch, & Bracken, 2002). Neuendorf (2002), highlights the aim of content analysis is to record or extract objective characteristics of meaningful statements. These characteristics emerge as a representative unit of analysis to develop from a pool of meanings. These units of analysis subsequently should develop some stable representation of categories of meaning derived from the original body of data. This minimal level of subjectivity should necessarily be critiqued for further research quality measure through reliability analysis with more than one rater.

When a rater attempts to make a distinction between manifest content transcript units as a surface judgement versus latent content transcript units under the surface, the significance and importance of reliability is paramount (Lombard et al., 2002; Neuendorf, 2002). A single rater is making subjective claims against certain categories based on an internal mental schema of what units of meaning should be grouped together while others are grouped elsewhere and why.

Developing a pilot and formal test rubric to critique intersubjectivity between more than one rater ensures, subjectivity is shared across more than one rater. Furthermore, the meaning is also likely to reach out to readers of the research (Potter & Levine-Donnerstein, 1999). Ultimately, content analysis (from interview transcripts) should care about interrater reliability as not only can its proper assessment make ratings more efficient, without it all of their work - data gathering, analysis, and interpretation - is likely to be dismissed by reviewers and critics (Lombard et al., 2002).

3.8.2 Interrater Data Analysis Stages

The following stages guided the development and subsequent interrater reliability analysis for the transcripts analysed as part of the phenomenographic data analysis of ways of

learning and ways of teaching. Practical guidance was also sought and adaptations of the data analysis method from (Lombard et al., 2002; Potter & Levine-Donnerstein, 1999).

3.8.3 Interrater Reliability

1. A sample of transcript units from the latent categories was used as a subset sample of the entire student data set to develop a pilot test instrument for the interrater reliability test. The sample was derived as selected transcripts units that made up the entire data set. In this way the test provided for rater decisions made by 2 raters (researcher and second rater for sample analysis).
2. A training scheme was devised to ensure pertinent information guided conversations between researcher and second rater as well as initial training and completion of the pilot test and subsequent completion of the interrater test by the second rater. Questions could be raised, and the contextual process could be discussed between rater and researcher to ensure an understanding of how specific transcript units were extracted from the pool of meanings and then categorised accordingly and why categories were named the way they were in the sorting process.
3. The pilot test was devised according to the software analysis (ReCal) style (Freelon, 2008) requirements for nominal data analysis. In this way an excel spreadsheet could be uploaded for the calculation to be completed.
4. The pilot test was created, and second rater was trained to complete the pilot test
5. During this piloting stage both raters discussed widely the challenges and ambiguities that not only faced the new rater who was being exposed to the data set and the contextual reasoning for the first time; but also, for the researcher in revealing their reasoning for why certain decisions were made and why in relation to what a transcript unit contained. Additionally, the way interviews were conducted, and the ways questions were asked or not asked also were discussed as epistemic confounds in the data collection process. Furthermore, multiple meanings emerged from the transcript statements during data collection, phenomenographic analysis and also during interrater pilot testing. It should also be noted that decisions were being made from contrasting epistemological thoughts during the whole interrater pilot testing process with higher levels of contextual understanding and reasoning for meaning processes adopted in the data analysis process.

6. Once the pilot test was completed and a level of familiarity could be agreed upon for the second rater as to their confidence to complete an interrater test instrument the second rater completed the test instrument.
7. The test instrument employed the same structure as the pilot test. The test instrument was devised using new and unseen subset sample of transcript units extracted from the original pool of meanings.
8. Once the interrater test was completed the data set was run through software (ReCal) (Freelon, 2008).
9. It is important to note that selecting an appropriate minimum acceptable level of reliability for the categories ought to be agreed upon (Field, 2013; Lombard, 2011; Lombard et al., 2002). Coefficients of .90 or greater are nearly-always acceptable, .80 or greater is acceptable in most situations, and .70 may be appropriate in some exploratory studies for some indices (Cohen's kappa) (Lombard et al., 2002). The interrater testing values are located at the end of research results chapter in Chapter 5 for student data set and Chapter 6 for teacher data set.

Chapter 4

Countried Experiences: Results

Research Question 1

4.1 Introduction

The phenomenology of Story Lining Country describes a form of Communitied Story within 6 Storylines (See Table 4). The section is broken into two sections to show and develop both the heuristic and hermeneutic awareness of data analysis as part of the overall phenomenological analysis. This provides a clearer response to the first research question: *What assumptions are held by Indigenous Elders towards Learning and Knowing and How do Indigenous Elders align relatedness to Countried Knowledge?*

The first section will begin with composite descriptions of each Indigenous Elder in the data set. The composite descriptions situate the context of meaningfulness of Stories shared. This is based on the experience and Indigenous Knowing of participants to contribute meaningfully to educational applications and research outcomes that this dissertation identifies. The section will then describe and interpret findings.

Table 4 highlights 19 themes or *artefacts* associated with Indigenous Elder Stories formulated through data analysis. The 19 themes/artefacts describe features and forms of Indigenised Knowing Elders wish the research findings to pass on as part of the educational application and research intent of the dissertation. *Table 4* will list the association between each Elder and each theme or artefact. The interpretation of each artefact describes the educational intent that asks why each artefact is important to know and learn. In this way teaching and learning as Storied Country situates Indigenous Knowledge within the 19 themes described that transmit knowing through the notion of ‘culture’ or ‘cultural knowledge’ of perceptions, beliefs, and values.

The 19 themes will list 3 germane quotes for each successive theme from 3 associated Storylines. Should one theme only contain one Storyline a single quote will be shared in relation to a theme. The intention is to list the themes in the table and subsequently allow each germane quote to be a moment of conceptual reflection and interpretation about the individual items in relation to the body of the data set. In this way, the intention is to develop educational curricula example items from Story through; with; and connected to; emergent meanings. This contributes to a form of meaning making and forming of curricula frameworks of Indigenous Knowledge. In this way interpretation is not about quantities of meaning but importantly the qualities of Indigenous Knowing that this dissertation has illuminated as important for both educational curricula content forms and evidential research findings.

The second section will describe three hermeneutically derived Storied experiences identified as part of extended periods within Communities back in Australia during the PhD. The three examples of Storied knowledge situate relational application between PhD research, educational settings and Community. The three Storied experiences describe the things or artefacts that are important things to Know and Learn and to Teach to subsequent generations as related to Places (Countries).

4.2 Part 1: Composite Descriptions of Participants

The sampling strategy of selecting these 6 stories is reflective of identifying Elders who informed both the sampling strategies of Student selection and Teacher participants. The assumption operating in this reasoning is the student and teacher samples would describe Knowing as reflective of relationship with Elders as much as the wider interpretation of Indigenous Knowledge and Knowing they contributed to the interviews. Elders were

chosen because of their long-standing relationships with both Student and Teacher data collection settings as well as holding long standing relationships with students and teacher samples interviewed. Elders were also chosen because of their broader understanding of contributing to Indigenous Knowledge as well as their identified standing within the community as being able to speak on behalf of their community. An Aboriginal or Torres Strait Islander Elder is someone who has gained recognition as a custodian of knowledge and lore, and who has permission to disclose knowledge and beliefs. It is important to understand that, in traditional Aboriginal and Torres Straits Islander 'culture', age alone doesn't necessarily mean that one is recognised as an Elder. Aboriginal people traditionally refer to an Elder as 'Aunty' or 'Uncle'.

4.2.1 Aunty KK (1)

Aunty KK has been an educator for over 35 years. She has worked in academic institutions, graduate training organisations, primary and secondary schools. She has worked with non-government organisations, policy development for government in community settings at local, state and national levels as well as within the international arena of First Peoples representation. She has also fought for Native Title representation through her traditional links to Country and broader national agendas for employment for Aboriginal and Torres Strait Islanders. She actively contributes and creates programs for Aboriginal and Torres Strait Islander peoples in Queensland and New South Wales.

4.2.2 Uncle W (2)

Uncle W works internationally and locally writing and researching, for both non-Indigenous and First Nation Peoples. Locally he advocates for Aboriginal and Torres Strait Islander peoples across the Country. Uncle W contributes to dialogues at local, state and national platforms in regard to Aboriginal and Torres Strait Islander voice in policy and social conditions. He maintains a presence on Country in the state of New South Wales but travels across the country for various speaking engagements as well as internationally.

4.2.3 Aunty T (3)

Aunty T works in education and social services both as a teacher and advocate for Aboriginal affairs in state and organisational programs for youth development. She is an acknowledged traditional owner and keeper of language and story in Western Australia. She actively contributes knowledge and relationship in both Aboriginal and non-aboriginal

community organisations. She maintains a presence on Noongar Country as well as various regional locations in Western Australia.

4.2.4 Aunty L (4)

Aunty L is 80-90 years old and identifies with her Indigenous heritage. She is an acknowledged traditional owner of Country. She has worked in various roles in small business and public service. She continues to be very active in community service both Indigenous and non-indigenous organisations. She maintains a presence in community service across the state of Queensland from Cairns in northern Australia to Brisbane and regional centres between Hervey Bay and Brisbane, South to Lismore and west out to Winton, Julia Creek and Mt Isa.

4.2.5 Uncle DD (5)

Uncle DD is 80-90 years old and Traditional owner of Country. Uncle DD continues to advocate for Indigenous Australian affairs at local, State and International levels for First Peoples. Uncle DD has held various roles throughout his life as an Elder, and educational program developer and continues to consult in and around the State of New South Wales. He is the keeper of many Stories on Country throughout Queensland, New South Wales, Tasmania and Northern Territory. He has guided and guides Men's business throughout Queensland, and New South Wales. He has published extensively and collaborated with many academic researchers over the course of his life.

4.2.6 Uncle K (6)

Uncle K is a respected Elder from Western Australia, He works in university settings speaking and guiding learning for students and academics as well as participating and guiding knowledge creation and production for University research on Indigenous Ways of Knowing and Being across Australia. Uncle K has created and delivered youth mentorship and educational programs for private as well as government policy on cultural heritage, environment and education over many years. He has published extensively for government, personal and university publications in relation to Aboriginal Knowledges.

4.3 Part 1: Thematic Descriptions and Interpretation

Table 4: Data Analysis themes/Artefacts associated with participant Story

Theme #	Theme/Artefact Name	Associated Story with theme selection
1	Acknowledgement of Elder Identity by wider community	2, 4
2	Ways of understanding what is meant by Community	1, 2, 3, 4, 5, 6
3	Ways of understanding what is meant by Country	1, 2, 3, 4, 5, 6
4	Ways of understanding crime experience	1, 2
5	Sorry Business	1, 2, 3, 4, 5, 6
6	Economics	1, 2
7	Ways of understanding Education	1, 2, 5, 6
8	Personal Employment History	1, 2, 4
9	Food	2, 6
10	Gender	2
11	Health	2, 4
12	Identity	1, 2, 3, 4, 5, 6
13	Ways of understanding Ignorance	1, 2, 3, 4, 5, 6
14	Ways of understanding Intuition	2, 3, 5, 6
15	Ways of understanding kindredness	1, 2, 3, 4, 5, 6
16	highlighting personal and historical Mission experiences	1, 2, 4
17	Impact of State policy	1, 2, 4, 5
18	Religious perspectives	4
19	Understanding the influence of Stories	1, 2, 3, 4, 5, 6

4.3.1 Acknowledgement of Elder Identity by wider community

Welcome to Country and Acknowledgement of Elders ceremonies have become increasingly popular form adopted by local, state and federal governments and private institutions. These ceremonies develop awareness among invited guests to highlight forms of respect towards Aboriginal and Torres Strait Islander Peoples as the traditional owners of Country prior to invasion and post invasion through Native Title claims. Australia contains many Countries existing beyond the history of invasion across the continental scape. These nations or Countries as distinct Aboriginal and Torres Strait Islander Peopled Countries connect to and hold deep ancestral relations between Country and Community. Acknowledgement ceremonies are tied to the same traditional protocols of

acknowledgement found among Indigenous community ceremonial practices. Uncle W highlighted, Australian Government census data acknowledged Aboriginal and Torres Strait Islander Peoples as part of the flora and fauna management policies:

I was born before we were counted in the census [1967], like XXXX we were counted among the Flora and Fauna (Uncle W)

While this symbolically contested assumption, itself exists between Indigenous and non-Indigenous peoples, the importance of the assumptions has as much to do with the way Indigenous peoples were treated and the broader assumption of discrimination perpetrated towards Indigenous peoples. For Uncle W it highlights the different ways Australian policy and the main populous has acknowledged Indigenous peoples in the past; often with disastrous consequence. In another example Aunty L describes a conference event she attended and how a local government councillor responded to the audience to acknowledge her presence in an alternative way to historical legacies of Indigenous treatment:

“And anyway, we go to the official opening, and then he stands up and says ‘and I acknowledge XXXX as a wonderful lady I’ve known all my life and she’s...’ And he specifically says... ‘And she’s just been inducted into the hall of fame of community’, and I think to myself, ‘what did I do? Why are they fussing about these things now, they never used to treat us this way before...?’ All the delegates and there were three other counsellors there and the mayor and cause that’s what they do”. (Aunty L)

Acknowledgement is a sign of knowing that Indigenous presence continues to exist within communities across Australia. Students have been taught about different histories and experiences in school curricula and been shown ways to value and respect such histories and experiences. Learning about the ways school settings move towards showing the same forms of respect to Indigenous existence by teaching students with; through; and connected to respect in school settings forms the intention of this artefact.

4.3.2 Ways of understanding what is meant by Community

Community has meant different things for Indigenous and non-Indigenous peoples throughout settler colonising relations. In a historical understanding of settler colonising relations, Uncle W talks about what is spoken about and not spoken about within the broader Australian community and known about the history of the ways Australia has built its sense of community. By telling Stories about the way his family were treated, he is able to describe that community for Indigenous peoples is about remembering and not forgetting the treatment of our communities through the trauma of settler colonising experiences.

Australian Community doesn't only mean the Story of 'discovery' of Australia by England and the explicit experiences of Australian nation building community histories. It also means attending to the meanings of community building through the ways Indigenous communities Story the frontier Black wars; genocide; displacement to missions; servanthood to settler cattle stations; loss of Indigenous personhood tied to Country; identifiability; loss of history; and loss of Country:

"Every aspect of her life was governed by that number XXXX, she lost her identity, she lost her name, and she was told that what she was wasn't good enough. She died at the age of 36 from a heart condition caused by XXXX, XXXX that she contracted in that girls' home. She left behind young children, orphaned children to live in a world where they carry the weight of her history. The history that is still not really spoken in our country, these are common stories to us, it's these stories that gives us the sense of who we are, just one of so many stories that are typical for our people, all of our people share these stories, we share the stories" (Uncle W).

Aunty L in Theme 1 described Acknowledgement, but also discussed the challenge of accepting that change of now being Acknowledged but knowing how she, her family and her community were treated previously. In Theme 2 she is talking about that change in being treated differently as a respected Elder. Indigenous meanings of community see simply creating Acknowledgement ceremonies, as an act of goodwill, doesn't disavow the history of policies and private institutional privileges that are built upon and continue to foster and profit from Indigenous trauma in complex ways:

"Why are they fussing about these things now they never used to treat us this way before." (Aunty L)

Uncle K also talks about this change to how people view Community, but he uses a Story from the *Nyitting* an ancient period of Storied community legacy for *Noongar* ways of meaning. In the Story he employs the relationship between Land – Water to describe how water affects land and people as related entities. Uncle K shared through the metaphors of his story about Land and Water changes that Indigenous Community is always being challenged from ancient time periods to contemporary post invasionary periods of his community's history. These challenges faced by *Noongar* reflect when Country changes, Peoples change. Being aware of these changes and the ways we respond to such changes is tantamount to continuing to strengthen community.

"The change was gradual they'd been used to having lots of different types of food to eat what we also need to realize is, then things gradually started to thaw out." (Uncle K)

Ways of teaching and learning that share with; through; and connected to; histories and experiences by Aboriginal and Torres Strait Islander meanings of community, form the intention of this curricula artefact. Each Elder shared a story about experiences reaching back into ancestral histories and contemporary reflections. These stories share how Indigenous communities continue to feel differently towards contemporary and historical meanings of defining our sense of community. For these exemplified stories - learning about different meanings of what we mean by community, help students understand the ways Elders see how change can occur. By providing examples from their lived experiences Elders guide such change.

4.3.3 Ways of understanding what is meant by Country

The meaning of Country for Aboriginal and Torres Strait Islander peoples has always been situated differently to the unified Australian nation state as a country. Invasion brought a different meaning of Country for Indigenous peoples. This theme talks about the ways a Place connected to a Country, holds significant protocols as Ways of Knowing and Being for Indigenous peoples. In this sense ways of Country are an interpretation of the distinctly different ways Elders talk about Country, not only their own connection to Country, but the Countries they sit with and across (Australia) throughout their travels and movements. Elders talk about protocols we ought to observe when we are *on Country* and when we are *with Country* as guests from another Place. They learn this from sharing their own Storylines of meaning connected to larger Story's that talk about passing through or travelling through Country as a guest. In one example of being a guest on Country, Auntie KK shares how it is important to always remember the protocols of relational knowing between Peoples. She talks about negotiating boundaries as sensibilities of knowing entry and exit points, by being aware through the feelings of being a guest but also that we all have a Countried existence and to be mindful of where we place our footprints, our knowing on Country:

"You've got to come from a 2016, 21st century perspective, I come from the 20th century you've got family that are from previous century's and that's granny and XXXX you know it's a different ball game. But it's even people like granny XXXX were even before this 20th century knowledge came out were already critiquing those assumptions around Indigenous Knowledge and how did they teach us? They teach us through body intelligence your eyes your ears, not your mouth watch listen look where you are putting your foot the mark you are leaving behind. You know you always have to be mindful of who's country you on since this business that the visitors brought because we are part of that now... Where are you leaving your mark that's what you have to ask yourself?" (Auntie KK)

Uncle W talks about Place Knowledge. Place Knowledge is about source and origin of Knowledge as emerging from situated places on Country. In this way the meaning of Country describes how knowledge comes from a place, with the associated assumptions of meaning and meaningfulness. Uncle W identifies that through the Stories told to him by his grandfather, Place Knowledge is continually shared intergenerationally and such transmission of knowledge ensures people know their Country and how Country informs their identity and identifiability.

“(H)e told me what our Country was, what that rock meant, what that tree meant.” (Uncle W)

Uncle DD shared how the meaning of Country meant relationship to Story. Storying Country is about identifying the different animative entities that exist within Country and to know your relationship to such entities. When Elders Story Country they are bringing us into relationship with those entities. Story and Place exists through the ways we align and emplace the enactment of content meaning and meaningful content. In this way through the Stories they share we can see how knowledge is situated and aligned. When we can *Feel; See; Notice; Listen; and Do*, we can honour the Storied Place(s) we are brought into relational connection to hear the coherency of Ways of Country meaningfully aligned and existing:

“You got dugong, you got the shark, and the rainbow serpent, and then the whale, and the big fish up top there all around those islands.” (Uncle DD)

The ways knowledge and knowing is situated within Country forms the intention of this curricula artefact. The way Elder Stories talk about Country show how significant the literal and conceptual geography and the entities that exist in that geography help guide the grounding of important skills of relating to broader ideas. When you know your place and you know your relationship to place you can begin to identify other relational qualities in respectful ways beyond you place. Elder stories describe forms of respecting the ways we work with; through; alongside and connected to Country as part of Indigenous Knowledge curricula frameworks.

4.3.4 Ways of understanding Crime experience

In Elder Stories, some clear distinctions are made through core values of what is right and wrong from Indigenous standpoints. Criminalising Story describes the ways Elders

highlight how since invasion, the assumptions of proper and improper behaviour within the community has been forced to change, based on the way Indigenous peoples have been governed. For a long time, Aboriginal and Torres Strait Islander peoples were taught to not practice, not to value traditional beliefs and protocols and value traditional Lands differently as a consequence of what was deemed wrong. In contemporary periods such behaviours to practice traditional forms of protocol and situate values and ceremony on Country are celebrated and applauded. In other dimensions, colonial assumptions of what was right sanctioned massacre, poisoning, harming, stealing, raping, displacing and exterminating Indigenous peoples.

When Elders Story crime experiences of right and wrong, they are describing contestations of core values and beliefs about the relationships people have to Country. These core values are at the centre of different meanings about what is right and wrong. These core values come from an Eldership of Country which identifies the different ways core values and beliefs about living with Country are fostered on Country. This ensures people and Country live together in sustaining and respectful ways. Eldership of Country is about holding the trauma of *wrong ways* as grounded and instructive Storied forms of *right ways*. Such an assumption after all, comes from their history and experience before, after and beyond the research process. Uncle W shares his Storied form of how contested ideas about right and wrong and the trauma of knowing different meanings of what a core value is passed on intergenerationally through the traumatic experiences held by his family:

"She told me her grand... about her father, my grandfather arrested from his bed accused of drinking and then tied to a tree like a dog, so his children would see as they walk passed to school." (Uncle W)

Core values are passed down from one generation to the next. Aunty KK described a memory to me which was passed down to her from her mother, who was told of the story by her mother. Aunty L carries forward the Storied memory for her grandchildren to share with them as a grounded instructive way of knowing Indigenous values (the significance of the experience does not allow me to reveal any further information):

"(T)here is not a word of malice in that entire story. That whole story just tells you what she saw and what she experienced. Never a word of malice or anger about the people that perpetrated this crime." (Aunty KK)

The curricula examples of exploring structures of power and the impact of forms of moral education enacted through policy governance of marginalised, invaded peoples forms the

intention of this curricula artefact. Crime and deviance form part of every colonised and invaded sovereign Country in Australia. The ways Elders attempt to deal with their own historical involvement through the memories of their families and communities, attest to the continued intention of educational spaces to deploy Indigenous Knowing of crime and deviance as relatable examples of teaching and learning about structures of power and the ways we teach the morals we all live by across the (Australian) continental scape. Challenging and contesting the assumptions to set the boundaries of meaning about moral education potentially help students identify what Country's core values of meaning actually mean as guided by the Stories shared by Elders.

4.3.5 Sorry Business (Death)

Sorry Business is about the maintenance and continuity of life. Elders Story bereavement experiences to teach about resilience and continuity. Indigenous histories are replete with stories connected to places where sorry business occurred to family, to community, to Country. Sharing these experiences of Sorry business reminds community to not forget but always remember the loss of people and country and the ways we can honour and memorialise such memories. Eldership of Country emplaces and enacts continuity of Storying Country through Place Knowledge. In this way, sorry business doesn't conceal or forget, but holds memories in grounded and instructive ways to be carried forward. Memorialising Country is about the generational continuance of knowing Country and the sorry business of Country. Aunty L shared a memory told by a previous generation to her about an incident that happened on Country between White Stockman and her grandmother. In this way remembering and memorialising Place Knowledge is about honouring memories grounded in place:

“That was such painful business that happened there with my mum you know when you read that letter, that story that Aunty XXXX wrote, XXXX watching...XXXX watching her mother XXXX die...” (Aunty L)

Uncle W shared a story of sorry business when he talked about a family member he was researching in the archives. By sharing a story about the way one of his family were treated, he wanted to show how every life is important and the consequence of his treatment actually brought about policy changes towards the way people thought about the treatment of Indigenous peoples at the time:

In the 1870's he and his family were living at XXXX, huddled against the harbour, living in the so called 'blacks camp'. I know this because there was a newspaper article about the death of his father, his father XXXX. The article said that an Aboriginal man named XXXX had passed away visiting an Aboriginal camp at XXXX. He had been left unattended for days, no one had come to collect his body, no doctor had attended him, and that now they called an inquest into his death. (Uncle W)

Uncle DD employed metaphors from two ancient stories meeting at a certain situated location on Country to talk about sorry business. The significance of locating sorry business at a place on Country, associate's sacredness to the place talked about in the story shared. In his story, two entities or two stories came together at a meeting place on Country. From the confrontation that occurred between the two storied entities, one entity lost and went underground. Remembering and honouring the place where the confrontation occurred helps us to value and respect certain places on Country where sorry business occurred:

So, if you look at the map and you look at them rings and the next one he come up was in the that place there you see, see right, and then that's where that XXXX what kill im there's a big story up there when he knocked him down you see, and the story and all our stories and that XXXX belong to all our mobs because he gives us order you see (Uncle DD)

A formative curriculum example from this theme describes the relationships people both Indigenous and non-Indigenous have to places on Country. The different ways we honour and memorialise the sacrifices both in military and civil loss, helps us to grieve and bereave the people we lose in our lives. However, for Indigenous peoples that loss is felt in deeper ways because the Country holds and locates examples of massacre sites or places of mass poisoning that are not honoured, have been hidden and concealed; and if remembered are vandalised and destroyed if memorialised. In the story's Elders share, the confrontations that happen when two story's meet and the ways Story's continue beyond the confrontation - can guides students to think about how to be resilient and continue despite the trauma of bereavement.

4.3.6 Economics

Stories about economic value talk about the ways we trade with the value of things as colonised Indigenous peoples. Relational trading between certain memorialised experiences share how Elder stories trade in meanings and memories that hold significant value in Storywork. By upholding and sharing certain memories in Story, Elders negotiate between boundaries of what is valued and what is not by sharing meaningful experiences

that otherwise would not be seen as meaningful. Hierarchical thinking from an Indigenous Storywork challenges and rejects hierarchies of meaning unless we can share in defining the hierarchical value thinking we are taught to accept as colonised being of value. Aunty KK used the example of Indigenous employment to share how we ought to be mindful of the ways we are expected to adopt certain values about processes that may not be our own to embrace:

“This Uncle used to run XXXX company, when a newer [Indigenous] generation came in talking about organisations having an ‘Aboriginal Strategy’ recording Indigenous employment figures asking if they have ticked the form? And why the organisation didn’t push staff to tick the box and asking Why isn’t it recorded. You know Uncle had so many ATSI (Aboriginal and Torres Strait Islander) people working there and this new generation of Indigenous managements wanted to capture the numbers of how many people work there to claim more federal funding. This fulla wanted to raise the numbers to show how many people worked there whereas uncle had advertised, interviewed and the most successful applicants were given the job. We couldn’t understand why it was all about money.” (Aunty KK)

In a follow, up contextualisation Aunty KK described what she meant about the difference in values she saw. She needed to negotiate the ways of rejecting certain values for the sake of her own being versus what the colonial environment expected her to accept. In a later conversation she went on to say that the uncle left that workplace because the values of the place didn’t agree anymore:

“[it’s about] those challenges where does the money fall versus your conscience.” (Aunty KK)

Uncle W used an example from his family history to describe the ways he challenged the treatment of his ancestral memories. In earlier colonial periods of settlement Indigenous peoples, among other civilising processes, were considered a labour force for building settler households and incomes. In many instances Indigenous peoples were forcibly sent by way of policy to be assigned to stations and farms as cheap labour, often working enormous hours and experiencing physical and emotional violence. Uncle W wanted to ‘rescue’ (his words) his family memories from such traumatic narratives by trading for the worst of experiences in his story as important to remember. He shared of an ancestor who was sent to a rural outstation and how he attempted to conciliate the continued treatment of his family memories from the trauma of knowing how they were treated in the past:

“there was a sign on the wall of the [dormitory], the sign read “think white, act white, be white. Eventually she was sent to work for wealthy squatter family’s in outback New South

Wales. She was trained as a domestic servant, eventually she found her way back to her own people, but she had to apply for permission from the state, to be able to live on the mission where XXXX, her brother lived” (Uncle W)

How Storied experiences of Indigenous Knowing continues to contribute to the ways we trade in values of Storied Country forms the intention of this curricula artefact. The instances where curriculum talks about the ways we measure the importance and significance of certain values and why - helps students to develop awareness of the benefits of trade in thinking; in behaviour; in ways of seeing the relationships we hold to certain places on Country or the rest of the world for that matter. Indigenous Knowing of Country highlights the sustaining ways of identifying the meaningful economic resources like food sources, proper water source usage, farming techniques, animal management, mineral use for the benefit of peopled Country how such storied forms can contribute, also forms the meaningful intention of this curriculum artefact.

4.3.7 Education

Elders don’t talk about learning to experience as a form of control, but they talk about learning that comes from inside as a sensible form of education. Knowing the Story of place builds relatedness to place. Elder Stories always situate place in story and the ways we can develop a sense of our own being to experience the story of place. Starting from this grounded position of knowing the relatedness between yourself, place and story then guides the informed ways of growing and making meanings beyond place to other related places. Elders talk about using the sense-abilities to guide the experience of a learning being as a way to build relational discipline in learning between yourself, the story of place, and the rest of the world of situated knowing places. Stories about education hold the experiences of educating Indigenous peoples in colonised ways but also in ways that respect the experiencing learning being. Aunty KK shared a lesson on the ways she was taught and the way she carried the story of Place through these ways of sitting, listening, noticing and doing:

“They teach us through body intelligence your eyes your ears, not your mouth watch, listen, look” (Aunty KK)

In another example Uncle K shared a Story to situate a group of Indigenous students on Country. The Story he shared was about the place and the ways students could develop their skill of being related to place and then growing that relatedness to think of different

ways relatedness could inform the meanings they were feeling, listening, noticing and doing:

“Part of the story for here where we camped, is this time when it was freezing cold and how everything came into being and how that the kangaroo cave here, or yonga, is part of the story And now today you can walk down to the paddock at the back and have a look at over there just on sunset, and you’ll see all the kangaroos coming out of the bush and moving onto the grassy paddocks and eating lots of food.” (Uncle K)

Uncle W shared a story of a colonising educational experience of place. His story focused on a taxonomy of guidelines regarding Indigenous education. He told the story of a family member who was educated because of her indigeneity, her assigned gender, where she lived on Country, and what she was worth to educational policy and governance of Country. Effectively, his family member as a result of education was displaced and disconnected from family, Country and community:

“(S)he lived alongside other girls, other girls who have been trained to be white, who were told that what they were was not good enough.” (Uncle W)

Elder Stories explore why we educate people and how we develop their ways of relating to place as a grounding intention of education. Elder Stories contain curricula elements of different ways of learning and teaching within educational settings. Elder Stories contain events and experiences meaningfully passed on through our ancestries of the ways we were taught and the purpose of being taught through mission stations, rural out stations, boarding schools, and in more contemporary periods universities and secondary schools, vocational education and further professional development. Curricula elements that make education relatable to place as part of Indigenous Knowledge of experiencing education helps curriculum to identify the significance and importance of Indigenous Knowledge and story of place as a significant skill of developing critical awareness of relationships between the self, story and place.

4.3.8 Personal Employment History

Knowing the story of place means the ways you engage with place are related. Elders story what they do in place to describe how they enact meaningfulness to life, place and the story they hold in place. In this way relating storied Place Knowledge in their Stories communicates the valuable ways of working with Country and working with Knowledge to contribute back to Community and Country in life affirming ways. Aunty L shared her

ways of working with Story by talking about working with knowledge about what she did during a period of her life. In this way the memories of places and the ways she contributed meaningfully to those places and the Place Knowledge she holds.

“I went and worked for an old man called Mr XXXX he had a big store, at XXXX in XXXX where we used to live there all the War years.” (Aunty L)

Uncle W situated working with knowledge in places that valued certain professions that Story places. By situating working with knowledge in both profession and place he was able to align meaningfully Place Knowledge, working with Knowledge and working with Story in contributory ways for community and Country:

“I found myself in a profession that allowed me to tell stories.” (Uncle W)

Aunty KK told me a Story of the time she worked for an organisation that wanted to develop ways of connecting to migrant communities. She shared the importance of identifying ways in which working with Story and Knowledge to situate Place grows to relate others to Country that otherwise would not know Story of Country and the community in which storied meaning exists:

“I began working for this company set up by this lawyer and white lady and this white girl ran this company and they were into cultural diversity. I came into the company to help on this cultural diversity program.” (Aunty KK)

Curriculum content that supportively celebrates Indigenous contributions to Place Knowledge and guides students to think about how we all contribute meaningfully to the Story of Country heightens our complicity in situating Place Knowledge. Place Knowledge does contain stories of displacement, violence and trauma; but it also contains stories of meaningful contribution to Country in supportive and nutritive ways for the next generation to identify with and promote forward. The contextual examples provided by Indigenous Knowing talk through meaningfully practical ways of contributing to Country. The reflections provided by stories become formative examples students can become aware of the different ways Indigenous Peoples continue to contribute to Country despite the traumas of colonising experiences.

4.3.9 Food

Storying Food is about seeking the nutritive sources within Place Knowledge. Food sources on Country describe the life sustaining ways we relate to Country. Food is literally and

conceptually nutritious to the ways we think about our relationship to places on Country and the Place Knowledge that inhabits those places. When Elders talk about food they are talking literally and conceptually about thinking through the qualities of nutritive sources to our thinking and bodies on Country. In this way we think about life sustaining ways that promote or inhibit growth. In one example, Uncle W shared a Story that located his family as marginalised group of people living on the fringes of an urban populous. Through the food they found he identified the importance of storying ways of seeking out nutrition. Place knowledge always holds conceptual meanings that are nutritious to the way we think about Story and the knowledge within Story. These nutritive thoughts sustain our Story as we are responsible for selecting the ingredients for growing conceptual meanings about Country. By remembering and uplifting certain memories Uncle W wanted to cultivate meaningful ways he could share Story:

‘these stories gave me a sense of who I was, my mother used to write poetry and short stories, she’d tell stories about living in the humpies on the fringes of town. She’d tell stories about the food they ate, she told me stories about the welfare, these stories warned me, and my mother warned me about the society that I was being born into.’ (Uncle W)

Uncle K also shared that when we learn about the importance of nutritive thoughts for our Story, we can remember and remind ourselves of the significance of the source and our responsibility to always think about the ways we connect and relate to Place Knowledge nutritiously. Uncle K reminded us that when we connect and relate to certain conceptually sustaining ingredients of Story, we are reminding ourselves about what we take for granted in the Stories we hear. Being mindful of maintaining and sustaining the value and source of Story that feeds our Place Knowledge. Country changes and as such moves us to be aware of the changes. These changes can be thought of as the values that become part of our Stories. Being aware of these changes to nutrition that Country provides in Story form, guides us to seek out nutritional meaning and meaningful connection wisely.

“lots of people died. And the reason they died was because it was so bitterly cold and there wasn’t a lot of food around, whereas they’d been used to and of course, the change was gradual, they’d been used to having lots of different types of food to eat.” (Uncle K)

Food as both a literal and conceptual meaning making element within Stories forms the intention of this curricula artefact. Elder stories contain curricula examples that teach us to think about where Stories come from, who can or does tell Storied experiences of Country and why they do so. The nature of Indigenous Knowing is about identifying the

nutritive conceptualisations that guide deep and meaningful engagement with Indigenous Knowledge and where such sources exist on Country. Colonising experiences in curriculum content tell Stories of ‘discovery’ and name discoverers of an *uninhabited* and inhabitive Country. Indigenous Knowing challenges these assumptions by telling conceptually nutritive Stories with; through and connected to Country.

4.3.10 Gender

Elders talk about women’s business and men’s business in ways that respect the distinctions and relatedness of such gendered contributions to Storying Country. These ways of Storying Country have also been brought into alignment with experiences that forced Indigenous peoples to think differently about what being men’s business and women’s business meant. Instead, as a form of colonial intervention we were segregated and disconnected from women’s places and men’s places on Country and as such the ways we thought about what being a man and being a woman meant. We were ushered into missions and reserves or exterminated based on being a man or being a woman.

In effect the Place Knowledge that guided and helped Indigenous peoples to understand such respectful relationships and distinctions, were covered over with alternative colonising meanings. We were taught about what being genderised meant and where women places and men’s places ought to be, rather than where we understood such places to exist on Country. In a small Story Uncle W shared the ways his family were taught about gender and the ways this began to change how we were to begin to engage with Country and Place Knowledge as genderised men and women in alternative ways. Storying Country through gendered ideals meant the unsettled and misaligned outcomes of learning experience in this way meant Uncle W’s Story held questions about why Indigenous women were taught the way they were and treated the way they were as gendered colonised, invaded peoples:

“XXXX was the town where they established a girl’s home, this was in the early part, or the latter part of the 1800s into the early part of 1900s, it remained opened right until the 1970s, that here was a home where Aboriginal girls were taken from all over Australia and sent to.” (Uncle W)

Elder Stories talk about the ways we value gender, forms the intention of this curricula artefact. The Storied experience of being taught gender describes how Indigenous ways of thinking about gender were reassigned through colonising experiences. In this storied experience, being a girl meant being literally and conceptually displaced from the way’s

family and Community taught gender and the meaningful responsibilities gender held in community. Instead being re-assigned a gendered form meant for the sake of economic, educational, social value of a colonial authority Indigenous Peoples were moved, displaced and disconnected in gendered ways from Place knowledge and places where community existed.

4.3.11 Health

Country has always been a source of life sustaining healing and well-being for Story and Place Knowledge. Eldership of Country cultivates this sense of healing maintenance through the storied relationships to Land, Water and Sky Country. For many millennia, the health of Story has always been about the health of Country. Eldership of Country through Story draws upon this duality by identifying the ways Story holds sickness and health of Country. When we are able to listen to both the sickness and health of Country we can attend to the sickness and health of Country in meaningfully healing ways. In one example Uncle W talks about Story holding the sickness of birthing places. Birthing is about health, growth and nurturance of the next generation and their continued connections to parents, Elders and Country. When colonial ideas about health and who has access to health for the survival and continuity of the next generation; we begin to understand why Indigenous Knowledge Stories sickness in Indigenous families and sickness within Communities on Country in the ways that it does:

“Who couldn’t go to hospital to have her first child because they wouldn’t accept her.”
(Uncle W)

Aunty T also shared a story about the ways she was to understand her connections to her new-born child and the ways Indigenous children were valued. She wanted to convey how important the connections are between herself and her child and reflected on how health interventions suggested alternative ways of maintaining connections or disconnections with her child:

“The matron of the maternity ward knew me, she said to me ‘listen XXXX you’re a bit scatty I’ve got people wanting to adopt this little girl’ and she’ll have a good home and you’re not a bad nurse’, she said ‘you can get on with your studies and you will be a good nurse one day.’” (Aunty T)

Uncle W shared a story about sick relationships on Country with drinking waterholes for Aboriginal communities. The time period reflected the open massacres and wars settlers

were waging with Aboriginal groups across the continent in competition for fertile grazing lands. At the time Uncle W was taking his child to the same Place Knowledge site where sickness Country exists on Country. They sat down at the side of the drinking waterhole on Country and he told them about why sickness Country existed. In the Storied example he described how settlers came and poisoned the local water sources for drinking water:

“I told him the story of what happened there, the creek today is named poison waterhole creek, he crosses that creek every time he goes to visit his grandparents, but on this day, I stopped and told him this story, of how the people there were poisoned, how they died on the banks of that creek, of how others seeing what happened fled to an island in the middle of the River, and were shot, today that island is known as murdering island. When I go home I cross poison waterholes creek, when I swim in the river, I can swim out to murdering island. We often hear people say that I didn’t know, why weren’t we told but it’s all around us, the reminders and the stories were all around us, the settlers name, the creek after what they’ve done, they named poison waterhole creek, (Uncle W)”

Health relationships with; through; connected to Country form the intention of this curricula artefact. Stories contain examples of experiences where relations between people were unhealthy or sick and access to health and welfare were part of policy assumptions regarding who could have access to health on; with and connected to; Country. Similarly, the ways Country is treated by people that select who can live and exist on; with and through Country is also another curricula example of meaningfulness from Elder Stories. In another way a curricula example of the way people is treating the environment (Country) for agriculture, mining, tourism, living, polluting, all talk up healthy relationships with; alongside; connected to; and maintained with; Country.

4.3.12 Identity

Storying Country is about the Identifiability of ourselves in the Storylines we carry through and with Country. When we connect to place knowledge, we connect to the stories that value our being in peopled places and stories from Country. Being storied from Country within Indigenous Knowing is deeply emplaced and meaningfully enacted through the Stories told and shared among communities and family. When we act, we enact our Storylines in respectable and responsible ways in relation to Country. Aunty KK remembered stories about the ways colonial interventions have fragmented the connections people have to Country and the identity from Country through people and places. She wanted to describe how the trauma of not being able to identify with and through Country and the ways such struggles are felt intergenerationally and continually:

Some others struggled with that they couldn't get away from loss of relationship, loss of belonging, it's so corrosive...You can look into all our families they always got that one which struggles and fights to exist cause the outside just tells them that they don't and shouldn't. See XXXX so happy on her face when she met us despite her mother being her mother she had that acceptance, that sense of belonging that runs deeper than the face and the history people expect her to believe (Aunty KK)

Uncle W shared that seeking and sourcing Stories of our identifiability in archival and familial research or returning back to Country is about Storying Country in informative ways of being related to Country. He suggested the Storyline and the source of our related storylines is where we can find a sense of identity in who we are as people and community connected to Country:

"It's these stories that gives us the sense of who we are." (Uncle W)

Aunty T contributed being identifiable is about being connected to Story and the connections in Story that relate and connect to place on Country:

"Kaya XXXX Whadjuk Ballardong Noongar." (Aunty T)

Kaya – 'hello' **Ballardong** refers to the *Noongar* language or dialectal group north-east of Perth (The Noongar language group in the Perth area is called **Whadjuk**).

Indigenous ways of maintaining identifiability forms the intentions of this curricula artefact. Elder Stories contain both celebrated and traumatic experiences of being Indigenous inform the stories we share. The examples of struggle or strength are part of the meaning making process Indigenous peoples continue to resiliently exist through colonising experiences that harm and at time support the maintenance of Indigenous Identifiability. In some instances, Indigenous languages that Elders wished to identify with, celebrate Indigenous language as a form of identifiability, at other times it is the struggles of maintaining an identity in an assimilating environment.

4.3.13 Ways of understanding Ignorance

Forgetting Story and being taught to forget Story is a form of ignorance. Not seeing, not listening, not having feeling towards Country misinforms the relations people have to Country. People grow up knowing the wrong Story and live in unrelatable ways to Country. When these connections to Story are broken or concealed by the ways we are taught to honour and respect Country, we forget how to relate to Country in meaningful and respectful ways. Being relatable is about acknowledging and sourcing our Story's, our

Countries and the Place Knowledge that situates and locates Country and Story. Elders story Country to hold Place Knowledge within community. When community knows the Story and the relatedness of Story to Country community lives in relation to Country in respectful and life sustaining ways. Aunty KK shared how teaching people who don't know Country can be problematic because they begin to relate to Country in unrelated ways if you don't teach them proper story. What happens is they never see the deep relations Indigenous Knowledge has to Country and held in proper Story:

The white lady running the program said you can't run cultural diversity unless you acknowledge the First Nation peoples and then you work from there (Aunty KK)

Uncle W shared a Story about when he was at school, he was taught Story about Country. He wanted to share that we may think we are being meaningful, when we teach our children certain Stories but when we forget or avoid telling children the proper Story, we are misaligning their relatedness to Country and teaching them to forget the proper Story. What happens is we intergenerationally teach unrelated ways of thinking about Story and displacing the relatedness held with Country by subsequent generations. What subsequent generations then continue to develop is new ways of continuing to build broken relationships of disrespect with Country:

"At school, I was told of a peaceful settlement of Australia, I was told that Captain Cook discovered Australia, I was told that Blaxland, Lawson and Wentworth crossed the blue mountains. I was never told that my people were waiting on the other side of those mountains, I was never told about the great bloodletting of XXXX, in the 1820s, the war for XXXX, if you go to the XXXX Gazette you can see the reporting of that conflict still today. It was a conflict at the time described as an exterminating war, at the time martial law was declared, legally sanctioned violence" (Uncle W)

Uncle K shared a story about not forgetting and trying to conceal the source of our Story and our Country. He wanted to remind us that Storying Country is about remembering and connecting and continually aligning our thinking with the proper story of relatedness with Country no matter which generation you belong to is working with Indigenous Knowledge intentions:

The dreamtime is way back there, and it's right here and now, and it's way out in the future, and it's all the places in between, it still has an impact on people and on everything else." (Uncle K)

Elders Story Country in proper ways of relating and aligning meaningful connections with Country. The Stories they share cross over temporal boundaries because they have known the experiences of people teaching the wrong stories about Country. When Elders share Dreaming Stories, they are drawing on deeper philosophies of meaning that still frame and structure the Storied ways of living on and with Country. It is these frames of reference that guide the ways we remember and understand proper stories of Country.

4.3.14 Ways of understanding Intuition

Feeling the Story of Country describes the intuitive and sense-able ways of engaging and connecting with Storied Country. When we think about the explicitly verbal and literate explanations of Country, they can only ever be a small aspect of Storied Country. When we can ground our sense-abilities in Story through the feeling ways, we begin to explore the layered interpretations of Country. Noticing and listening - being aware of the ways Elders Story Country rests on our capacity to sit and listen. In one example Uncle K was sharing with the group the relationship between the Story of the *Nyitting* and the feeling of being situated experientially in the same place by journeying temporally back to the particular period:

“Part of the story for here where we camped, is this time when it was freezing cold and how everything came into being and how that the kangaroo cave here, or yonga, is part of the story” (Uncle K)

Uncle DD wanted me to connect to the *Feeling* of Storied Country where my Storyline lay. He wanted me to seek out the relatedness to larger Continental Storylines by first thinking about relatedness here in this location of Storying, but also where I had moved and where I was going in my Storyline. In this way Eldership of Country guides the intuitive feeling of currents of instruction about relatedness and the ways we become aware of our own Storied, Countryed existence:

“that serpent there which is still a part of your dreaming.” (Uncle DD)

Uncle W recalled how he was taught to Story at school and how he felt that this way of Storying Country didn't feel like the Storied Countryed Existence he had come to understand and know before and while he was attending school:

"I remember going to school as a young boy and having to recite the [National]oath, the pledge of allegiance, and I remember at the age of 5 or 6 feeling that this didn't speak to me, I don't know what it was but even at that age I knew this wasn't my story" (Uncle W)

Storied Feelings of a Countried Existence talk up the implicit sense-abilities of being with Country. Feeling the Feeling of Sitting; feeling the Feeling of Listening; feeling the Feeling of Noticing; and feeling the Feeling of Doing are all experiential forms of Indigenous Knowing that are intuitive ways of becoming meaningful in relatedness. Indigenous Knowing is about exploring forms of logic and reasoning that may not be explicitly identified as part of curricula forms of knowledge and learning. Storied examples that identify entry points to this awareness of being with; alongside; connected to; Country assist in developing the affective turn of negotiating entry points for enculturate processes.

4.3.15 Ways of understanding Kindredness

Kindredness within the Eldership of Country holds the speed and direction of identifying relatedness among the Storied elements of Indigenous Knowing. This directedness guides us to understand how and why we engage in the Storied experiences shared by Elders. As an example of relatedness, Stories hold both the sickness and health of Peopled Country. When Elders relate us to sickness Country, we go slower and purposefully across the particular storied experience of Country and the Place Knowledge it holds in that location. When we are sick we do move slower; when we share in traumatic experiences we move slower through the experience, so we give people time to move through the trauma or sickness in gentler purposive ways. This ensures we maintain a respectful sustenance and not harm life any further than what it already is being put under by having to go through a traumatic experience. In this way we can move life towards healing and health in relatable ways to understand the healthiness of Storied Country. Uncle W shared a story about how he works with memories and the ways he tends to their situated place on Country by working through the trauma and heartache colonising experiences in gentler affirming way of healing Storied Country:

"My work is about trying to rescue the memories of my great aunt XXXX, people like XXXX my great, great grandfather, but being able to give voice to them." (Uncle W)

Uncle W storied ways of looking at his family, to 'rescue' traumatic memories to heal his Storied Country. In the same way Uncle DD directed the ways I was to source and seek out familial relatedness as a grounding impetuous in Storylining. Uncle DD guided me to seek

out the ways my Storyline existed across Country regardless of moving through sickness or healing Country. In this way I was to enact my sense of being within my Storyline and hold the ways I storied sickness and healing in my Storyline:

"(T)hat big journey right got your, right you already doing that, you looking at family, you see." (Uncle DD)

Aunty T Storied Country through feeling when she shared a grandfather Story. Her grandfather continued the Storied ways intergenerationally from the distinct relations that she continued along the same directedness of Storying Country. In the same way she directed me to Story through my storyline of Storying Country:

"I think we're experiencing a message from my grandfather to continue on that road of teaching our culture." (Aunty T)

Storied examples share Indigenous Knowing as forms of directing, relating and experiencing Country. Elders continue to take bearings in relatable ways to understand the health of our Storied Country. This directedness points to the ways our Storied Country heals or continues to be indisposed by the Storied Country we maintain as opposed to the Storied Country we ought to maintain. Relatedness as a curriculum example talks through; and with; the experiences Indigenous and non-indigenous peoples continuing to exist with; alongside; connected to and against; Country. Directedness as a curriculum example points to, regionalises and situates Place Knowledge curriculum by guiding the ways we think about Storied Country from our School settings. Experientialness as a curriculum example talks to; and with; the ways that can potentially unrelate our existence in the Stories we hold. In other words, we can hold *experiential-less* forms of Storied Country. Indifferent relatedness or directedness or experiential-less ways of experiencing Storied knowledge connected to; with; alongside; and through Country guides us away from proper ways of being meaningful with; to; and connected to; Country.

Social Sciences, Humanities, and Science all define forms of relatedness which are adopted into educational settings or ways of knowing. Indigenous Stories also hold forms of relatedness, directedness and experience that trace back millennia and these forms of relatedness, directedness and experience continue to exist through the Stories shared as part of Indigenous Knowing. In the examples highlighted Elders still remember and enact upon kindredness as a form of relatedness, directedness and experience to Story not only

invasionary histories but healing histories that work towards broader curricula memories of meaningful teaching and learning.

4.3.16 Kindredness of Mission

Every Story remembers the mission be they among the London Missionary Society investitures of Christianisation Story with other denominations through the *Coming of the Light* celebrations for Torres Straits Islanders or the school boarding houses or mission stations among the guise of many denominations across the continent for Aboriginal Peoples. If the mission didn't house Aboriginal People, a government reserve or station did with an informally active Christian mission attached to the 'welfare' of Aboriginal peoples. Indigenous peoples who could pass as white or were certified as non-Indigenous could negotiate localities on their own accord but were invariably disconnected from family and community and ostracised themselves within their new communities. In this way everyone has a Story of mission and everyone relates to the Place Knowledge of missions and reserves and the ways such places are Storied.

Mission Story holds many experiences of our relatedness with; to; through; above; and under; Country as part of being taught ways of being and knowing through the mission Story. Through direct, familial, or ancestral experiences together with the documentation of mission Story; is held within the perspectives of community. In instances, the ancestral memories of being displaced from Country are carried through our Storylines and are shared within Elder Stories. In one example Uncle W wanted to share how he holds relatedness to ancestral memories by reading and voicing descriptions that are meaningful to his way of Storying Country where he and his community exist:

"Just one of so many stories that are typical for our people, all of our people share these stories, we share the stories, we share the stories of children taken, of land lost, of languages silenced, of culture destroyed, people who were told where they can live, people who were told who they could marry" (Uncle W)

Aunty L wanted to tell a story about the memories of her Aunt and the ways she was assessed to exist in Story that Aunty L held and remembered as a part of her seeking Story:

"And she must have been about 16 or 17 that records say she 'ran white'. Meaning she left XXXX, the dormitory... So, this one, XXXX I think her name was and I know that my mum had got a letter from auntie XXXX a long, long time ago saying that this daughter XXXX had gone to XXXX to live. She probably was 17 or something like that and the record said that she's 'gone white'" (Aunty L)

Aunty KK contributed that the ancestral memories that carry through our Story still impact, still inform and still are a deeper aspect of Eldership of Country. This is because Story flows down the generations and is felt in different ways by those who have to Story Country and recount the many ways mission Story impacted a *Peopled Country*:

“We have to understand Mission plays a huge part of those old people’s life and it is passed down the generations...remember I said XXXX came from the same background out of the orphanage and married XXXX. You know some of these people who start showing their heads as aboriginal and as much as you’ve been bittier cause you’ve fought so hard to hold story to keep it together for your family when nobody else does and these other ones start popping up.” (Aunty KK)

Elder Storied examples of ancestral relatedness to colonising mission experiences both historical and contemporary form the intentions of this curricula artefact. Indigenous Knowing talks about the experiences of relatedness to mission, reservation, and community as forms of institutions that enforced behaviour, learning, language, and identity changes upon a population. Indigenous Knowing of such lived experiences challenges the Story of ‘peaceful settlement’ still described by Australian school textbooks or as part of a negotiated meaning making process. Indigenous Knowing also talks about contemporary experiences of sending children away to universities, day schools and boarding schools for educative intentions as different ways the mission continues to play a role in Aboriginal and Torres Strait Islander lives. Such examples of relatedness between Storied knowledge and current generational awareness of continued colonising processes, provide examples for school settings to inform curricula content of Indigenous Knowledge regarding the consequence of institutional learning.

4.3.17 Impact of State Policy

Local policy can be described as the individual colonial settlers and lease holders who controlled the ways of Storying Country on ‘their’ lands through the fence, the gun, the poison the local police officer, the cattle, the rabbit, the donkey, the camel and the horse. State policy can be described as the policy of individual states to legislate the control and segregation of Aboriginal and Torres Straits Islanders to Story Country in proper ways. National policy was the idea of a free and peaceful nation state being developed on behalf of the Australian population and how the rest of the world believed in the continental development of the Nation state. In the first year of my PhD I met a fellow post-graduate and countryperson from Australia who mentioned I was the first Aborigine they had met.

The creation of a Master narrative guides us to believe in an authoritarian Story of Country. This is what we mean when we build the nationhood of a country by developing a narrative that all people can believe. In invaded countries this narrative becomes contested by the individual stories held and authored by invaded peoples. In this sense, Stories are authored by living, experiencing beings. Hence Storied State Policy enacts the meaning that matters to the policy meaning maker while the Story authored by Elders is concealed and hidden or employed when and how it best fits the Master narrative. In these ways there is a Master narrative of Storied Country rather than an authored Country of Stories. In many ways the frameworks Aboriginal and Torres Strait Islanders can Story Country have been built by external processes that identify which ways to Story Country and through which lens and language of policy to define relatedness. Storying Country plays a big part in holding the ways of seeing and telling Story as these Stories are carried every day and be every generation. The Story of policy is memorialised every day and felt every day. In one example, Uncle W wanted to share how he understood State Policy through Storied Country by talking about the way one of his ancestral kin navigated policy measures:

“She was trained as a domestic servant, eventually she found her way back to her own people, but she had to apply for permission from the state, to be able to live on the mission where, my grandfather, her brother lived, she had to apply for permission to marry the man that she loved. You know every aspect of her life was governed by that number XXXX” (Uncle W)

Aunty KK wanted to talk about a State Policy:

“but when she died, he couldn’t get that property as the husband because she was aboriginal, and he wasn’t.” (Aunty KK)

Uncle DD wanted to talk about the ways we employ policy at the local level as people trying to control and Story our own ways:

“(W)hat’s separating us more now is white man’s legislative laws” (Uncle DD)

Storied examples of educational policy both historical and contemporary acting upon Indigenous Knowing form the intention of this curricula artefact. The nature of informal and formal relationships in educational settings contribute to students learning about Indigenous Knowing and how it exists across meaning making boundaries of institutional practice. The changes that occur between informal knowing and formal knowing provide critical junctures for students to identify the changes that preserve and neglect proper ways

of Storying Indigenous Country Knowing. Coming to know the different ways policy in both private and governmental institutional practice impact Indigenous Knowing is an important way of defining relatedness within Storied Country.

4.3.18 Religious Perspectives

How Elders Story their sense of being, can share the different ways relation to Storied Place Knowledge guides and evolves because of the existing movements of Story across Country and Countries. The dynamics of Story is never static, it is alive with and through the significant prevalence of developing and settling of Aboriginal and Torres Strait Islander Church missions or governmental reserves with religious oversight. The mixed interpretations of what constituted authoritarian religious dogma and ways of living for Indigenous peoples invariably saw Indigenous meaning making disconnect and fragment into pieces strewn across the Country. This was the result of colonial intervention into Storied and Countryed existences being chopped up and mixed up across the continental scapes. These pieces now become the existing Storied connections of a Countryed existence beyond invasion. In the aftermath, looking and seeking out the fractured pieces of Story is Story finding and sourcing its Countryed Existence. Storied beings always find relatedness to continue because Indigenous Peoples find ways to continue to exist – that is the resilience of our Storied Countryed existence.

Memorialising experiences of religious relatedness is as much about the religious conversions that took place as it is about the ways Elders Story connections and the ways those connection tended to emerge as a consequence of religious institutional boundaries of meaning and geo-spatialisation across the continental scape. Families were disconnected because they stayed on the church mission or they were certified to leave the mission or escape the mission; or they were rounded up or they were hunted down; or children deemed ‘whiter’ were taken and removed from mothers and communities to be housed in boarding missions or placed with white settler families.

In Missioning and Policymaking Story; Story still lives and exists in these *sacredised* places because our ancestral beings existed and were extinguished by these places. Relatedness to our family and our memories, still enact a sense of worth and value in ways that sought to and continue to seek Storylining of a Countryed existence. In the one example, Auntie L talks about her movements across country to Story Country and the ways her Eldership of Country sought to and continues to seek out the forms of relatedness with Country that still exist and still reveal connections both familial and geo-spatialised:

So, when I went up there as a young lady for some big Christian retreat out there and then when she came back, I was leaving that day, then they took me around to find where XXXX was that's when we found out she'd gone away. And then this XXXX who works in the front office at that big corporation, got in touch with her brother called XXXX and he came around and they looked at me and, they saw their great-great-grandma and they made me very welcome” (Aunt L)

Storied examples of religious beingness of Indigenous Knowing forms the intention of this curricula artefact. Educational settings that attend to the religious development of students contribute to the Missioning and Policymaking understanding of what should be taught as part of a faith-based understanding of spirituality. Curricula examples contained in Elder Stories talk about deeper sensibilities of spirituality whether they are historical or part of contemporary educative pastoral care models that attempt to connect peoples across the Country and to the wider community. The critical examples in Stories provide avenues to explore the notion of community and what community attempts to construct and teach for [all] community members.

4.3.19 Understanding the impact of Stories

A Storied Countried existence, describes the ways of relatedness between Story and Country. When we can understand the Storylines within Stories, we identify the individual experiences of Elders that attend to the Storied notions of Eldership of our Countried existence. Stories protect and maintain our Storylines as part of the movements we engage with across our Countried existence. Through the Stories Elders share and show through living examples of experiential and conceptual meaning making, we live the forms of relatedness to Storyline and Story respectfully.

Storylining takes two forms firstly as aligned - emplaced and enacted, being meaningfully aligned. Secondly, as misaligned – displaced, re-enacted, being brought into meaningful alignment. Elders can be heard to relate, and share awareness of Story as described through the 19 themes or living artefacts within Storied Country. These artefacts story both the walking through *sickness* Country; and the walking through *healing* Country. This form of Storied Knowing can only ever occur based on the health and resilience of a Peopled Country. Storylining conceives of ways Elders Story the Countried existence that we all, as a contemporary generation find our relatedness in the Storylines that cross over; underneath; around; alongside; through; a shared Countried existence. This Countried existence emerges from the meanings and meaning making we identify with and through

the examples illuminated by 19 junctures of meaning from the forms of Storied Country that exist on Country.

When Elders guide us through the Story of Sickness Country, the storytelling of artefacts we come to disclaim or reclaim as part of Storylining Country are very much about the ways we *hold* temporal identifiability with being displaced or emplaced within Country. This impacts the ways we understand our sense of being settled or unsettled in our living, storied ways. Indeed, walking through sickness Country is very much about the ways we listen to the Eldership of our Countried existence and reproduce the assumptions of walking through sickness Country respectfully as such Eldership guides us. If we model or adopt such guidance, we run the risk of creating and holding more trauma than necessary as part of our experience of learning to Story Country as Indigenous Peoples.

When Elders guide us through the Story of Healing Country, the storytelling of artefacts we come to disclaim or reclaim as part of Storylining Country are very much about the ways we come to *respond* to the temporal identifiability with being displaced or emplaced within Country. Healing Country is healing because it responds to our trauma as much as we wish to respond to healing Country. Such dialectic observances tend to the wounds of wounded and wounding Stories and the vulnerability of such wounding processes as invariably painful to move through and across in respectful healing ways. When Elders Story it is to give voice, to be heard and to find the identifiable entities that need to be seen and heard from that would otherwise be concealed, buried, covered over and lost in the larger tracks of meaning that groove the continental scape.

Regardless of these assumptions, living artefacts exist and the ways we hold and respond to such storied living artefacts determines our sense of relatedness to and through; the experiences such artefacts guide us to engage with and experience as a critical awareness of meaning making in the non-situated worldviews we find ourselves having to negotiate on a daily and intergenerational living experience. Story holds the experience, and how we define the Storyline that connects relatedness as part of a Storylining is as impactful as the ways we Country our existence. In one example, Uncle K wanted to talk through; with; alongside; and within; a *Nyitting* Story about relatedness between Land, and Water Country. He talked about Water – the *Warkarl* – the water snake; about Land - where peopled were Countried and the ways Story moved across the Countried existence of *Noongar*.

“they knew that the great Warkarl, was moving across the land, and just reinforcing the stories” (Uncle K)

Aunty KK also wanted to show relatedness between Land – a ‘mountain’ we were driving past at the time and Sky – Placing a line of sight for the listener to look through the sky to look a certain way:

“That’s a significant mountain over there Mt XXXX, the Traditional Owners from around here have a very interesting story about that place.” (Aunty KK)

Uncle W wanted to show relatedness to Country by identifying why we story:

“these are common stories to us, it’s these stories that gives us the sense of who we are, just one of so many stories that are typical for our people, all of our people share these stories, we share the stories, we share the stories of children taken, of land lost, of languages silenced” (Uncle W)

Storied experiences contribute to curricula through broader explanations of living Countried experiences. Storytelling is about providing platforms from which we seek out meanings quietly and respectfully as formalised aspects of learning and teaching. Examples of storied curricula items of interest for; with; and alongside Country exist in Storied forms. These items relate in both literal and conceptual form to align and intimate focused learning for listeners to grow in awareness within Storied forms of learning.

4.3.20 Conclusion

The emergent themes evident in the stories explored, identify the Countried experiences of Elders. These themes described as meaningful artefacts found within Stories, propose 19 examples that potentially inform different curricula junctures within Indigenous Knowledge and subsequent Countried education. Employing the stages of heuristic inquiry, the section began with composite descriptions of each participating Elder and defined the sampling strategy of why particular Elders were selected through the assumptions of defining Eldership or being an Elder in community. The section then detailed each of the 19 resultant themes and related each theme through germane quotes of significance identified from the data set. Secondly each theme was then explored as an intuitive way of defining the relationship to curricula items of meanings. Part 2 of this phenomenological investigation will attend to the experiences of analysing data with and through Country and the ways the researcher worked in community while undertaking data analysis as a co-participating Aboriginal and Torres Strait Islander. This section responds

to the hermeneutic expression of heuristic inquiry that transparently describes the ways a researcher is inalienably linked to the research experience and the ways they identify with the constraints of research as both a resource and a source for the notion of lived experience.

4.4 Part 2 Storylining Countried Experiences

Introduction

This section will detail, or Storyline three researcher experiences encountered during fieldwork. Storylining describes the transparent act of revealing the practical relations between experiences, both researched and lived, as a way to develop the inalienability of research experience and the ways such research experience is valued through and with living experiences. Being an Indigenous person and identifying with both the research space and the identifiable qualities of my being, situate Knowing throughout this dissertation. The Stories as an instrument of Storied identity construction, practically inform the ways I effectively navigated the experiences of my researching life as a Storied process of meaning making. Further the distillation of Part 1 didn't happen in isolation it happened as part of the participatory roles I played in Community while undertaking data analysis, research and associated ways of learning about Storied Country.

The storied knowledge unfolds as a process of meaning-making, weaving together experiences and events in a particular *gestalt*, or overall construction of reality. These three stories are a small portion of Storied experiences from my journals and memories during the multiple extended trips I made back to Australia during the PhD while studying in Cambridge, England. The Stories suggest identifying the 19 themes and trying to make meaning of what Elders wanted to talk about as part of the yarns we had; evolved and emerged also from my own experiences away from yarning with participants to just sit and listen to Country; read over the notes and interviews; and move with; and alongside; Peopled Country wherever I moved across the continent as someone deeply and affectively involved in Community.

These storied forms of ethnographic intent illuminate that meaning is always in-Place as highly contextual. However, the Stories are also moving both through affect - the emotions I felt; and regulation of movement – the things that I did. This argument seeks to go beyond a Place focus towards a *multi* Placed formation of Storied identity. The Stories explore a ethnographical process of identity construction to place. Such development identified Storied experiences, that, over time; and in multiple Places across the continental

scape, came alive for the research writing to hold, define and work with particular significances and frequencies of meaningful understanding. Further, as a form of transparency to the scholarship and the research detail in the research questions attended, the Stories open up a critical examination of researching, Storying processes.

Three research field experiences are Storied as a subjective participation with research participants developed in the previous section. The three Stories are titled Whale Story, Herron Story and Lizard Story as a literal and conceptual understanding of my Indigenous Identity that is carried by my Storyline but also reflective of the movements within each Story. These movements can traverse large spatial distances like the Whale migration patterns of the Water or high above in similar ways to the flight patterns of the Herron in the Sky or short rapid movements similar to the Lizard on the Land. These subjective experiences are speculative but are informed from my memorialised experiences of being a feeling, living human being holding memories and existing in; with; through and alongside Elders and Country too. Further it also attests to my desire to ensure as many voices in the research experience can be heard through the Story's I tell.

4.4.1 Story of the Whale

While residing in a metropolitan city in Australia, I continued to extend Storied relationships with Country. I began connecting again with Indigenous Elders I had worked with on high school educational programs across the continent over a number of years prior to this time. Meaning making with Country is about acknowledging Guesthood, in other words, trying to make meaning with; through; and alongside; Country as a relatable guest or visitor from my own traditional territories elsewhere on the continent or over territorial seas. One day, a staff member associated with an English as a Second Language (ESL) school for international language learners approached me about a student program. They were thinking about fostering relationships with local, Indigenous communities from traditional lands of greater Melbourne. They felt, the trip to places outside of greater Melbourne to interstate regions provided opportunities international students to learn about Indigenous 'culture' and experience which international students felt deeply connected with but wanted the same sort of experience closer to metropolitan Melbourne.

The challenge I faced was negotiating traditional assumptions of what culture looked and felt like from rural and remote regions. Urban areas comparatively unsettled interpretations of what Indigenous Peoples ought and should be representative of within tropes of understanding. This awareness was accessed through books and digital media

expressions. I consulted with one traditional owner and talked about these issues and the examples of programs we had worked on together in the past. In this way we could begin to create and begin to develop relationships with not only the ESL school but also with different forms of Country that exist geographically amongst; under; over; through; buildings, roads, highways, tramways, cinemas, libraries, universities, hospitals and research institutes.

Meetings were set up and time frames suggested with the possibility of developing a 'proof of concept' camp program for growing a program beyond the first pilot case. The assumption was to showcase the option for the language school to support Elders to guide the ways International visitors ought to be situated on Country in a metropolitan setting. The thought was Aboriginal Australian Knowledge was an artificially composed element of International knowing and a grounded experience would develop alternative ways finding relatedness and directedness with Indigenous peoples beyond the guise of alternative diplomacies. Visitors could exist alongside; with; and within the respectful meaning making Storied Country provided through; with; connected to and grown by an Eldership of a Countried existence.

This Countried existence could be defined in an infinite number of ways but rested on the assumptions of relatedness, directedness and experience to sustain a Storied, Countried existence. If Elders talked about colonial history, that was the Story. If Elders talked about their children going to university and becoming professionals, that was the Story. If Elders talked about family relationships, that was the Story. If Elders talked about different Water courses under buildings and roads, that was the Story. If Elders wanted to talk about trips they made to different parts of the world that was the Story. If Elders wanted to speak about different places they worked across the continent and or in the City, that was the story. If Elders wanted to teach ceremonial dances, and songs in mother tongues, walk among buildings Storying Country then that is Story. I myself as an Indigenous guest, visitor and researcher, was situated within, alongside and around such deeply meaningful making process through the privilege of situating deep meaningful time with Elders. In these instances, while researching and engaging in employment and my own personal and intellectual growth; Elders who wished to situate me within Country and share with me the Countried existence of their Storied Knowing as a way of teaching - then that was Story too.

4.4.2 Story of the Herron

My extended period in Australia for interviews and data analysis provided me with the opportunity to sit and listen with; through; alongside; and within; the descriptions and interpretations of Storied Knowing. These thoughts emerged from the interview material shared by participants but also the communities I passed through, worked alongside and participated with as a related member of Community and Country. In mid-late 2016, an Uncle from the Torres Straits Island called through to family living in North Queensland to enquire about a church bell retail outlet. The local church in the region after many years found their church bell broken and needed a replacement one. That news from family was relayed in conversation to me while I was travelling across Country undertaking fieldwork interviews and working in community educational programs.

At the time I had driven down from Brisbane to Sydney and had finished up some interviews on Country on the southern coast of New South Wales and was about to fly across to Perth to begin some work with Community and lead an educational program. Family suggested while I was in all those places to make enquiries on behalf of Uncle in the Torres Strait who was having trouble finding a suitable replacement. They had located retail outlets in Tasmania where forms of second-hand bells were advertised for sale but also internationally and neither seemed to be providing the connections to the bell Uncle was sourcing. I too began a search and found manufactures around Australia but also in regional Australia which I arranged to visit and discuss further when time permitted, or I could manage appropriately.

The following year, while resident as a teaching and pastoral care fellow at a university college for university students, I identified the location of one of the bell manufacturing retail places in the greater regional area of the State where I worked at the university. I made time and hired a vehicle and drove the three to four hours outside the greater metropolitan area to begin discussions with the manufacturer. After discussions, with the help of a fellow colleague I recorded the different tonal frequencies of the bells available to be made by the foundry while discussing how different tonal frequencies originated from different parts of the world. We discussed how the tone presupposed certain meanings of relationship to the external environment and as such reflected a dialectical relationship between the sound and the place where the sound was made on country.

This made me think of how such situated and contextual sounds invariably developed or heightened the complicity of identifying certain patterns of meaning in the sound and the ways such sounds reflected the situated environment. We began going through the different sounds as the manufacture tapped each bell successively identifying tonal differences between English bells, Asian bells, and Dutch bells and then where American bells adopted their Sounds from and the origin of Australian church bells. We also discussed tonal bells created in Australia from the surrounding landscape where the foundry was located. In this sense identifying the importance of the frequency of a gum leaf in the wind or the rustling of eucalyptus trees. In these instances, considering the landscape, the coastal sounds of where the manufacturer grew up and how such experiences informed their understanding of a Countried sound.

These recorded tonal sounds were played back over the phone to family in North Queensland and then also emailed back up to family to play back and listen to the different sounds and also the context of how the sounds were distinctly different. The families in North Queensland also got in touch with Uncle living in the Torres Strait and where via phone calls, the descriptions and sounds were played over the phone for a selection choice to be made by Uncle. The sound chosen was selected and subsequently the bell was cast and made for purchase.

When completed I picked up the formed cast, packed it in a suitcase around some clothes and shoes and books I wasn't taking back to England with me in the coming months; and I flew to another large metropolitan city. I had arranged to meet with some other family members who had flown down for the day from North Queensland. We were meeting to discuss a variety of community programs we were developing together back in North Queensland for disengaged high school youth in the region and for the local mission which we all had family connections with and wanted to contribute some educational frameworks.

The suitcase was exchanged, and the bell was then taken by family up to North Queensland. From there, family received the suitcase and it was repacked and sent via a barge to one of the Torres Strait Islands. Uncle travelled down from his Island home to the main distribution centre and then took the bell back to where he was living. He then repacked it and waited for the right season to travel by dinghy to another outer island of the Torres Straits where the church was located to deliver the bell. When the bell was cast Uncle wrote down the names of his family members on the bell as a dedication gift on behalf of the Torres Strait families who still held deep associations to the local Community from around the continent where they all worked and lived respectively.

4.4.3 Story of the Lizard

I was resident in a college as a pastoral care worker and tutor for undergraduate students during my extended work with; and alongside; community. One morning an incident occurred in the food preparation and eating area where a visiting member of the public passed away. The college term was still in session and students both Indigenous and non-indigenous still needed to attend the area for meals. For a short period of less than a week, alternative arrangements were put in place. This ensured disruptions to morning routines by staff and students could continue to be accommodated while the area was out of bounds for associated investigations. A demountable kitchen and servery were set up and a makeshift eating area was assembled. For each meal and snack of the day Students and staff including myself would visit eat, meet, socialise and attempt to get on with the day. After four-five days, a religious ceremony for staff and students by the local college chaplain was conducted. Prayers and blessing of the area were accomplished, and Staff and students could return to normal working and studying responsibilities.

On the morning of the incident, conversations between myself and Indigenous students filtered through an awareness that the place couldn't be returned to without some form of Indigenous protocol to cleanse the area. I began getting in touch with Traditional Owners and Elders of Country to facilitate some form of dialogue about what to do as students needed to eat meals, socialise and continue to be part of the college environment with non-indigenous student residents and staff. Indeed, this heightened their concern and anxiety when in the post religious blessings, non-Indigenous staff and students returned to the main dining area to continue on with termly responsibilities. In contrast, the cohort of Indigenous residents couldn't return to the same place, as cleansing ceremonies had not been completed by traditional owners in accordance to the termly schedule of the college.

In the ensuing period of heightened awareness among staff regarding what to do about the Indigenous student cohort; Indigenous students themselves observed avoidance protocols by maintaining a vigilance to avoid the area as part of Indigenous protocol regarding Sorry business. As an Aboriginal and Torres Strait Islander person myself, I too did my best to limit my engagement with the area while I responded to Indigenous student concerns and the non-Indigenous Staff tasked with the responsibility of normalising the college after the upsetting incident, but also attempting to maintain forms of continuity among Indigenous and non-Indigenous student relationships.

I set up an eating area in my small room after it became too upsetting for me to see students being told to go to a different eating area assigned for meals three times a day during observance of Sorry business protocols. The non-Indigenous staff accepted this outcome and so I began the daily routine of preparing to serve meals and snacks three times a day. My room was distant enough from the place, and I made it available for them to come visit over an 18-hour period every day over 10-14 days. This was to ensure they could drop in, share, Story, connect for social comfort, de-stress and foster connections with other Indigenous Students and myself during a tenuous and tumultuous time in the college experience of undergraduate study and relatable college life.

Every morning, lunch and dinner, I would walk to the kitchen area not too far from my room, enter the back door through the washing up area or food preparation area and collect food and drinks on a small trolley for students. I would return to my room, set up the food items and wait for them to arrive. Then, when they had all departed for morning lectures, I would pack up the kitchen items, rubbish and leftovers and return them all to the kitchen. Some would return after morning lectures and before lunch to get some snacks or hang out. Just prior to lunch I would repeat the process again and then return the trolley to the kitchen once they had left for afternoon lectures. I also left bowls of fruit and snacks throughout the day for students to come by my room to access and get on with their day as best as they could. I repeated the process again just before Dinner and after dinner.

Administratively, the accountability of the whole experience affected many dimensions. The linear time frame was not conducive to Indigenous feeling around protocol and as a collegiate wide experience among non-indigenous staff how best to manage the situation readily frayed relations. Indeed, my PhD time frame commitments suffered; college time frames suffered; students felt disconnected and some students reported having disturbed sleep. As a community Indigenous and non-indigenous students and staff the longer-term effects were felt in silent, unlistened places until we heard about such experiences.

Some Indigenous students who were resident in the adjoining building space, also requested to be moved further away from the incident area. Night times some Indigenous students tended not to go anywhere, or outside. We walked together in groups and couldn't focus too much on anything. Some Indigenous students had to respond to questions from non-indigenous students and staff to explain themselves and their behaviour. Indeed, the experiences travelled to other Indigenous students in neighbouring colleges with students

talking about the incident and the way all Indigenous student cohorts were attempting to respond both as residents of college and the wider university community.

Elders from the community also felt pressure from the already exorbitant commitments to their limited daily and nightly metropolitan time responsibilities. They needed to attend the college and enact ceremony in a scheduled administrative time frame. Elders also told the college Sorry business always unsettled Country and we needed to be patient for the Land to settle before anything can happen to move forward. Eventually, a time was negotiated to ensure some form of ceremonial protocol could be attended to for students and some non-indigenous staff also affected deeply by the incident in the eating area yet continued to work on before the place could be cleansed by a smoking ceremony.

Automatic fire systems connected to the metropolitan fires service were disabled for the particular building, smoke alarms were disabled, and people gathered. Elders from two Nations arrived, when they could. I helped one of the participants go and bring some eucalyptus branches and leaves into relation with the burning of organic material during the smoking ceremony. Special requests for the smoke to be carried through; around; alongside; into; and within; rooms, buildings, and around; and breathed in; by Indigenous students, and as well as non-indigenous staff and students also present. Afterwards those that wanted to stay for meals did so. Both Elders Storied the experience, sharing of death in community, and their own personal reflections of how they attempt to manage sorry business while carrying their own Sorry business in the community. They spoke of the day with their other community and responsibilities and also met some of the staff and students they had not been introduced to before.

4.5 Conclusion Part 1 & 2

The two parts responded to the question *What assumptions are held by Indigenous Elders towards Learning and Knowing and How do Elders align relatedness to Countried Knowledge?* In Part 1 & 2, Aboriginal and Torres Strait Islander Peoples can be described to hold both *constructed* and *principled* awareness of understanding lived experience as inter-ancestral, lateral and personal. These formations can be described as guides to a counter intuitive passage of meaning that aims to foster a resistivity to implicit hegemonic processes that re-construct an indeterminable ontological alienability between the notion of lived experience and the being of Aboriginal and Torres Strait Islander Peoples. Further, counter-intuitive passages act as a continuity to identifying meaningfulness in the contested

everyday with; through; alongside and connected to the relational consciousness of Country.

Constructions *evolve* from co-participants discerning the nature of refractive instances evident in counter-intuitive Countryed experiences. These counter-intuitive constructions story truths from a Countryed experiential description of knowing and being. As an example, when Elders story artefactual histories and legacies that talk about experiences such as violence, access, marginalisation and acknowledgment; these lived experiences whether inter-ancestral, lateral or personally experienced - act as counter-intuitive form of describing an ontological inalienability of Countryed existences.

Further, in the descriptions and interpretations of the researchers experience on and with Country, ontological inalienability is evident in the refractions of identifying kinship to entities such as the *Whale*, *Herron* and *Lizard*. These entities represent the spatialised place thoughts of inter-ancestral, lateral and personally experienced movements storied and multi-placed over time that transform and dissimilate in dynamic conceptualisations of a Countryed existence. The practice of being a Whale, Herron or Lizard becomes the distinct ways extra-ordinary stories emerge from experience. As such the place thought can be multi-storied and multi placed. These shared and meaningful connections contribute to the overall sense of understanding the notion of Countryed experiences as stories in and of witnessing practiced beingness.

Principles *devolve* from the grounded physicality of experience. The vitality of lived experience is the living and experiencing of being axiological inalienable from the intentional feeling of being human. In this way the sensory affective dimension of vital experiencing is experienced not only through the self, but *transpersonally* through the *selves* defined as inter-ancestral, and lateral. Congruently to constructed evolutions; principled devolvment refracts counter-intuitive acts of principled focus. This is evident in the stories that generatively emerge as descriptive interpretations of principled focus through storied meanings.

The examples of Elders sharing relatedness to an object, a place or an action such as *rock*, *poison waterhole creek*, *the feeling of cold*, or *giving a child up for adoption* – suggest the lateral, inter-ancestral, or personal experience is valued inalienably. If it wasn't, they would not have mentioned such things in our yarns together nor thought to mention such knowledge as meaningfully important to convey to the researcher. In this way such experiential awareness contributes to the relatedness of understanding the notion of Countryed experiences.

Countried experiences also hold a tension of negotiating in-betweeness of being constructed and being principled. This tension is evident in the way we negotiate contested meanings upon our lived experience. Among the themes, the Stories evidence settler colonising processes within artefactual experiences of *mission, health, crime, acknowledgement, education, and gender* [...] experiences among thirteen other artefacts found. Countried experiences situate the governance of our beings through contested Indigenous *and* non-Indigenous ways of knowing and being. However, they also situate contestation as an inherent *constitution* of being identified as Aboriginal and Torres Strait Islander Peoples. In these instances, the master narrative models the notion of *Aboriginal-and-Torres-Strait-Islander-ness* and the way we replicate such models according to the governance of our being. What eventuates is a constrained *access* to the notion of lived experience whereby the constraint acts as both a resource and a source for meaning making in the Storylines we share.

The source and resource of meaning making may evolve from refractions within such governance models that contest the illumination of counter-intuitive constructions. Alternatively, contestation may devolve from counter-intuitive principles of affective truth. These become evident in the ways Stories identify constraints to the access of lived experience but also the contextual features of what constitutes a constraint. In this way, Story is a source and resource to access meaningfully, the constrained sense of being a contested Aboriginal and Torres Islander identity constitutes.

In the researcher experience it was in the story of the *Lizard* perhaps negotiating administration schedules; in the Story of the *Whale* it perhaps was the value of epistemic truth of Aboriginal Knowing; in the story of the *Herron* it may have been the physical distance storied over a spatialised three-thousand-kilometre journey from Erub island in the North; to a major metropolitan city in the South. In these instances, the potential way the constraint was identified and negotiated to maintain some sense of an Indigenised lived experience; was highlighted as both source and resource to knowing a sense of being.

These Eldered and researched stories legitimately relate and empirically ground a way of knowing and being. These storylines attest to the ways we do negotiate contested living experiences when we do identify as Aboriginal and Torres Strait Islander Peoples and when we do wish to agentially negotiate the lived experience as Aboriginal and Torres Strait Islander Peoples. Our capacity to Story in such negotiated passages of meaningful purpose are navigated throughout our lived experiences as sovereign thinkers about our own lives. Indeed, we become reflexively cognisant of negotiating the inner and outer

value assumptions that emerge from the everyday experiences of Indigenous and non-Indigenous interaction. In these contexts of being positioned in-between the inner and outer as governance models understand us to be positioned; we are expected to interact regardless of where we are being positioned. Aboriginal and Torres Strait Islander thinkers circumscribe and orbit into the centrality of our thinking and being, while negotiating the outer marginality concurrently as displaced peoples and settled Countries. Our Stories demonstrate by sharing lived experiences that are not un-forgotten or buried and concealed from the broader (Australian) awareness, we are able to maintain a continuity to our Countryed existence through the very contestations we reflect upon and share in our Stories.

In identifying counter-intuitive experiences, the stories shared can be seen to legitimate the inalienability of ourselves from the lived experiences we exist within. This epistemic truth is seen in the first instance as a repeating cycle of contextual lived experience. Aboriginal and Torres Strait Islander thinkers Story the same things over and over again. Such storied practices not only remind, but un-forget and ground the contextual experiences inter-ancestrally, laterally and personally as a process of resistance to the ontological alienability governance systems effect on our sense of being.

Storied living experiences are also reproducible. Lived experiences are felt inter-ancestrally, laterally and personally through the places, entities and actions we live and work across time and space in relatedness. In these instances, the same value placed upon Aboriginal and Torres Strait Islander experience felt historically are relatable in contextually different but axiologically congruent assumptions surrounding Indigenous being. The *massacre* may no longer be used as a model of controlling Indigeneity; but are transformed into models of governance that still systemically regulate and frame lived experience and the ways of experiencing the being of *Aboriginal-and-Torres-Strait Islander-ness*. Such resistivity to axiological alienability proffered by systemic colonising governance, attest to the sovereignty of our thinking of our Countryed existence.

Summatively, in defining the repeatability and reproducibility of Storied living experiences the sovereign inalienability of our storied thinking becomes confirmable. Elders through noticing and Storying the repeatability and reproducibility of living experiences undoubtedly identify the empirical fabric of confirmable truths passed down from one generation to the next. Part 2 of the researchers experience as a Countryed being, storied ways of negotiating living and conceptual meaning through the passages anticipated and negotiated as a sovereign thinker themselves. This anticipation is the realised and felt experience of knowing and feeling some form of noumenal awareness of experiential

meaning even before such everyday experiences manifest or are fully realised. In this way, the chapter has contributed to the ontological inalienability of shared experiences that while separate, isolated, and at times transpersonal from each other - distinctly relate across Countried existences and experiences in uniquely emergent and creative ways of being noticed.

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Chapter 5

Ways of Learning: Results

Research Question 2

5.1 Introduction

This section will attempt to answer the question: *What assumptions do Indigenous adolescent students hold towards learning and how are these linked to ways of learning in general?* The section identified that some students hold a limited or restricted quantity of ways of learning while others progress towards holding a larger quantity of ways of learning or holding more advanced ways of learning. When we think of Aboriginal and Torres Strait Islander students learning to experience, they relate in different ways of learning. Since students' ways of understanding are expressed in their speech and actions, Aboriginal and Torres Strait Islander Students can be seen to negotiate learning in different ways of justification and reasoning.

The following section will introduce each way of learning describing the qualities respectively. Student statements are inserted into the text at strategic locations to best support and provide context to the descriptions and interpretations made within each way of learning. Individual student transcript statements are qualified through the letters: *K1*, *L2*, *M3*, *N4*, *O5*, *P6*, *Q7*, *R8*, *S9* and *T10* representing individual students who participated in yarns. In some descriptions of interview text, the *Researcher* is identified as they engage in an active discussion of learning and the different ways student interview material is contextualised in a dialogue. These identifiers help to contextualise which student said what in relation to the evidence base for particular ways of learning.

5.2 Connected Ways of Learning

Connected ways of learning focus on constructive attention towards the conscious, explicit, and structured, qualities of content meaning. Learners talk about the relational aspects between ideas presented and convey their constructions through the ways they identify relationships between meanings presented and known in a learning task. Students deploy strategically conceptual meanings as a way to contextualise the information presented. Students identify the particular concepts accordingly by discriminating between the available conceptual elements that fit the learning experience. In one example a student was talking about the relationship between student school fees, school income and teacher wages:

“the students are pretty much paying the school and that money is paying the teachers as well” (K1)

In another example, a student was talking about the relationship between graduate employment opportunities and educational achievement:

There’s a wider range of things you can do when you have a better education (M3)

The interpretation a learner made was to suggest that based on their reading of an article, the greater educational qualification a student achieves, then the more employment options would be available after they graduate. In another example, a student talks about the relationship between legitimate dependents of social welfare income and seeking youth employment:

“like some people kind of actually look for a job on their own and it’s much harder for them.” (M3)

One student described the relationship between government spending, youth employment and training justification as way to make meaning of different connections they saw in the reading material they were reading and conveying understanding in the yarn.:

“government is funding young people. People like trainings and things like that, that help them prepare for the job.” (S9)

In another example the same student is talking about the relationship between employment and qualities of a successful job applicant:

“It’s more experience level” (S9)

In another example a student attempted to construct meaning based on the engagements they were having in developing a question for a paragraph they were working on as part of a larger essay construction. The example details the questions and responses between the researcher and student as an active engagement in constructing a conceptual understanding of a topic:

R: How would you write down this as a question for your paragraph? Because you've written all the answers down here for body paragraph three.

S9: Its more experience level

R: Using the how, what, when, why sort of thing.

S9: What experience level do you need for example.

R: Yeah, you've got here, unreal expectations, so yeah. What, what did you say?

S9: What does it... like... the need for a job for young people. Or what is expected?

R: Yeah what is expected. So, there's an expectation. Are they meeting the expectation, why are they not meeting their expectation?

Connected ways of learning aim to describe the ways learners talk about the connections between abstract elements expressed in literate social forms. This way of learning is reflective of the significance placed upon the way’s students are required to achieve learning outcomes in formal learnings settings. The focus on abstract elements is an important aspect of learning which contributes to learners being exposed to the way’s

teachers understand critical thinking and reading skills. When students can make interpretations that reflect the same way meaning and meaningfulness is identified and presented in formal learning settings, practitioners can surmise that learners are developing more complex interpretations about the relationship between abstract elements. Practitioners can build upon these interpretations to guide learners with more complex meanings as part of the learning environment.

5.3 Grounded Ways of Learning

Compared to *Connected* ways of learning, *Grounded* ways of learning typically describe student learning where learners deploy unconscious, implicit and strategically affective relational qualities within learning. This way of learning describes the affective alignment within content meaning and meaningful content of learning. In other words, students feel and experience a learning experience through indiscriminate selection of concepts to fit meanings as part of a reconstructive process within learning. Students typically are guided by the relationship between the affective meaning and the conceptual idea presented. This way of selecting concepts is dependent on the emotions and feelings as core beliefs and values students have towards a particular learning experience. In one example a student attempted to highlight the connection within a story they were being told:

“We were all sitting in a big group and XXXX was sitting in the chair and...it was just...it just kind of was like a moment, you know when you get a moment and it just feels really strong. That’s how I felt when we were all sitting together listening.” (L2)

Learners define an implicit understanding of relational qualities within self and core values through strategic ways they can align relational meanings and meaningfulness to things. In this sense, learners learn within relationships. In one example a student describes the affective justification within storytelling:

“Because it is good to like listen to someone else tell their story and then to share that story with them. Like you understand where you are coming from you have some sort of kind of common, you have something in common with them. It makes it easier, you can relate to them when they are talking.” (T10)

In another example a learner describes the relation within the connection between two people:

"I'd say the bond, Yeah the bonding that we have and just connecting with each other."
(P6)

A student described the affective response within disconnected relationships between people to describe alignment within a misaligned relationship of fellow students not attending the same program they were attending:

"Some people, you know, they didn't see them and didn't feel that relationship, you know what I mean?" (R8)

Another student yarned up a description of how misalignment within relationships can be aligned in meaningfully affective ways and how that could be accomplished:

"Yeah, you know, but suddenly he comes back here and feels all those emotions again"
(R8)

One student suggested the affective response within the connection to cultural processes meant they could feel something special about something they identified with as a person when they could positively learn about being and Aboriginal and Torres Strait Islander person:

"You felt good because you were connecting to your culture more." (S9)

Alternatively, another student described how a particular learning experience helped them to identify strongly as an Aboriginal and Torres Strait Islander person by talking about the way they could affectively centre themselves within the learning experience they were describing.

"It was a kind of like a big...circle, it just kind of, and it all came spiralling back into, you know, here" (L2)

Grounded learners express affective connections within experiences with others and the broader world and to speak of deep personal connections to things. In one example a learner describes the affective alignment within the content meaning:

"That really happy feeling. I can't think, and excited you know. bursting with vibes inside. That kind of emotion and each camp after that, you get the same feeling" (L2)

Another student described the affective response within the connection to mental well-being:

“Like my emotions that I didn’t even know that I had were buried away, And I could name it and... step on from it.” (L2)

Alternatively, a student went on to describing how they related affectively to the learning experience of creating lyrics for a song described the connections to music through the way they lyrically described a learning experience:

“Don’t forget that music is the soul for the passion I feel in my chest” (Q7)

One student justified the relations within an immersive learning experience describing the spatial environment as contextually important to describing how epistemy was ever-present or the every-where-ness of knowledge:

“The knowledge here is just like everywhere.” (N4)

Another student described the meaningfulness of knowledge as connecting to a deeper sensory perception of Story and the way they were located within the Story being told:

“I was just, my eyes were just...like alight. It just went on” (L2)

One student attempted to reconstruct conceptual meanings based on the interactions they were having with the researcher:

Researcher: “So, you can write your topic sentence in one sentence. Start with ‘THE’, The relationship maybe...?”

K1: “The relationship between student enrolments”

Researcher: “Enrolments in home schooling and public schooling affects teacher’s employment in many ways or various ways it’s up to you which one to use.”

K1: “How do you spell various?”

Researcher: “V-A-R-I-O-U-S various full stop. So that is a topic sentence, your paragraph is going to be about the relationship between student enrolment in home schooling and public schooling and how they affect teacher employment.”

K1: “Various ways”

In another example of attempting to identify with the conceptual constructions of the word ‘integrity’, a student worked around the concept in different ways to reconstruct meaning from experiences they had with the concept through meaningful activities:

Researcher: “Did you come across any sort of themes from the camps you wanted to talk about?”

K1: “From any camp? Can it either be good or bad?”

Researcher: “Good or bad it doesn’t matter, it’s entirely up to you.”

K1: “I really try to connect with integrity because I use integrity for a lot of things because once I started learning about it a bit more on that camp I just yeah, and it ties in with honesty and stuff and it’s just good to research the many ways. My friend and I we researched different role models around the world like Malala and how she used integrity for, to change woman’s rights and stuff and Eddy Mabo as well how he used integrity and stuff and I really enjoyed that and also researching how by just using integrity, how...grow...what’s the word? What...like you can change a lot of things, sharing feelings, just speaking truth. Yeah”.

Grounded Ways of learning is about instructive responses to learning through experiences. In other words, students can typically describe learning as contextual to a personable experience they either witnessed or were actively being a participant. Students through their dialogue, read a particular article then thought about a personable experience. In this way they made meaning of the reading material through certain contextual and relatable experiences. Through this instructive process a particular student could convey meaning and the ways they could understand the literature presented to them as a learning exercise. Students were able to then describe as part of the yarns with the researcher how they gain meaning from meaningful experiential situations.

This way of learning attempts to reflect the ways of learning whereby learners describe deeply grounded relations within content meanings and this alignment with meaningful content. Students maintain relational thinking as instructive rather than reconstructive and deploy relational ways of describing and bringing others into relationship through sensory or affective ways of meaning. Learners describe how they align content meaning and meaningful content through affective responses. Sensory responses describe a meaning making process where grounding content meaning and meaning in perceptual ways guides awareness within relationships to people, things and knowing of things.

5.4 Interconnected Ways of Learning

Interconnected ways of learning describe a way of learning that incorporates qualities of learning gained from both Connected and Grounded ways of learning. This way of learning

compared to Connected or Grounded ways of learning, identifies with diplomatic, proactive qualities of learning. Students typically mediate their learning by thinking more strategically or diplomatically about how they negotiate their learning towards the connections they make. These connections are developed by deploying experiential affirmations to make meaning of conceptual elements within the learning setting or alternatively thinking through different conceptual elements that best suit the learning setting and the outcome to be achieved. In one example a learner identified a social experience, and deploys the meaningful content of the experience to connect with a content meaning identified within a learning exercise of reading an article:

“I know what bullying is like you know I put up with that shit all my life and like doesn’t really matter you know, they shouldn’t do like, be doing bullying, they shouldn’t be doing racism” (O5)

Interconnected ways of learning see students strategise by deploy both *Connected* and *Grounded ways of learning* to support and justify the meanings they convey. Students ensure the outcome of learning is both grounded and connected to the relational ways within connections and how this alignment between content meaning and meaningful content can be affirmed. In one example a learner responded to the researcher question about the ways they accomplished this while reading and discussing meaning in an article they had read.

R: “What makes you want to agree with her?”

S9: “Just through my own experience really, finding out how hard it is to find a job really.”

Interconnected ways of learning describe the ways students develop strategies to assist the ways they make meaningful content meanings. Learners reflect on reasoning and justification to bring others into relation with the alignment they see between content meaning and meaningful content. In one example a learner empathised with the perpetrators of bullying practices despite being a victim themselves of bullying as he read through the reading material discussing bullying:

“When they do things like that [bully/racism towards others] like, that’s gonna make them feel no good too you know” (O5)

One Student similarly empathised with particular younger students involved in perpetrating negative behaviours in the community:

“They are young, and they do not really have the maturity to do that yet and they do not know when to stop or to start.” (N4)

The students typically consider multiple ways to identify and convey awareness of learning material as well as how such learning material can be deployed to support further engagement with their reasoning and justification. A student recognising the significance of the relationship between situated culturally conceptual elements regarding Indigenous meaning, spoke of the journeys both literal and conceptual that were deployed in a learning experience:

“Follow the story about the butterfly and the ant. Got told about that and here we followed it all the way down and came back.” (S9)

In another example a student attempting to make the distinction between collective and individualist social processes described through a learning experience the different ways of conceptualising and justifying certain assumptions about the ways they learn involved certain motivational characteristics to learn:

“I just wanted to do this because when I’d seen one of the XXXX from the other place. I know they really didn’t feel that bond, most of them are separate and stuff, they do their own stuff, yeah. When you come here, it’s like oh yeah, you feel like you’re a part of the group, you know” (R8)

5.5 Dissonant Ways of Learning

The term *Dissonant* is used as it conveys disharmony the students feel when they think about the connections or relatedness they are asked to make when they learn. The term can also describe learning tension or friction or learning challenge. In effect the significance of *Dissonance* is to describe that all Aboriginal and Torres Strait Islander students in the sample felt this way of learning. The tension describes the ways the students become aware and hold the disharmony between themselves and a presented learning task or learning material. This disharmony can be because of holding a limited resource of conceptual vocabulary or intuitively feeling a misalignment within a task or learning material has with personal core beliefs and values.

When the students are presented with meanings that are not aligned with personal epistemic, conceptual or affective meaning making processes, the students negotiate the disharmony through affective, conceptual distancing or proactive strategies such as

proactivity or tactfulness to negotiate through the disharmony in effective ways of making meaning of the task or learning material. This disharmony is expressed as an affective perception of disharmony; a conceptual perception of disharmony; or an epistemic perception of the way's others develop assumptions about being an Aboriginal and Torres Strait Islander person through learning tasks or learning material.

Characteristically, if a student only identified with this way of learning (and no students in the sample did), disharmony would consistently impact learning in negative ways. Some of the students held two or three ways of learning inclusive of a *Dissonant* way of learning; while some of the students identified with three or four ways of learning inclusive of a *Dissonant* way of learning. The main point to take away, is that dissonance was identified by all the students as either an affective, conceptual, or epistemic disharmony that they had in their thinking to negotiate learning tensions within the learning experience. They negotiated through these learning challenges affectively; conceptually; or tactfully.

Importantly, while all the students identified with dissonance in a particular learning experiences, they negotiated out of the learning dissonance in characteristically different ways by using either *Connected* ways of learning, or *Grounded* ways of learning or *Interconnected* ways of learning. Like non-Indigenous students, Aboriginal and Torres Strait islander Students are expected to attend school and achieve learning outcomes; to graduate in some way and achieve a measurable school result - despite any arising learning dissonance within the learning experience. Students negotiated dissonance in *Connected Dissonant* ways of learning, *Grounded Dissonant* and *Interconnected Dissonant* ways of learning. By describing characteristically different *Dissonant* ways of learning, we can begin to see more clearly the different ways Aboriginal and Torres Strait Islander Students negotiate dissonance as either an epistemic, affective or conceptual challenge.

5.5.1 Connected Dissonance

Connected Dissonance describes disharmony in epistemic thinking or concept meaning being identified. Epistemic thinking is a learning experience or task material that doesn't align with a student's core beliefs or values or a student cannot identify with a concept being presented. In one example a student identified a particular epistemic assumption about Aboriginal and Torres Strait Islander peoples that the student did not identify with, but the teacher did and was part of their teaching assumption:

“And there was a lecture about arresting black people and white people. So, we had to sit in the lecture room listen to it and it was like people get arrested the same. And I was like no they don’t it is aboriginal way to start at life in that way.” (N4)

In another instance a student wanted to challenge the epistemic thinking being presented to them in a learning experience by justifying their reasoning:

“I told her that ‘people had stereotypes of aboriginal smoking weed and stealing’ (N4)

Again, the student raised other instances of dissonance in epistemic thinking:

“And then she [lecturer] was like ‘everyone does that’. And I was like ‘yeah, but the cops think that we are the people that actually do that’” (N4)

In these instances, the student deployed additional concepts to build a layer of conceptual distance between themselves and the experience. In other words, if a learner identifies incoherency within the content meaning, they deploy additional concepts as a distancing measure rather than connect to the emotively unhelpful feelings attributed to their thinking and learning. *Connected* ways of learning adopt these strategies to buffer the dissonance felt when exposed to incoherency between opposing epistemic conceptualisations by seeking out alternative content meanings.

Connected ways of learning describes instances where students raise questions to challenge the conceptual assumptions they are expected to accept as part of reading material or a learning experience. In one of the reading articles, some students were asked to critique the merits of increasing home-schooling funding. Raising questions, challenges the explicit conceptual assumptions in the reading material by exploring alternative implicit meanings students identify:

“So, if there are more kids doing home schooling, how is that money going to support education and other academic paths? (K1)

Another student found the conceptual assumptions set out in the same reading material were not as informing as they explicitly read regarding the merits of home-schooling:

“They should have talked about bullying, they didn’t even talk about bullying.” (O6)

Connected ways of learning do relate to *Grounded* ways of learning, however this way of learning has a limited range of social contexts with which to deploy as an affirming process of connecting or grounding a concept linked to an experience. What this describes is *Connected* ways of learning may not have the depth of lived experience or social context

to convey the thinking. In this way *Connected* ways of learning is about modelling or adopting concepts within the available conceptual range to assist in making the conceptual links accordingly after reading the task material. This form of abstract or high conceptual thinking is valued by school learning as students are taught the skills of higher conceptual thinking; as abstract thought is a valued way of thinking about the world. The limitation to linking concepts that can be affirmed by *Grounded* ways of learning is felt as the compromises students make knowing they have limited prior living experience or social context to mediate the links they wish to make between connected concepts:

“My argument with that is if we did go into austerity our economics will crash and that would be unstable. I basically want to talk about how it affects communities, unemployment, and stimulus packages. (T10)

After reading the article the student made the same concept links between what they had read in the article and the way they constructed a model of the same arguments in their thinking about the reading material. In the reading material the argument was made that *austerity* would affect *communities, unemployment*, and they extended this by thinking also about *stimulus packages*. While this displays higher conceptual thinking, the limited existence of social context or experience to affirm their thinking is also identified:

“Like in developed countries, if you take on a policy that didn’t work in another country like, especially a developed county which is probably like changed everything and you’ll go back down to being like third world or something” (T10)

When learners face *Connected Dissonance*, there is a desire to critique experiences from a structured, abstract, understanding of the content meaning they are engaging with when the meaningful content is misaligned or incoherent. Distancing processes employ available conceptual meaning making capacity to understand content meaning as relatable to other content meanings familiar to learners. In other words, learners with no social context of how a concept meaning is relatable rely on further concept meanings to understand the alignment of relationships between relatable concepts. In this way the concept meanings are made meaningful for the sake of other concept meanings

5.5.2 Grounded Dissonant

Grounded ways of learning do relate to *Connected* ways of learning but there are limitations to the way students can make the links. Grounded dissonant ways of learning is an example of those limitation where students respond through deep reactive and/or affective

descriptions of engaging with dissonant learning experiences. In one example a student described a classroom encounter where the teacher intervened between themselves and another student:

“It is pissing me off because he is my cousin and saying that I cannot be around him” (O5)

The student went on to contextualise and justify their reasoning for being angry:

“It was so bad in class I couldn’t even get my own cousin to help me with the work. That is just how that teacher was. [They] said, that I am distracting him. And I was like how can, I distract him when I am asking him for his help.” (O5)

In the same example the student further contextualised and justified their reasoning for the relational qualities from a deeper social context of reasoning:

“I mean you don’t know me and my cousins background you don’t know how long we have been together and ever since we have been little children, we have been like this.” (O5)

Grounded dissonant ways of learning see students want to protect relational qualities of learning as they negotiate the disharmony, they feel in learning experiences:

“I am not going to let anyone interfere with our relationship. That just got me angry you know.” (O5)

Students notice ways of negotiating dissonance but respond by protecting and maintaining relationships as more integral and grounded than the instability of dissonance or for that matter trying to deploy additional concepts to distance themselves from the disharmony they are feeling. In another example when a student was asked about the relationships between themselves and other absent students from the academic camp cohort, they described the impact and the ways the felt this impact:

“I think that’s what everyone needs to do, just come back and, you know, feel that relationship with everyone. Yeah, that’s what I’m saying, you feel lost then you need to come back” (R8)

In this example the student wanted to protect the relational being of the academic camp and the ways this relational knowing is expressed. They described how this loss of connection between students is felt by those who attended.

Grounded dissonant ways of learning also describe the affective response when students feel disconnected from the learning experience. In one example a student described the

ways they felt about the relationship between their core beliefs and a learning experience in both positively grounded ways but also and negatively grounded dissonant ways:

Researcher (R): “Was it what they were doing or how they were doing it to relate it to you?”

P6: “It was what they were doing, both, how they were doing and what they were doing. XXXX would share things and show us stuff then we would go do things as a group together.”

(R): “Yeah, when you think of XXXX and yourself, what do you think is good about that?”

P6: “Yeah, the bonding that we have and just connecting with each other.”

(R): “If XXXX started saying, ah listen, I’m going to be charging \$600 for my time, how would you feel then?”

P6: “I would feel, I don’t know, fairly upset.”

P6: “I wouldn’t feel a part of it anymore because anyone could pay 600 bucks you know.”

In these instances, *Grounded Dissonant* ways of learning describe how students affectively respond to the disharmony they feel in their understanding of relational learning as a positively collective learning experience rather than an individual pursuit. Relational learning is about maintaining relationships.

5.5.3 Interconnected Dissonant

Interconnected dissonant ways of learning describe how when students are faced with particularly challenging forms of disharmony, they respond proactively or diplomatically towards the dissonant learning experience. In one example a student raised the concern that a particular article didn’t talk about specific acts of racism or bullying or talk specifically about racism or bullying in general as important contextual meanings connected to the merits of home-schooling education. These acts of racism or bullying related to black minorities inclusive of Aboriginal and Torres Strait Islander students. To negotiate through this concern about the article on home-schooling they suggested the following to describe how public education would have more effective ways to deal with racism and bullying than home schooling:

“I’m gonna tell you something else right now, this right like racism and bullying is just a like a word like, like just a word, a big thing in schools right now they should, when like a student comes to school and like they like call like an African or an Indigenous kid, like

doing his own thing, you know, or like call im' a 'coon' or a 'boong' you know, and like teachers are gonna be asking where did he get that word from? You know, what have your parents been saying to you? Like where did you get those words from you know? That's home schooling" (O5)

Interconnected dissonant ways of learning also describe the ways students employ personal experiences to proactively respond to challenges within learning experience. In one example, when the researcher interrogated why a student maintained a particular position regarding an article describing the merits of social welfare for youth they were reading, the student responded in this way:

(R): *"When you say, 'oh I like the fact that they are being more helpful to people who have no money, where did that come from?"*

(P6): *"I don't know, because it's part of my personal life as well, so yeah."*

In this example the learner employed a personal experience to respond to the challenge of being questioned about why they held certain assumptions about the reading material.

Interconnected dissonant ways of learning also describe instances where students working around unknown concepts provide diplomatic responses to develop links between known concepts and unknown concepts. In a different example of working around unknown concepts in proactive ways a student couldn't initially identify with the 'Indigenous' concept of *songline*. Their response suggested they had never heard about the concept before, but then proceeded to speak about different experiences that potentially related to the notion of a songline. It should be noted that Songline is not a universally recognised english word of meaning for Aboriginal and Torres Strait Islander Peoples. Through other relatable concepts they worked around the original question and word in different ways.

R: *"You know how I was talking about the songline?"*

T10: *"The what? The, maybe 'adulthood' but I feel like we were transitioning from our teenagers to adults. And for me to go through that is a bit tough but at the same time I learned that was really good to have like no mental challenges. And like listening to the role models we all stood around going on about what we go through every day and like what we hope to go through in our future life."*

The student despite not fully being aware of the relationships in meaning still tried to connect through different conceptual or experiential learning processes to generate some

form of relatability between the concept and the meanings they were aware of through personal experiences.

5.6 Conclusion

This section has described the different ways learners have expressed their understanding of ways of learning. Aboriginal and Torres Strait Islander Students can be seen to negotiate learning in different ways of justification and reasoning. The four ways of learning developed are: *Connected* ways of learning; *Grounded* ways of learning; *Interconnected* ways of learning; and, *Dissonant* ways of learning.

Connected ways of learning focus on constructive attention towards discriminating between available concepts and selectively deploy these concepts accordingly within the learning task. In this way learners structure meaning as a conceptual framework of understanding the learning material in a learning task. Learners talk about the relational aspects between ideas presented and convey their constructions through the ways they identify relationships between meanings presented and known.

Alternatively, *Grounded* ways of learning typically describe student learning where students deploy strategically affective selection strategies of concepts when relating to the learning task or learning material presented. In other words, students feel and experience a learning task or material through indiscriminate selection of concepts to fit meanings within learning. Students typically are guided by the relationship between the affective meaning and the conceptual idea presented. This way of selecting concepts is dependent on the way a learning task or learning material aligns with core beliefs and values students have towards a particular learning experience.

Interconnected ways of learning described learning that incorporates qualities of learning gained from both Connected and Grounded ways of learning. In this way of learning, typically mediations occur for learning where students think more proactively or diplomatically about how to negotiate learning towards the connections they are asked to make by tasks or learning material. By deploying experiential affirmations to make meaning of conceptual elements or for that matter combining conceptual elements together to form conceptual understanding for their learning outcomes. *Interconnected* ways of learning describe the way students think through the best suited response to the learning task or learning material for the outcome they are expected to achieve.

Dissonant ways of learning describe the disharmony students identify within

learning experiences. This is conveyed as the way's students hold learning tensions with material or tasks presented in learning experiences. Disharmony can be reflective of students holding a limited resource of conceptual vocabulary or skill base; or some misalignment a task or learning material has with personal core beliefs and values. This disharmony is expressed either through an affective perception of disharmony or a conceptual perception of disharmony in engaging with the learning task or material. Alternatively, some students respond to disharmony through diplomatic or tactful responses to the learning task or learning material. The main point to take away, is that dissonance was identified by all students as either an affective or conceptual or epistemic disharmony that they had to negotiate as a learning tension by varying their response as either reactively affective, conceptually distancing or diplomatically engaging.

Summatively, the section has attempted to describe and interpret the ways of learning presented from the pool of meaning of student transcript material. Some students employed a limited number of ways of learning; while comparably, some students employed a larger range of ways of learning. In analysing the transcripts, some students employed a particular way of learning to describe their understanding and then in following transcript material identified an alternative way of learning. This suggests students employed more than one way of learning. This argues, students are not categorised, but the ways of learning expressed across the student sample makes up the nature of the phenomenographic analysis structure; which when derived from a pool of meaning, develops 2-6 ways of meaning as ways of learning. In this case four ways of learning were identified from the pool of meaning.

5.7 Interrater Reliability Test

Following calculation of percent agreement and Cohens Kappa the following assumptions regarding acceptability of numeric values was considered. $\kappa < 0.90$ are nearly always acceptable, $\kappa < 0.8$. is acceptable in most situations, and $\kappa < 0.70$ may be appropriate in some exploratory studies for some indices. Kappa is more conservative in reported value

Table 5: Students Interrater Reliability Results

Percent Agreement	Cohen's Kappa
91	0.813

Chapter 6

Ways of Teaching: Results

Research Question 3

6.1 Introduction

The section responds to the research question: *What are the perceived links teachers hold towards Indigenous Knowledge and how are these links reflected in their teaching situations?* This section will describe the various ways of teaching identified from the research data. The phenomenographic analysis attempts to describe 2 – 6 ways of teaching as evident from the research data. Non-indigenous teachers make up the sample of interview material analysed and represent the larger cohort of secondary school teaching educators tasked with teaching Indigenous Knowledge to students from Indigenous and non-Indigenous backgrounds in Australian schools. Some teachers explicitly identified as *White* (European descent).

The section will list the ways of teaching identified that are reflective of the different ways a sample of teachers has interpreted the different ways of teaching Indigenous Knowledge. Teacher example interview transcripts items are represented within the text and annotated as: A1, B2, C3, D4, E5, F6, G7, H8, I9, J10. These textual items represent the different moments within the interviews with the researcher where teachers conceptualised a way of teaching that could be itemised as part of a pool of meaning. This pool of meaning resulted in a particular collection of ways of teaching to be discussed.

6.2 Comparative Ways of Teaching

Comparative ways of teaching describe a teaching practice where teachers attempt to employ contrasting pedagogical techniques to relate to an unknown knowledge base such as Indigenous Knowledge for themselves and students to achieve differential target outcomes. Differential outcomes are described as a simplified representation, and efficient way to easily convey differential meanings that bodies of knowledge may contain and can be easily expressed and managed as part of a lesson outcome. In the teacher interview examples investigated, teachers attempted to construct meanings that highlighted differences between the notion of Western Knowledge and Indigenous Knowledge.

At other points during the interview's teachers made distinctions between the different way's domain or subject knowledge like english, maths, history, religion etc. could engage with Indigenous Knowledge. Teachers felt by conveying the different ways that a particular domain or subject effectively contextualised Indigenous Knowledge but also when it limited their capacity to teach indigenous knowledge was a good way to convey the ways they saw the utility of Indigenous Knowledge in subjects they taught. The domain distinctions assisted teachers to negotiate between familiar knowledge bases which they confidently managed and the Indigenous Knowledges which formed part of the wider curricula epistemic and experiential goals.

These characteristics highlight that for all the teachers in the sample, a distinction between Western knowledge and Indigenous Knowledge is made as a way to describe what they mean when they talk about IK. This distinction allowed teachers to then generate meaningful interpretations in a conversation with the researcher about the ways they engage with IK as part of curricula; potential student outcomes; and the impact on personal experiences in the educative setting and/or wider community context.

In one example responding to the question how a practitioner might engage with IK a teacher identified differential outcomes as important to define IK and Western notions of meaning:

“When I’m teaching I would hold indigenous knowledge systems up in a contrast how thinking might be in the natural sciences how thinking might be in mathematics so going for and what I see as a more obvious contrast in our culture in this time our context, so we seem to value being rational and we seem to value different types of logic.” (G7)

One teacher contextualised their understanding through a question posed to students during a lesson:

“What are the differences here in terms of the perception of life and the structure of life and our sort of Western model” (D4)

Another practitioner highlighted where IK is used as a proxy for comparatives to western conceptualisations of IK in student essays as a function of learned ways of knowing:

“it [IK] often serves as a substitute for either superstition or mythology [by students] and so it will be used as an example of, “Well, you know the indigenous people of country ‘x,’ they will believe this but scientifically we know this,” (A1)

In contrast, Indigenous Knowledge is described by practitioners who define meaning in various ways as a comparative to what we mean by Western Knowledge:

“versus this much more-freer, non-hierarchical community feel, you know” (D4)

“[T]he connections throughout the country.” (D4)

In another example a practitioner related the meanings they had been exposed to during their lives growing up and how they conceptualised what IK meant to them:

“just the incredible history that I think, I know I sense it, the history and the bush knowledge and everything” (B2)

Another practitioner described previous experiences of where they began their professional exposure to teaching IK and how IK constituted with various elements inclusive of:

“the collective wisdom, the importance of the elders, the spiritual connection to the land” (F6)

In conceptualising the ways, a domain specific of religious studies engages with IK the difference between IK and religious studies was formulated in this way by the practitioner:

“For me as a human being, means connecting people, connecting land, connecting the story of the past from a Christian perspective that would be the bible. From the aboriginal traditional perspective, the wisdom that is in the stories that has been passed down, and the ancestral heritage there as well and respect for that with that knowledge has come from, where that interpretation comes from.” (F6)

A domain specific example of where Indigenous Knowledge could be seen as an effective area that could teach Indigenous knowledge was in Language studies that a teacher mentioned:

“I tend to see and the role of language, different features of language” (G7)

Another domain specific area was English for another teacher who described the effectiveness of being able to convey forms of Indigenous Knowledge that allowed students to gain a more effective conceptualisation of Aboriginal and Torres Strait islander peoples that was relatable to particular temporal contexts:

“English it’s so good in terms of highlighting issues and stuff like that as well, like contemporary issues.” (B2)

Comparatively, the same teacher also highlighted the challenges in another domain like Mathematics subjects where they highlighted the limitations of being able to effectively transfer Indigenous Knowledge meaning as an effective curricula example:

Maths, I reached a blank just cos the curriculum itself is so, it’s not like you can talk about the different ways of counting and things like that (B2)

Another practitioner also highlighted the challenges of contextualising Indigenous Knowledge in mathematics commenting on the superficiality of a comparative way of teaching Indigenous Knowledge compared to more effective ways of embedding Indigenous knowledge in maths:

Here is a picture of a message stick, showing indigenous ways of measurement.

Which we then measured. There is a different between that which kind of feels like a box ticking? (I9)

The same practitioner also found for biology subjects the opportunity to contextualise Indigenous Knowledge as a species-based awareness of ecological relationships:

“how the diversity of totems in the community is, in a sense acts like a safety net for the species themselves because it means that, in the community everyone is looking out for a particular life form” (I9)

Another practitioner attempted to define the different ways we term Indigenous Knowledge and for them it was about defining it a certain way as important to their understanding of growing up in ‘the bush’ meaning rural areas of the country as related to Indigenous Knowledge of the bush:

“Incorporating bush knowledge into school” (B2)

Practitioners find this way of teaching a simple pedagogical technique to get curricula outcomes across to students and highlight their understanding of what constitutes IK. This way of teaching is also restrictive on teaching practice as it limits the ways of teaching a practitioner ought to be able to deploy IK within the teaching environment. Teachers necessarily are recognised as having a wide repertoire of pedagogical techniques available as a useful strategy for conveying meaning and limiting themselves to compare and contrast pedagogies can tend to be seen as a restrictive way of teaching. In suggesting this assumption, compare and contrast pedagogies also work towards developing awareness of IK by both students and teachers as an introductory learning process, however; practitioners are aware of the depth IK contributes to meaningful content and so a strong desire exist within practitioners to chart these depths of knowing.

6.3 Adoptive Ways of Teaching

Adoptive Ways of Teaching describe teaching practices where teachers attempt to model, replicate or reproduce concepts through their teaching practices that achieve conceptual target outcomes. Conceptual target outcomes describe the ways secondary education focuses on teaching students to recognise and develop the skills to engage and negotiate abstract forms of meaning. Abstract forms of meaning are an important aspect of higher thinking skill development. Adoptive ways of teaching provide teachers with passages of meaning to highlight their assumptions about ways of knowing IK through personal exposure in pre-service training; further professional development; Practical Ways of

Teaching; and more generally through lived experiences. Teachers deploy such pedagogical techniques in formal classroom settings as a way to convey or project meaning and assumption for student outcomes within IK. In this way, forms of IK pedagogy are employed to deliver IK activities for students. One practitioner encapsulated the teaching environment of Adoptive ways of teaching by suggesting both that challenges of teaching environments but also what the educational environment is generally about:

“because you’re so conceptual in the way you are talking about things [in school]” (B2)

A modelling practice involves taking an example of IK pedagogy from a different part of the world to employ in classroom: In a conversation with one practitioner they spoke of a student conference where participants came from various localities in the region. To provide a way of getting students to get to know each other and converse in a socially demanding situation of not knowing each other, teachers employed an IK pedagogical process from Native American contexts:

“we did a learning circle” (A1).

A replication practice describes the ways teachers employ a pedagogy they have seen or heard being used prior. In these instances, a teacher has seen the practice being completed in a different contextual location and chosen to adopt the practice in their classroom:

“we did a yarning circle” (B2).

In another instance a teacher wished to convey the conceptual examples drawn from a generic national context of a particular [Indigenous] South American context to highlight the ways they employ forms of [Indigenous] knowledge:

“Using those examples in the classroom, I’m actually drawing from South America, I know those people because I spent time over there, I know about that.” (H8)

In these instances, teachers see the benefits of how effective practice can be for conveying meaning and meaningful intent by replicating a practice to potentially see the same benefits can manifest in alternative locations. Problematically while effective and easily facilitated, issues surrounding acknowledgement of origin can emerge if not properly facilitated in different locations.

“she said it might be a good idea to ask permission for you to use the yarning circle and I was like, oh, it never even occurred to me to do that” (B2)

Another teacher conveyed the limitations of their way of teaching as an aspect of the conceptual nature of teaching environments:

“how am I supposed to; you see it's so difficult to know; supposed to understand; people can be can have a distinctly different perspective of what reality is like. Yeah when I teach, I feel I don't know enough... and I only have anecdotal levels of acknowledgement” (G7)

Another teacher felt the association of living in certain areas conceptually assigned as Indigenous places in their city was also an important aspect of knowing different ways to convey conceptual meanings of Indigenous knowledge:

“I live in Red Fern, I spend a lot of time at the national centre of indigenous education as well. But yet I don't really feel like I have the background knowledge to do justice” (H8)

Alternatively, reproduction practices can be seen where teachers reproduce a teaching practice with minor differences. A teacher can deploy IK pedagogy in a way that can be seen to acknowledge the origins of a pedagogy and the way it ought to be deployed in the classroom:

“I did a deep focus on XXXX [...] process of going through the idea of XXXX and that's when I connected with Aunt and she came in and spoke” (C3)

Adoptive Ways of Teaching operate in the conceptual dimension of IK and aim to relate LK through conceptual elements of meaning that provides forms of explicit, structured learning activities and outcomes. Teachers also attempt to provide curricula examples through visiting community Elders and Indigenous researches like myself to engage in conversational dialogue with students in classrooms. This provides practitioners a way of developing modes of authenticity around IK being spoken about by First Peoples living within the community.

6.4 Practical Ways of Teaching

Practical ways of teaching describe pedagogy aimed to deliver experiential targeted outcomes. Compared to *Adoptive* ways of teaching, secondary teachers attempt to employ immersive experiences within IK to deliver curricula content as an active construction that

is both instructive as it is immersive. Instructive in a sense immersing student in an experience provided greater depth of meaning that would not normally be fully appreciated through purely conceptual elements of meaning. Teachers describe these experiential moments as ‘*first-hand*’ (C3; D4) and ensure both teachers and students engage in activities within and beyond the classroom to remind and gain memorialised experiences about IK.

These teaching environments are somewhat structured to deliver curricula and pedagogy in ways that embody living experiences for both teachers and students. These programmatic intentions can be considered ‘outreach’ (E5) in nature with more daily activity-based lessons within the community. Outreach describes how teachers and students can be moving across Country as excursioners connecting with Community by visiting locations of significant importance to local First Peoples and the Ways of Knowing and Being they hold to Country. Typically, teachers and students are guided by Elders to engage with Community and the immersivity of this engagement guides the experiential process as relatable to in-class knowing. This relatability can be described as ‘*affirmation*’ (C3) of in-class knowing of IK. In one example a practitioner described an introductory activity where students with guidance from Elders came into relation with IK:

“I did it with Uncle XXXX present, so we bring in examples the kids would either heard of or actually seen traditional ceremonies or whatever. So, for example, I paired it up to experience of our program so that the kids could go alright, we need to study kinship and rituals. Well, here is an example of where you would have seen kinship in operation if you did our program...where the experience engages us with kinship from an Indigenous place. We can connect to the syllabus where they do talk about kinship, so that it becomes a lived story rather than a text book story” (E5)

This exposure to immersive IK experiences, reveals the greater depths of IK whereby activities become fully absorbing, experiential and relatable. As one practitioner shared, her understanding of relatability with community:

“And so then, prior to working at XXXX, I was at XXXX. And I had a strong connection with XXXX, up in XXXX. And I was part of the program there at XXXX. And so, I was part of a program where we went up and ran a sports camp, which then moved into art and music. But the main crux of that was developing a relationship with the community through connections through the school” (C3)

In one example a practitioner felt the programmatic activities that students engage with develop ways of knowing and being that could not be fully realised within classroom settings:

“[K]ids are involved in activities that are outside the regular classroom so the XXXX [place] and XXXX [place] program.” (A1)

Another secondary teacher noted how through the practical engagement and experience of particular outreach programs they were able to contextualise and relate certain ‘Indigenous experiences’ as comparable to other locations:

“But I think when I had the opportunity to go to the XXXX, I saw first-hand the same difference in circumstance in living that I did in parts of XXXX or I did in XXXX, you know.” (C3)

Another practitioner suggested students gain a deeper sense of meaning from Practical ways of teaching instances for the sake of their wider curricula formal engagement in the school setting:

“these girls are already experiencing it to a much more in-depth level first hand” (D4)

Practical ways of teaching also reveal the limitations teachers feel as they become aware of their own limited knowing of IK through experiences. In one example when a conversation around experience with teaching IK translated from a personal experience, a practitioner working with community highlighted the challenge they felt when they are tasked with the responsibility of delivering a lesson away from the context of an IK experience they have come to know.

“So, my reflections/quotes - it was all second-hand stuff that I watched and listened to as an observer. But again, it was only based on one trip really. And I was telling the students that that’s a superficial – super, super superficial – a fraction” (D4)

Here a teacher attempts to convey the meaningfulness of a meaning they have come to know but finds it challenging to reproduce meaningfulness and alternatively replicates meaning in the classroom. Alternatively, A teacher who advances towards a reproduction, would necessarily connect with Elders living in the community where they teach. This begins to form ways of relational connection that support Elders in community to continue

with holding Community as much as community where practitioners work can be grounded by their instruction concurrently.

Practical ways of teaching are about the way's teachers can support Elders working with Community as much as community learns about IK in an immersive way. This form of connection for practitioners is about classroom knowing transforming and transferring to more meaningful content forms. These forms express the continuity and survivance of Storying Community. Practical ways of teaching are about grounding and connecting to the ways Elders align connections between content meaning and meaningful content of IK. It is also about the way's teacher become involved with the process but also become aware of their limitations.

6.5 Reflexive Ways of Teaching

Reflexive ways of teaching describe practices where teachers and students aim to achieve more transformational targeted outcomes with IK. *Reflexivity* is considered qualitatively different from *reflective* notions. Being reflective is thinking about personal actions as a form of reliving and noticing details missed previously through educational experiences. Being *Reflexive* is about understanding your contributions to the structures you exist in and the ways your existence in those structures contributes to the way power relationships are formed between people as part of the educative structure and context.

The qualitative characteristics of *Reflexive* ways of teaching imbibe the conceptual, the experiential and the comparative distinctions ways of knowing and teaching provide. Teachers suggest a deeper sense of situated understanding of Indigenous Knowledge and the ways they try to implicitly identify power dynamics within their teaching dynamics. The practical outcome from this way of teaching is a cathartically evolving teaching and learning process of shared learning and awareness. In one example, practitioners deployed themselves as a body of knowledge to direct a sense of being around IK through their own experiences of attending teaching retreats with Community Elders. Secondary school teachers participated in the learning journey with students and their own experiences also came into classroom relations with IK:

“[S]ome of the things that I had written down in my journal and showing the kids, running them through that” (D4).

Teachers and students gain a sense of meaningful engagement with people and places that holds the possibility to carry such learning into the wider community beyond the formal classroom setting. In one example a practitioner related a story from their preservice training where they came to understand the nature of Community consultation and the inherent power of education policy structures employed to develop the ways IK should be integrated into the national curriculum. Indigenous Community consultation is a valued expression of respect for IK development and usurping such processes is known to be disrespectful of the expression of IK:

“didn’t even bother to consult one average person, let alone an Elder or anything like that.” (B2)

In another example Reflexive ways of teaching guided one practitioner to describe the significance of community connections for the sake of more meaningful interpretations of IK and the ways this meaningfulness is deployed within community settings:

“[A]ctually working with Elders to be able to see how those connections and communities work.” (F6)

In another example a teacher spoke of the challenges that present themselves when we don’t acknowledge the imperial structures of experiences. They felt by knowing the historical legacy of ‘cultural’ engagements it was important to be mindful of such assumptions when teaching IK:

“[W]hen one culture takes over or thinking it’s the same, I think there’s such an ignorance behind that. There’s no learning that can take place” (B2)

Reflexive Ways of Teaching also describe the ways practitioners specifically are given an opportunity to engage in a reflexive process of teaching for personal and professional development. Another teacher described how the ways of teaching have an inherent gendered assumption within the locality of their teaching environment engaging with IK. The all-girls school engaged with IK specific to assumptions on the contextualisations of male and women’s learning. The practitioner expressed an awareness of acknowledging their place in the educational setting by negotiating their place based on the values and core beliefs of IK, and respecting these assumptions provided by the Elders within the community:

“It’s a woman’s business thing so, I don’t do it” (E5)

In another example, a practitioner was brought into an awareness of the ways IK was employed in a prior school location as compared to their current school location. For them being mindful of the implicit structures between schools and the way each educational setting acknowledged their continuing contribution to what is actually acknowledged in school and structural awareness of Indigenous relationships to Land:

“[Before] I didn’t have any particular embedded knowledge of the land we were working on other than its indigenous land” (F6)

When this practitioner reflected on the ways IK was employed in a previous school location, they felt they only *replicated* ways of teaching as opposed to *reproducing* ways of teaching in their current school location. In the following example, they identify with a sense of vulnerability of not knowing how to work with IK and rather than an expression of isolation was an opportunity to facilitate relationships with Elders in the Community as opposed to avoidance of Elders in the Community:

“[Now] If I...am not sure about the way forward, I go and work with the Elders.” (F6)

Reflexive Ways of Teaching guides students and teachers towards conceptual vulnerability. Conceptual vulnerability describes the ways practitioners become aware of the limitations of the concepts that scaffold and frame meaning of IK and how these concepts inform their understanding of Ways of Teaching and the impact on students:

“I mean, obviously I’m not indigenous – but you know, it’s confronting. You think, “Oh, I hope I’m representing this in the right way.” that’s why I chose to use my personal experience because I thought that’s more authentic than something in a textbook perhaps” (D4).

In another example a practitioner related a story of the ways imperialism can defend certain knowledge boundaries. These knowledge boundaries describe certain protective measures and preservation intentions for the sake of knowing cultural distinctions.

“So, I think it’s the whole idea about being open to rather than fearful of different groups and try to learn from that.” (C3)

Reflexive Ways of teaching also describes the developmental conditions of possibility through ways of teaching. In another example a secondary school teacher suggested that working with IK is about respecting the year level or age level of knowing students hold.

They felt ways of teaching can be about changing perspectives, over time and in different contexts:

“So, I am building the connections with that [IK] by working with small groups and in year 77 more kids, I’ll talk with 7 more kids [with Uncle]. Then in year 8 we will do the work with Auntie, then for year 10 and 11 they can do the deeper stuff with Uncle and Aunt” (E5)

Reflexive Ways of Teaching creates the conditions of possibility for practitioners to become aware of their relation to IK. This assumption describes the ways practitioners come into relationship with their own vulnerability and the ways they attempt to work with vulnerablising experiences. This reveals the assailable nature of ways of knowing held by teachers. The vulnerability experienced within the collective teaching and learning potentially translates the intentions of IK into ways of seeing. IK can reveal transformational intentions that help practitioners to see the deeper growth and sense of being surrounding what and how Indigenous Knowledge is constituted.

6.6 Integrational Ways of Teaching

Integrational ways of teaching aim to guide students towards translatable and or transferable targeted outcomes such as notions of service and/or social justice. Translatable or transferable outcomes describe the ways students begin to engage with IK on their own and the different ways they come to understand Community and Elders thus forming their own relationships that foster extended and continuing engagement. This way of teaching is about knowing how to provide, or scaffold different ways student can engage in different contexts and different settings beyond a particular classroom lesson with IK.

In this way a practitioner acts as a witness rather than as an agent of structured pedagogical intention. The emphasis is on guiding students towards informal opportunities to negotiate IK on their own beyond the formalised teaching practices evident in *Comparative, Adoptive, Practical, and Reflexive* ways of teaching. In one example a practitioner described how *Integrational* ways of teaching is about placing a sense of self-directed, agential acts of meaningful learning with IK. Through engagement with IK practices in an immersive and guided process with Elders in the classroom, students were able to engage in activities for creative expression of deeper meanings:

“Give the girls a sense that they can be still” (C3)

This way of teaching highlights how teachers try to develop relational qualities with not only the spatial environment of formal and informal classrooms settings but also the wider community where a school is built and situated:

“And I think when you’re doing that teaching in-line with a very strong NAIDOC (original wording National Aborigines and Islanders Day Observance Committee) celebration here at the college, so even if the girls aren’t part of the XXXX program or the XXXX program, they still see what NAIDOC week is and they still have that connection and they stay also with the XXXX and visitors from XXXX that come, and we have the XXXX and then over in the school grounds the XXXX. (C3)

Integrational Ways of Teaching also provide for student voice to actively gain insight and relationship to the assumptions shared and experienced with Indigenous Knowledge. In one example a teacher expressed they see where students have been able to engage in other curricula settings which they are not specifically teaching but are assessing work and how their assessments reveal student engagements:

“I can’t teach these kids about Indigenous knowledge systems because they’ve actually been in the community and they actually understand it much more than I do.” (H8)

A practitioner also described the ways in which they saw alignment between Practical Ways of Teaching and Conceptual Ways of Teaching by considering how they attempted to integrate both ways of teaching into a classroom setting:

“I think they [other places] affirm what you do in the classroom” (C3)

The practitioner was also able to describe the ways they incorporated meaningful experiences both conceptual and experiential that were also both reflexive but importantly agential for student learning. The practitioner placed agential learning with the student to carry forward as a self-directed learning process of seeking answers through Reflexive Ways of Teaching:

They were [...] able to reflect on and draw on as to how the environment or nature spoke to them, or “flirts” with them. (C3)

Again, the practitioner described Integrational ways of teaching as a non-polarising learning experience:

“All I’m doing is I’m giving them opportunities and hopefully, you know, it may resonate now, it may resonate in five years’ time, it may resonate in 10 years’ time. But all I’m doing is sowing those seeds and hopefully it will flower one day” (C3)

In another example a practitioner engaged in a dialogue for a specific lesson plan with the researcher where both researcher and practitioner spoke about the relationship Story has with Land. The practitioner wanted to incorporate more innovative ways of teaching mathematics by deploying IK. Through conversations with the researcher they were able to develop an awareness of deeper layered relational connections between Story and Land and then subsequently relate IK for mathematics, trigonometry and issues surrounding sustainability and environmental relationships:

“I suppose that would almost be the most effective way in terms of linking mathematics and geometry, not geometry, geography it can be linked because geography is quite practical. So, if we incorporate story into that then we are educating into the idea of Aboriginal practices. Sustainable farming all that kind of thing and still teaching them maths; I like that” (B2)

Integrational Ways of Teaching develop practitioner’s relationship with themselves as learners as much as the students they teach. IK is a knowledge base guided by the Eldership of Country. By acknowledging this Eldership of Country IK practitioners are exposed to the ways Elders hold Community and community as Place Knowledge custodians of StoryLine. Students are expected to become life learners and carry the continuity of Story beyond the school setting. The instances where practitioners safely withdraw, and students seek out ways of meaning for themselves, exposes students to the ways Elders mediate and guide learning for all in Community through Indigenous Knowledge. This withdrawal also gives students the opportunity to translate and transfer awareness to other areas of community or ways they work with Community beyond the Ways of Teaching that guide them to the entry point with IK.

6.7 Conclusion

The phenomenography of ways of teaching identified five ways teachers aim to engage with Indigenous Knowledge. This phenomenographic analysis has responded to the research question: *What are the perceived links teachers hold towards Indigenous Knowledge and how are these links reflected in teaching situations?* The analysis has provided a description of five ways of teaching. How practitioners navigate these Ways of Teaching, is determined by practitioner perception of their relational qualities towards Indigenous Knowledge. In some instances, practitioners saw the benefit of conceptual classroom knowing or alternatively experiential immersive knowing. In other contexts,

secondary school teachers saw the benefits of simply employing Comparative ways of teaching or developing deeper engagements through Reflexive or Integrational ways of teaching.

Conversational interviews with ten secondary school teachers were transcribed and analysed which resulted in a pool of meaning. This pool of meaning has guided the description and interpretation of ways of teaching as opposed to categorising teachers. This is evident in the way teachers may highlight one way of teaching, then in subsequent transcription text analysis highlight another distinct and relatable way of teaching. Such ways of teaching form the basis of up to 2-6 potential ways of teaching. These distinct ways of teaching inform the ways secondary school teachers deliver IK curricula material within the classroom but also affirm IK knowing beyond the classroom through deeper meaningful relationships with Elders Indigenous Communities.

Comparative ways of teaching highlight the ways practitioners strive for differential target outcomes such as conceptual differences between IK and alternative forms of epistemology be they domain or subject specific or broader categorisations of knowledge assumption. *Comparative* ways of teaching also express the ways teachers differentiate between classroom knowing as conceptual and experiential knowing as immersive within the social context of understanding what we mean by the term Indigenous Community. In this sense Indigenous Community can include the educational setting of the school grounds where a school is built, or it may also mean an Indigenous Community beyond the school grounds. Comparative ways of teaching also describe an efficient way of introducing basic entry points for students and teachers to engage with IK but is limited in deepening student and teacher awareness of IK.

Adoptive ways of teaching operate in the conceptual dimension of IK and aim to relate IK through conceptual elements of meaning that provide forms of explicit, structured conceptual target outcomes. This is achieved via modelling, replicating or reproducing content meanings of IK as a particular teaching process. A modelling process involves taking an example of IK pedagogy from a different part of the world to employ in a classroom setting. Replication describes the ways teachers employ a pedagogy they have seen or heard being used prior. In these instances, a teacher has seen the practice being completed in a different contextual location and chosen to adopt the practice in their classroom. In instances of modelling and replicating processual problems arise as part of a reflexive understanding about Indigenous protocols of situated knowledge.

Indigenous protocols talk about respecting situated knowledge from Place. In effect, challenging the universalising of Indigenous Knowledge as a homogenised body of knowledge. In these instances, reproduction teaching processes can be seen where teachers reproduce a pedagogy with minor differences. A teacher can deploy pedagogy in a way that can be seen to acknowledge the origins of a situated knowledge about pedagogy and the way it ought to be deployed in the classroom. In these instances, teachers reproduce curricula examples through allowing visiting community Elders and Indigenous researchers like myself to enter a classroom and engage in conversational dialogue with students. This provides practitioners a way of developing modes of authenticity around IK being spoken about by Aboriginal and Torres Strait Islander Peoples living within Indigenous Community.

Practical ways of teaching are about the ways secondary school teachers can support Elders working with and in Indigenous Communities as part of teaching Indigenous Knowledge as an immersive instructive experience. This form of connection for practitioners is about classroom knowing relating to more meaningful content forms beyond the classroom conceptual understanding of IK. These forms express the continuity and survivance of Storying Community. Practical ways of teaching are about grounding the relationships practitioners and students have with the ways Elders align connections between content meaning and meaningful content of IK. It is also about the way's teachers become involved with the different teaching processes by introducing awareness of pedagogical limitations. These limitations describe the challenge practitioners feel when they are tasked with the responsibility of delivering a lesson away from the context of an IK experience they have come to know.

Reflexive ways of teaching create the conditions of possibility for teachers to become aware of their relationship to IK. Teachers become active in critically questioning their involvement as educators and professionals operating in the structural dynamics of education. Such relationships reveal how teachers as agents of specific ways of knowing and relating inform the ways structures of discourse as both a professional and a way of curricula knowing affect their relationships to others in the community. In this sense the marginalisation of Indigenous peoples and as such the Indigenous Knowledges they hold. *Reflexive* ways of teaching also describe how teachers become aware of their own vulnerability and the ways they attempt to work with vulnerablising experiences not as a limitation but as potential growth areas of their teaching. This reveals the assailable nature of ways of knowing held by teachers. Reflexive ways of teaching IK potentially reveal

transformational teaching intentions that help practitioners to see the deeper growth and sense of being surrounding what and how Indigenous Knowledge is constituted within Elders and Indigenous peoples as a whole.

Integrational ways of teaching develop the conditions of potentiality within a practitioner's relationship with themselves as learners as much as the students they teach. IK is a knowledge base guided by the Eldership of Country. By acknowledging this Eldership of Country IK practitioners are exposed to the ways Elders hold Community as Place Knowledge custodians. Students are expected to become life learners and carry their reflections of IK as a post-secondary impetuous. The instances where teachers can safely withdraw, and students seek out ways of meaning for themselves, exposes students to the ways Elders mediate and guide learning for all in Community through Indigenous Knowledge. This withdrawal also gives students the opportunity to translate and transfer awareness to other areas of active social justice within the wider community or ways they work with Community beyond the ways of teaching that guide them to this entry point with IK as individual learners.

6.8 Interrater Reliability Test

Following calculation of percent agreement and Cohens Kappa the following assumptions regarding acceptability of numeric values was considered. $\kappa < 0.90$ are nearly always acceptable, $\kappa < 0.8$ is acceptable in most situations, and $\kappa < 0.70$ may be appropriate in some exploratory studies for some indices. Kappa is generally more conservative in reported value than percent agreement. The percent agreement statistic is easily calculated and directly interpretable. Its key limitation is that it does not take account the possibility that raters guessed on scores. It thus may overestimate the true agreement among raters.

Table 6: Teacher Interrater Reliability Results

Percent Agreement	Cohen's Kappa
90	0.8

Chapter 7

Country Education

7.1 Introduction

This discussion section will identify the ways the research findings contribute and debate existing literature. The first research question asked: *What assumptions are held by Indigenous Elders towards Learning and Knowing and How do Elders align relatedness to Storied Country?* This will examine the research findings on Country Experience and explore associated research links to existing literature. The second research question asked: *What assumptions do Indigenous adolescent students hold towards learning and how are these linked to ways of learning in general?* This will examine the research findings on Ways of Learning in the context of Country Thinking. The final research question asked: *What are the perceived links teachers hold towards Indigenous Knowledge and how are these links reflected in teaching situations?* Broadly the discussion section aims to integrate and related the research findings across all research questions and develop the educational philosophy and knowledge base for Aboriginal and Torres Strait Islander ways

of thinking and the contribution of Countryed pedagogies towards the development of Critical Indigenous pedagogies.

7.2 Countryed Experiences: Research Question 1

7.2.1 Introduction

The first research question asked: *What assumptions are held by Indigenous Elders towards Learning and Knowing and How do Elders align relatedness to Storied Country?* Summatively, the main findings argue two main assumptions held by Elders relate to the constructed and principled nature of Countryed Stories. This is developed through the evolvment and devolvment of refractions evident in identified lived experiences. These experiences operate as counterintuitive and resistive to governance mechanisms evident in contested connections with; and to; an ontological inalienability.

Considering the source and resource of such contestations, Aboriginal and Torres Strait Islander thinkers circumscribe sovereign thinking to the explicit and implicit tensions embedded in their positioning. Explicitly, we want to speak about the meanings and connections that we wish to make in our stories. Implicitly, when we do, these connections are assessed in contested ways and challenges to the epistemic truth such meanings claim. These positions highlight the inner centrality of inalienability to our being and the outer alienability of marginality expressed in a contested, experienced and Countryed identity. These findings will be discussed in relation to the literature review, limitations and practical implications and suggestions for further research.

The section will begin with the notion of Countryed stories to identify the significance of research findings in the stories shared. This is followed by the contestations evident in interpretive meanings sovereign thinkers attend in research and experiencing spaces. This will be followed by the contextualisations of inter-ancestral, lateral and placed connections as an emergent quality of understanding sovereign inter-thoughts. The section will conclude with an examination of Storylining Country and its contribution through the notion of inter-thoughts that guide the manifestations of Countryed experiences in Elder and researcher stories.

7.2.2 Countried Stories

The nature of Countried stories describe the everyday but also the exceptional or counter-intuitive in storied form. The story forms resulted in developing the awareness of a repeatability, reproducibility and confirmable sense of Aboriginal and Torres Strait Islander sovereign thinking. These findings contribute to the interpretation of the ways imaginative use of metaphor in hermeneutic circling assists in a continuity of interpreting relatedness (Donald 2012). The contextual framework of Indigenous *Métissage* employs the notion of a contested site of sovereignty to develop a form of 'Indigenous standpoint' (Donald, 2012, p. 534).

The engagements *Métissage* employs across perceived frontiers of difference, can respectfully negotiate and understand entry points of meaning that carefully honour individual storylines without the need to 'deny, assimilate, hybridise, or conclude' about Place Thought(s) (Donald, 2012, p. 536). In this way, attending to the complex difficulties of problematic relations between Aboriginal self and European settler self as identifiable through Canadian and Aboriginal Peoples, histories and Storylines. *Métissage* as a standpoint, frames such displacing challenges as shared educational concerns in relatedness to selves and Storylines. The identity concern holds the expectation of choosing Storylines be they *being* Aboriginal or *being* European settler ancestries of Knowing place. In this regard, Donald's (2012) assumptions convey the challenges of negotiating ontological alienability from inalienable expressions of self or selves.

In the research findings, the refractive instances where Elders counterintuitively storied versions of lived experience, describe and contribute to the notion of temporal coevality as ontologically immanent (Langton, 2006). In this sense, while Stories may contain examples of referentiality to the ancience of the Dreaming, they contemporaneously acknowledge the colonising present. This temporal immanence of stories to manifest value and meaning in the here and know, maintains a continuity beyond the notion of pre or post-colonising while also maintaining the continuity of contestations towards lived experience.

These findings debate with the forms Donald's (2012) work expresses; to suggest Indigenous thinkers ought to dissimilate themselves from the perceived assumption of notional frontier barriers. Where Donald (2012) argues for moving beyond perceived frontiers, the research findings illuminate that Elders don't see particular intellectual barriers framed by standpoint but identify with the capacity to story in the everyday and

the extra ordinary as standpoint in and of itself. Further, in the way these findings debate the notion of incommensurability (Hokowhitu, 2016). Contestation is an alternative but contributory notion to examine further.

Grounded in the everyday of a Countryed existence, the stories move beyond notions on incommensurability to enact within, through and projected by the very contestations they resource as refractions within their being. These finding also extend upon debate surrounding notional examples of emancipatory (e.g. (A. Moreton-Robinson, 2016), or positional (e.g. Nakata 1998) and suggest that the practice of Storying as processual form of contestation can evolve into a far greater refractive strength and contribute further to the assumptions of Indigenous Standpoint theory. This is evident in the storytelling capacity Elders hold to speak sovereignly and meaningfully into the intellectual discourse in relatable and grounded ways of meaningful *contestation-as-engagement*.

The storied lived experiences that illuminate the everyday and the counterintuitive express a deep ever awareness or ever presentness as a conceptual and experiential understanding of the way things come to be Known (Dulumunmun-Harrison, 2003, 2016; Martin, 2008; Mowaljarlai & Malnic, 1993; Nannup, 2017). The examples in the research findings where Elders made meaning of the everyday and the transcendental noticing's through inter-ancestral visits, memories of historical colonial legacy or noticing the location of a passing topographical and spatialised entity attend to the existingness within Indigenous Knowing but more importantly, identify the capacity to Story tell as a refractive, empirically contestation of valid praxis.

Such findings contribute to the ways *Quandamooka* connect to ancestry (Martin, 2003); or in *Yuin* Knowing the continuance of the Whale Story (M. D. Harrison, 2016); or in *Noongar* Knowing the continual effect of Story on everything (Nannup, 2017). What such knowing and experiencing argue, is that conceptualism cannot be assumed. A continuance, or a connecting link must be a part of the nature of Storying. In other words, to presuppose that conceptualisations negate the feeling within Being for Indigenous Knowledge; is to maintain Knowing, as an unconnected conceptual element to Ways of Being.

These research findings also contribute to the resistance towards the assumption of reductive object ontologies (Povinelli's, 2016). The empiricity of relatedness between Country and People contributes to the notion of ontological inalienability as a conducive apparatus of understanding our awareness of Indigenous being, has a far greater depth than

the reductive *sieving*⁶ out of constraints for the synthesis of meaning can contend.

The research findings also contribute to the forms of attentiveness in theoretical story (Peschard, 2007). The research findings highlight the contested nature of experience to evolve its cognitive value out of counter intuitive forms of Story. In a sense the cognitive value Elder and researcher stories hold operate to consciously refract off the everyday they see and experience into alternative meanings and theoretical assessments of meaning. In this way a sovereign assessment is implicit in thinking about contemporaneous concerns and the ways such experiences are impacting the next generation of Countried beings. In additional research findings, Uncle DD in *Understanding Kindredness* told the Story of always sourcing and seeking relatedness in Storylining. This ensured a continuity to enacting meaningful connections with and through the life of Story internalised in memory and externalised in Country. In other words, Storying Country is assessed as cognitively valuable as both concept and feeling as each relies on the other within a dialectic relationship of Countried meaning making.

The research findings also described a contested accountability towards ontological inalienability of Indigenous knowing. Contested in a sense by the descriptions of tensions and challenges to ensure meaningful connections are always maintained. In the research findings, the ethnographic experiences of the researcher spoke of the different ways the research experience sought out relational connections to Storying meaningfully. While grounding the emergent creativity of the three stories in kindredness to the entities of the Whale, Herron and the Lizard, the stories detail the different ways an ontological immanence is present in the choices and assumptions subjectively made in the stories told, but also the way inalienability was contested or challenged. These findings find salience in the understanding that '*recognition to the way relations are maintained between and amongst Entities*' is a project of constant negotiation (K. L. Martin, 2003, p. 14). In other words, by working through the contested nature of lived experience and recognising contestations as a source and resource of an expressible continuity to Countried existences.

In developing the sense that the research and position in research is a contentious issue for Indigenous scholars, how we attempt to manifest meaningfully grounded connections in our work is where we attempt to negotiate the boundaries of meaning we move across. In the three stories proffered, the immanent sense of alienability brought

⁶ In reference to William James' notion of a 'torn' process - of tearing out of experience the conception (W. James, 1890, vol. 1, pg 465, 482). Further his emphasis on 'sieve' the intention to screen within the 'conceptual scheme gathering up the world contents' (W. James, 1890, vol. 1, pg 482)

about a refractive determination to seek our inalienable configurations to the storied experiences. In contributory ways, Holmwood & Stewart, (1991) suggest *whose* practical contradictions do we attend. In this sense the immanent alienability identifies the way we attend to such contested spaces of meaning which inherently hold a cognitive value to our sense of being. The research findings by meaningfully storying the ways a sovereign thinker negotiates such disruptive and dissimilating cognitive instances, identifies the resistive measures that account for maintaining sovereign forms of cognitive meaningfulness while negotiating contested experiences of reality.

7.2.3 Contiguous and Contested Borders of Meaning

“Boundaries were not imaginary lines in the ocean but rather points of entry that were constantly negotiated and even contested. The sea was open to anyone who could navigate a way through” (Hau’ofa, 1994, pp. 154–155)

The research findings identified Elder Stories refracting in counter intuitive ways. This contestation to storied lived experiences as sovereign thinkers can be attributed to the negotiatory processes evident in the borderlands of contested meaning. The research findings described the ways sovereign thinkers storied the implicitness of centralising Indigenous meanings by identifying the lived experiences meaningfully held. Congruently, such stories held the affective dimensions of contested marginality through the stories of feeling displaced and unconnected and the ignorant assumptions when Elders couldn’t find salience in the histories and legacies embedded within lived experience or taught to them. The strength of these negotiatory processes is evident in the stories to story contested events as active participation in the meaning making process. Peschard (2007) describes the sense that the source and resource of a constraint can be defined as the constraint itself in the meaning making process. In these instances, the value is in the constraint itself or the contestations defined within Stories.

Aboriginal and Torres Strait Islander thinkers find themselves placed within an intellectual landscape of alienability while knowing and feeling a deeper sense of inalienability in both process and form (e.g. Donald 2012). Furthermore, the constructed assumption of Countried stories by Aboriginal and Torres Strait Islander thinkers rest upon a principled awareness of being. Bringing the thesis intention into relation with Elders who shared forms of their Storied Country is about identifying meaningful alignments of *textual* relationality. The associative nature of bounded Knowing and Being, warrants an expectation of constantly negotiating points of entry to connect through the proximal nature

of respecting individual selves of meaning inclusive of the ways text represents our sense of Knowing and Being. This is reflected in the critical border thinking that is both spatially and cognitively mediated by this thesis

The tension in the findings rests upon the *textual* examples deployed to make meaning of the research findings in the thesis. Linguistically, this proximal negotiation is represented by the prepositional forms my research adopts when I talk about ‘connection’, ‘Place’, ‘Country’, ‘Community’, ‘Elder’ or ‘meaning’ for that matter. This thesis has deployed prepositional forms such as: ‘with’, ‘alongside’, ‘to’, ‘through’, ‘under’, ‘above’, ‘across’, ‘over’, ‘beneath’. The intention is to develop the respectful nomenclature to deploy the meaningful nature and intentions of Indigenous Knowing and Being as a form of relationality - *in text* (Medin & Bang, 2014b). This implicit research finding is situated throughout the thesis and operates as part of the inalienability of negotiation Indigenous scholars feel when engaging with contested borders of meaning and access to meaning.

For me simply textualising my experiences does not allow me to engage respectfully and negotiate the meanings in the text that I put down on the paper. Indeed Kanaka Maoli Scholar, Manu Aluli Meyer, (1998, p. 25) reminded us that ‘Words link thoughts to actions’ as a signifying causality. Situating my relationality in text helps me to develop my relationality through the nomenclature shaping and forming the notion of ‘Indigenous Knowledge’ and the inter-relatability of Place. The in-text negotiations develop and contribute to deeper ways of integrating identifiability. Indeed, the shap(*ing*) and form(*ing*) of Indigenous Knowledge is both an active suffix of meaning making to denote continuity but also dynamic process of mediated, negotiated, and contested form(s) of meaning *and* making in itself. In this way Indigenous Knowing is *being* reshaped and unshaped continuously through the negotiated entry points of connective meaningfulness.

Overall, this response is attributed to language ideologies playing a part in the way textual authority enacts norms or standardisations (Hymes, 1996; Mumby, 1989; Silverstein, 1976). By developing a respectful nomenclature as an inherent aspect of writing *Indigenously*, provides a negotiated and respectful outcome from contested spaces of thinking. In the context of decolonial methodologies, (L. T. Smith, 1999, p. 15) suggests ‘Indigenous methodologies tend to approach cultural protocols, values and behaviours as an integral part’. Connection with; to; and alongside; Elders is always being informed by a multi-layered *shaping* of integral textual meaning echoed in the ways or protocols living beings gather or value their meaningfulness into; through; with; and alongside; Storylines held to; through; and with; Place.

Expressing this dynamism textually, is a way of describing how text itself has to be respectfully negotiated to ensure relationality continues through; with; and within; textual representations. Simply textualising meaning is not enough, meaningful textualisation is unsettling and challenging to the norms and standardisations of a grapholects' readability. Further, meaningful textualisation is a contested form of resisting hegemonic standardisations to the norm and the ways language as contextually valued and considered an implicit assumptions; constitutes a significance to uncovering an essential component of the process of construction and assessment of value (Longino, 1990).

7.2.4 Inter-Ancestral, Lateral and Place Connections

Métis/Otipemisiw scholar Zoe Todd illuminates for Storytelling we can be 'perpetually in between' (Todd, 2018, p. 1234). This meaningfully conceptual and experiential insight, suggests meaningful transfer of Story between generations has always been a significant and relatable form of knowledge sharing about the relationships we hold to our Place (and Places) (M. D. Harrison, 2016; Nannup, 2006a, 2006c, 2017; K. L. Martin, 2003).

Meaningful transfer has the responsibility of ensuring this transferability can be aligned in ways that make it expression-able between sovereign thinkers. Cheryl Crazy Bull shared 'Our ancestors before us thought of us even though they did not know us' (Crazy Bull, 1997, p. 8). *Thinking* of Anishnaabe and Haudenosaunee women Vanessa Watts and her Place Thought(s); and respectfully aligning such meaningful Knowing with Métis/Otipemisiw women Zoe Todd notion of *in-betweenness* as a researcher; I begin to consider the sovereign *inter-thought* as thoughts that make up our Ways of Thinking about the self and the world in-Place.

In the research findings, Elders storied the lived experiences inter-ancestrally, laterally and personally. The temporal continuance of storying their thoughts as Countried *and* placed, situated and shared the relatedness that sovereign thinking carefully navigates to Story relatedness. This care is an affective dimension of knowing how contested and traumatic such thoughts and remembrances are to sovereign thinkers. The inter-thought contributes to the meaning making described as a complex interrelation between the interactions taking place not just with individual objects or artefacts, but also with persisting structures, which may be cultural and or social, concrete and or abstract (Anderson, 2003). Further, actions themselves have immediate environmental effects, but also social or cultural ones. In other words, actions have meanings which play a role in their deployment (Anderson, 2003). Inter-thought(s) as an active engaging way of thinking

about the self in relatedness, describes how connections between ancestries passes Knowing and Being ancestrally and laterally as a cognitively meaningful and aligned way of Knowing. Place Thoughts describe the indistinguishable nature between Place and Thought (Watts, 2013). Potentially, the inter-thought can be argued as the meaningfully respectful way of aligning Place Thoughts in relation with each other. By placing one inter thought after another like footprints on Country, Place Thoughts as deeply situated and localised Places; become known through the Storylines sitting across scapes nurtured and governed by sovereign thinkers.

In one example Uncle W said: “*What that rock meant*”. The signification between *Rock* and *meaning* is Placed. Also placed is the *Knowing* between the *teller* and the *listener*, in this instance Uncle W and his ancestor. The secondary form is Uncle W the teller and me – the listening researcher. This transmission between ancestral connections operate in a complex and meaningfully aligned care for Knowing. These assumptions allude to the epistemic and ontological reasoning that evolves and devolves and then evolves again from teller(s) to the listener(s) and so on in a meaningfully aligned pattern of relationality. This pattern of meaning reifies each participant in proper-Place, as individual Place Thought entities in respectful relation to each other through Storylines and the Inter thoughts which make up the Storylines. When participants come together in a community of sharing story, the intention to though trade guides meaningful connections. These ways of Storying Country attest to the importance of continuity and endurance (D. B. Rose, 1992)

Kerwin, (2010, 2011) identified the notion of trading paths across the continental scape. In a related way Mowaljarlai & Malnic, (1993) & Roe, Benterrak, Muecke, & Nangun, (1996) *talk up* (reify) Country as visually mapped conceptual lines-as-meaning. In a similar way, Rose makes mention that her essay is not about songs but rather land (D. B. Rose, 1996, p. 2). In these instances, meaning making as situated within Place Thought(s) connected relationally by inter-thoughts. Peoples coming together to share, exchange and respectfully situate Knowing. (Garneau, 2012b cited in Todd, 2018) equally spoke of thought trading as a meaningfully respectful way that guides researchers to situate understanding through emancipatory mediums of scholarship. Each Knowing self, constructs reasoning for Knowing things are in proper Place as geographically and conceptually placed forms of meaningfully aligned ways of Knowing. Rose commented, ‘everything was good – that people and country were doing the right thing’ (D. B. Rose, 1996, p. 69). Such thoughts confer a logic to developing the awareness of Countried

thinking as relatable, aligned and respectful and describing and contributing to the notion that research should not do harm among people, places and entities.

7.2.5 Storylining Country

Storytelling shares meaningful relationships towards the ways Country is viewed and held (Christensen et al., 2018; Porsanger, 2004; Todd, 2018; Wong, 2018). Drawing on (Beijaard, van Driel, & Verloop, 1999) notion of story-line; Storylining is evidenced by the sovereign thinking within Story as a way of journeying or voyaging or navigating passages of meaning across situated scapes. Sovereign ways to *scape* Country or think through Stories of meaningful intention suggests Knowing moves with Country (Nannup, 2017); through the thoughts traded with and through interactions with Peopled Places (Christensen et al., 2018; L. G. Phillips & Bunda, 2018; Porsanger, 2004; Todd, 2018). In this way Elders Storied the *landscape, waterscape and skyscape* of implicit responsibilities and accountabilities that informed not only the researcher, but the eventual research findings produced as a result of this research project.

The three examples of Storying interrelated experiences exemplified elements of storylines moving alongside; with; and through Country in respectful ways, while acknowledging the intentions to ensure Storied meaningful contributions explicitly acknowledged Country as both educational and philosophically creative to the meaning making exercises. The grounding of relational qualities in the Stories the researcher shared, are reflective of tensions, challenges and differences held through; with; and connected to Indigenous Knowing (Brayboy & Maughan, 2009). Such pedagogical and educational indifferences would argue epistemological, ontological, axiological differences exist within and through relations of meaning and such forms of defining but also holding the ways these constructions and principled existences are contested; holds salience to the ways sovereign thinkers continue to negotiate settled and colonising spaces (Brayboy & Maughan, 2009).

7.2.6 Conclusion

Summatively, this section has distilled from the research findings salient points that describe and respond to the research question and the overall literature evident for the dissertation. The important point to take away is the development of understanding the nature of sovereign thinking as an inalienable characteristic of Countried experiences. In describing the nature of inalienability in contested places of meaning the ways stories

refract in counter intuitive ways are an act of resisting processes inherent in the alienability of meaning felt through the notion of lived experience. In identifying practical implications not only for future research but educational theory the latent qualities of an inalienability of sovereign thinking identifies key areas of critical insight for not only the growth and development of Indigenous knowledge but the respective impetuous of Indigenous ways of thinking and critical indigenous pedagogies.

In the first instance the assumption of educational theory is positioned by the formalised ways institutional constructions employ Indigenous knowledge. These constructions operate as an inverse to the sovereign ways of thinking just examined, and undoubtedly raise the issue of governance. What must be remembered is that the notion of Indigenous Knowledge is a formalised construction of meaning employed by institutional settings to structure the salience and value of the epistemy and in effect build trust in its capacity to deliver assessable outcomes. In these instances, the implication for curriculum and pedagogy as tools of the formal institution to instil epistemic value and trust in IK, rests upon the assessment that continued Indigenous scholarship will continue to contribute relatable forms of meaning.

Problematically, the refractions that emerge for Aboriginal and Torres Strait Islander students through the engagement with formalised notions of Indigenous Knowledge is the counter intuitive risk of propagating epistemic slippage. Epistemic slippage is the contested assumption of value and trust teachers and educators place in the notion of sovereign thinking through the storied forms of identifiable Indigenous meaning. The resulting potential of continuing to alienate students from the inalienable qualities identified in these research findings, argues the necessity to instil the kinds of meaningful value prescriptive notions of curriculum and pedagogy ought to develop; is an important area for future educational research and critical Indigenous theory development.

7.3 Countried Thinking: Research Question 2

7.3.1 Introduction

The second research question asked: *What assumptions do Indigenous adolescent students hold towards learning and how are these linked to ways of learning in general?*

The was answered by the research findings that identified four distinct and relatable ways of learning. *Connected* ways of learning described constructive approaches to learning

whereby students mediated their approach by discriminating between connecting conceptual elements for a task outcome. *Grounded* ways of learning described approaches to learning whereby students deploy strategically affective selection strategies of concepts when relating to the learning task or learning material presented. In other words, students feel and experience a learning task or material through indiscriminate selection of concepts to fit meanings within learning. *Interconnected* ways of learning incorporate the qualities of learning gained from both Connected and Grounded ways of learning. In this way of learning, typically mediations occur for learning where students think more proactively or diplomatically about how to negotiate learning towards the connections, they are asked to make by learning tasks.

Finally, *Dissonant* ways of learning describe the disharmony students identify within learning experiences. This is conveyed as the way's students hold learning tensions with material or tasks presented in learning experiences. Disharmony can be reflective of students holding a limited resource of conceptual vocabulary or skill base; or some misalignment a task or learning material has with personal core beliefs and values. This disharmony is expressed either through an affective perception of disharmony or a conceptual perception of disharmony in engaging with the learning task or material.

The section will begin with exploring the relationship of the research findings to existing literature on learning theories. Beginning with the notion of learning to experience, the chapter explores the ways Aboriginal and Torres Strait Islander ways of learning help to contribute to the wider learning theory literature and formative research findings for this project. The chapter considers the four ways of learning and conceptualises these ways of learning along the notional lines of connected, grounded, interconnected and dissonant thinking within the way's students are taught to experience learning. The section will also discuss implications and future research findings.

7.3.2 Towards Learning to experience

Aboriginal and Torres Strait Islander students are expected to attend formal institutions of education; achieve learning outcomes; and graduate with the assessment being, they will pursue post-secondary forms of societal engagement be they familial, employment, vocational, or university studies (Ford, 2013; Hughes, 2015). Indeed, the entry point for such assessments in relation to the research findings arise with their entry into secondary school settings. The question this discussion responds to, is how such entry points and the learning journeys they design through formal secondary education mediates and develops

the desired 'achievement' value and cognitive processes of thinking and reasoning.

The specific practices that are valued as a form of achievement for successful post-secondary learning, suggest the ways students and the institution co-create the educational framework, result in the understanding of what achievement ought to look like. This is in part, an awareness of the contextual and relative nature of knowledge and the ways the contextual features of both student and institution make as an assessable learning strategy (Perry, 1970). Indeed, Hofer & Pintrich (1997) have contributed that learning can be a function of personal epistemological development and epistemological belief resource value. In effect what value is placed on Indigenous Knowing as an existing resource and how that value will be reflective of the way Indigenous Knowing as a determinant of cognitive justification and reasoning development is a *valued* aspect of achievement and graduation within formal secondary school institutional settings.

Säljö (1991) went on to suggest patterns of social interaction, our understanding of the world, and our cognitive capacities are themselves mediated and constituted as a function of the informal developments we bring into the formal school settings. Kumpulainen and Renshaw's (2007) socio-cultural assumption, suggests the process of learning entails enculturation into and transformation of the practices, discourses, and norms of a particular community. Enculturation being a mediatory process of reciprocity between an individual learner and the community of knowing with which they engage. Further, the processes of enculturation *and* transformation, cognitively develop an agentic learner whose capacities are afforded and constrained by the cultural tools they can *access* within their social setting (Kumpulainen & Renshaw, 2007, p. 111).

When we think of Aboriginal and Torres Strait Islander students learning, they relate in different ways to learning. Since students' ways of understanding are expressed in their speech and actions, Aboriginal and Torres Strait Islander students can be seen to negotiate learning in different ways of cognitive justification and reasoning regarding what are surface and what are deep approaches. When students suggest an affective dimension such as, 'I feel' - such justifications point towards a way of knowing and being: 'I know and relate/associate'. This can be thought of as an aspect of both the internalised and externalised sense of reasoning (cognitive justification) mediated (actions) within their contextual scape of learning. Whether ATSI students are mediating IK or alternative forms of epistemological knowing, reasoning and justification emerge from associative characteristics of *constraining* forms of knowing how such associations exist meaningfully.

Access as a form of internalised alignment between affective and cognitive

dimensions of learning; would highlight for Aboriginal and Torres Strait Islander students' internal access to regulation of alignment through formalised secondary school examples of IK are constrained. Meyer, Parsons and Dunne, (1990), suggested the association of constructs that represent approaches to studying at an individual level is a context-specific response and is affected by the qualitative level of perception of the individual towards certain key elements of learning context. Here the assumption suggested is the notion of learning trauma as a result of the constraints placed upon the ways Aboriginal Students are allowed to access deeper alignments between affective and cognitive justification of thinking and knowing. Reflectively, the historical legacy of implicitly identifying learning 'deficits' among Indigenous populations can be seen to prevail and the ways the educative imperative privileges the forms of meaning valued and accessed (Onus, 1969)

Boulton-Lewis et al., (2000a, p. 407) found that Aboriginal and Torres Straits Islander students sought 'learning as gaining understanding'. In this context, the research findings continued to find logic surrounding the contested nature of what is knowing. This finding contributes to the legacy of such contested knowing for educative impetuous. This can be seen in the inter-ancestral and lateral logics that prevail intergenerationally. In these instances, the prevailing logic and reason justifies the notion of formal education and suggests a pre-existing internalised deficit to ameliorate through gainful formal educational assumptions.

Context-specific regulation of learning reflects the ways Aboriginal and Torres Strait Islander thinking and knowing is regulated by the available learning epistemy about epistemy. If literature regarding learning epistemy is thought and taught about in line to the context specific forms, it is thought and taught about; such assumptions inform the ways students are regulated to engage with epistemy as an outcome of research upon learning but also how epistemy about things is developed and known by secondary school teachers.

Ramsden (1992) suggested student learning in the context of higher education is more about the adaptations students make towards teachers as a relational dynamic between manifest (teacher assumption of learning and achievement) and latent (student assumptions of feeling and thinking) qualities within the didactic association. Boulton-Lewis, Wilss, and Lewis, (2003) and Vermunt and Verloop (1999) identified such constraints operate within competing and counter orbits of learning and teaching theory. In effect self-regulation is a product of the ways we come to understand what we regulate within the formal didactic environments.

Secondary school teachers and the theory(s) that inform their teaching and knowing

about learning and achievement as well as the curricula forms, they employ; guide the ways students are to be regulated for the sake of learning about self-regulation. In these instances, these assumptions determine the nature of a formal educative environment and the ways such environments become closed systems of enculturating and transforming the knowing and thinking of their students. Equally, students will reflect the thinking they have about the way they feel and have known as an aspect of the ways they learn as a result of being enculturated and transformed by the educative environment. The challenge that this research finding contribute is through the access points and justifications for education. Aboriginal and Torres Strait Islander students enculturate and transform in their being what kinds of meaningful value is placed on the inalienability of their ways of learning as informative to the educative environments they are expected to transition through and beyond as post-secondary achievement.

7.3.3 Experiencing Learning

Formal secondary school educational environments reflect the nature of why students learn as context specific to the achievements valued. Aboriginal and Torres Strait Islander students are taught to learn as a reflection of the things formal settings wish all students to enculturate and value within the 'notion' of achievement. Indigenous Knowing as an epistemic form has utility for cognition and instruction *should* it be able to transition Aboriginal and Torres Strait Islander students towards *enculturally* achieving and valuing the forms of meaning so identified and valued. Such assumptions scaffold the emergence of more nuanced assumptions of cognitive justification and reasoning (Bang, 2015; Cajete, 2000; George et al., 2013; Ingold, 2010; Langton, 2006; Rhea, 2018).

Bang et al. (2015) and Marin and Bang (2018) have contextualised cognitive *mobility* as an external governance of movement in relation to the surrounding environment. The various ways of learning developed within this research project identify for Aboriginal and Torres Strait Islander students a greater reflection or mirroring of the deeper interrelatedness held towards the spatial environment (Kitchens, 2009; Lauer & Aswani, 2009). Such an assumption scaffolds the ways students enter the formal environment and the ways the learning environment functions to either stimulate or constrain their thinking of their ways of learning. The identified ways of learning: *Connected*, *Grounded*, *Interconnected* and *Dissonant*, provide descriptive ways of making an internal assessment of the ways formal governance of thinking can be explored further. Such assessments can be explored as a contextual example of approaches to learning

research which has developed a stable sense that students do develop broadly defined surface and deep approaches to learning (Marton & Säljö, 1976a, 1976b, 1984).

7.3.4 Connected Thinking

Connected ways of learning focus on constructive attention towards the conscious, explicit, and structured, qualities of content meaning. Entwistle's assessment of *an intention to understand* assists in describes this way of learning (Entwistle, 1987). Learners talk about the relational aspects between ideas presented and convey their constructions through the ways they identify relationships between meanings presented and known in a learning task. Such assumptions suggest that the interrelationships between the learning approach and target meaning are negotiated through the perceptions of students (Entwistle, 1987, 1991). The relational aspects of learning also tend to be focused upon conceptual meanings identified in formal educational settings identified as mental models (Vermunt, 1996). Salience is also held with *constructed knowledge* (Belenky *et al.*, 1986),

In this way students attempt to discriminate between a target meaning and a discrete meaning in the learning task. Vermunt (1996) suggested students tend to *select or relate* as a form of connecting meanings identified within a task. This interpretation raises in the research finding, the logic of strategisation. Students adopt a certain strategy that provides them the necessary cognitive awareness to select or discriminate between conceptual meanings. In this way, students can locate or select the target meaning through a cognitive justification for their reasoning about the learning material. These findings contribute to the ways students orientate or examine the available learning material and make an informed choice (Entwistle, 1987, 1991; Vermunt, 1996).

7.3.5 Grounded Thinking

Inversely, Grounded Ways of Learning describe the ways of learning that deploy unconscious, implicit and strategically affective relational qualities within learning. Vermunt (1996) described such conceptualisations as when students *generate emotions* while identifying connections in the learning material. This way of learning is about the attributional value of the relationship between themselves and the learning material presented. Such emotive and discrete selections rely on the values and beliefs students identify with as a motivative conditional to engage with presented learning material. Hofer & Pintrich (1997) suggested beliefs about ability can have motivational power, as they lead to either performance or mastery goals. Views of intelligence, however, have not typically

been thought of as part of the construct of epistemological beliefs, though they may be indirectly related to learning in that they motivate goal choice and thus affect the academic behaviour that ensues.

The findings suggest Aboriginal and Torres Strait Islander students attempts to locate context and relatedness with presented learning material as an *affective* response to indiscriminate selection of concepts to fit meanings. This in part is a reconstructive and emergent meaning making process that is based upon the way's students deploy emotive dimensions of learning experience. At times the emotive response negatively affects student's capacity to ground relatedness between selected concepts; while at other times the emotive response motivates students to push forward through particular frictions. Such descriptions hold salience with relating concepts to everyday personable experiences students perceive in the learning experience (Entwistle, 1987, 1991; Hofer, 2004b, 2008), and justification of truth (Hofer, 2001) as well as the different ways students engage with affective learning challenges in conducive or deleterious ways (Vermunt & Verloop, 1999).

These suggestions identify relatedness between formal environments and the familial home environments of students. In other words, how students make sense of the learning experience, is reflective of the ways they infer that certain personal beliefs are part of the broader socio-cultural context and such beliefs are valued in the educational environment that concurrently impacts the ways students negotiate learning (Hofer, 2000, 2004b, 2004a, 2008; Hofer & Pintrich, 1997). The implication of these assumptions would argue that should the broader socio-cultural context negatively reflect upon certain student personal beliefs, then the consequence reflected congruently within the educational setting may potentially reveal affective challenges for students learning experiences. This is especially salient for educational environments where Indigenous students are taught by a majority of non-indigenous teachers and educators.

7.3.6 Interconnected Thinking

Interconnected ways of learning describe a way of learning that incorporates qualities of learning gained from both Connected and Grounded ways of learning. Interconnected ways of learning describe variations in approaches to learning negotiated or mediated as an aspect of change. Such contributions reflect the ideas of conceptual change or theory of change (Mason, 2001; Mason & Boscolo, 2004); interplay between personal and contextual influences (Vermunt, 1996), conscious and purposive learning actions (Mason, 2003).

This way of learning compared to Connected or Grounded ways of learning, identifies with negotiated, proactive qualities of learning. In these instances, ideas and assumptions must ultimately be tested (Kitchener & King, 1981); to identify how they hold salience in a revisionary process of meaning making - a *diagnosis* (Vermunt, 1996). Diagnosis then guides Interconnected ways of learning towards conceptual mediation, thinking more strategically, or diplomatically, about how to negotiate learning towards the connections they make. Such diagnostic mediation can be a function of *reflective thinking* (King & Kitchener, 1981, 2004); and *motivational decisions to learn* (Cano, 2005a, 2005b, 2007).

These connections are developed by deploying experiential affirmations to make meaning of conceptual elements within the learning setting or alternatively thinking through different conceptual elements that best suited the learning setting and the outcome to be achieved. Such Interconnected ways of learning hold salience with situative metacognitive activity (Mason & Boldrin, 2008) as well as active epistemic judgments and monitoring (Bråten, Britt, Strømsø, & Rouet, 2011) and situative perspectives (Bang, 2015; Bang et al., 2007; Barajas-López & Bang, 2018; Järvenoja, Järvelä, & Malmberg, 2015; Nolen, Horn, & Ward, 2015; Turner & Nolen, 2015)

7.3.7 Dissonance Thinking

The salience of the research findings that suggest Aboriginal and Torres Strait Island peoples navigate forms of contested knowing in daily lived experience suggests such contested notions are felt intergenerationally by Aboriginal and Torres Strait Islander secondary school students. This is a result of knowing and believing that Indigenous Knowledge exists and such Ways of Knowing are born into a contested site of existence within colonising frameworks. This epistemic contestations can be reflective of the example epistemic contrasts and the salience of differing beliefs about knowledge and knowing (Hofer, 2008). Indigenous Knowledges also as a differing referent of meaning, acknowledges the challenges of meaning making scholarship attends to; let alone conceptualisations within secondary schooling. In these situations responding to bridges of meaning, facilitate contemporary proactive dialogues (Mason, 2007). Responding to the notion of epistemic contrast, two potential areas of ongoing research potentially for Indigenous ways of knowing include (i) ‘cultural’ differences (e.g. Bang et al., 2007) and (ii) underlying mechanisms of the said differences formulated as *situated perspectives* (e.g. Bang, 2015; Järvenoja et al., 2015; Turner & Nolen, 2015).

Indigenous Knowledge is both reflective of the contextual experience individuals identify with as well as how individual identity development is understood. This core assumption for the sake of entering a learning task; highlight the attributional value Aboriginal and Torres Strait Island students assign to learning. In this way learning is determined by the contextual manifestation of relatedness and as a consequence impact the learning approach and engagements with a learning task (J. H. F. Meyer, 1991). Students are situated in their learning context and attempt to relate and adapt (Cano, 2005a). This is potentially accomplished as both a function of the teaching pedagogy (Ramsden, 1992; Ramsden & Entwistle, 1981) and the way knowledge is presented and valued (Bang et al., 2007).

Prosser et al. (2000) suggested that these situations of dissonance, contextual perception of learning task and approach to learning become incoherent. Long (2003, p. 33) suggested such dissonance was reflective of the 'micro-environment' of individual learners. When considering Grounded ways of learning in dissonance, salience with the notion of limited self-regulation appeals to the affective strategies noted within the students (Lindblom-Ylänne & Lonka, 2000). In these situations, typical responses by students account for reactivity as opposed to pro-activity (potential increase in self-regulation) noted in *Interconnected* ways of learning. Further, while limited self-regulation for *Grounded* ways of learning can be seen as potentially evident it could also be seen as a motivating aspect of ways of learning (Vermunt, 1996). Grounded ways of learning represent the deeper unconscious aspects of ways of learning. Such sensory interpretations through the connections to Country attribute strong, grounded, resilient emotional states that students connect with in meaningful ways.

Contrastingly, Vermunt and Verloop's (1999) association with *friction*; described as both constructive and destructive. This distinction lends itself to Connected ways of learning whereby constructive or distancing approaches mediate the felt dissonance from a learning task. Constructive frictions determine a tenacity to develop thinking and learning skill sets combined with an appreciable enjoyment in achieving growth through tackling a challenging learning task. Alternatively, destructive frictions can situate a distancing approach from a learning task or the conceptualisations expected to learn and enculturate. Such distancing reduces the development of learning and thinking skills and requires a contested compromise of truths.

Similarly, *Interconnected* ways of learning when engaging with dissonance would highlight both constructive and destructive friction (Vermunt & Verloop, 1999). This is

mediated constructively as pro-activity towards a learning task and destructively as diplomacy. However, an additional element of reflexivity for Aboriginal and Torres Strait Islander students is standpoint. Standpoint as a socio-cultural construction guides students towards a reflexive acceptance of identity within a colonised worldview (Bodkin-Andrews, Whittaker, Harrison, et al., 2017; Foley, 2003; M. Nakata, 1998). Such constructive friction would guide interconnected learners towards ‘approaching knowledge in terms of its usefulness and in terms of what it can show us and teach us - as a reflexive view of position, as viewed by others as a legitimate [worldview] practice. Comparatively destructive friction illuminates a reduction in ‘condemning the knowledge on the basis of a particular analysis’ and deficit discord (M. Nakata, 1998, p. 11).

7.3.8 Conclusion

This section has discussed the research findings in relation to the existent literature review. The main points drawn from the four ways of learning suggests Aboriginal and Torres Strait Islander students negotiate their learning in distinctly different but relatable ways. The significance of deep and surface approaches to learning suggest particular qualities and characteristics are attributed to specific surface or deep approaches. When students are faced with particular learning challenges, they attempt to deploy the specific approach to learning. Contextually for the sample of students in the research findings, surface learning was the result of some students deploying a limited number of ways of learning. deep learning was comparably highlighted by some students deploying a larger range of ways of learning inclusive of more advanced learning strategies. Potentially the ways students transition between different ways of learning and exploring the limitation of such transitions as part of the thinking strategies they make could be a potential area where future research may consider learning development.

7.4 Countried Pedagogies: Research Question 3

7.4.1 Introduction

This third research question asked: *What are the perceived links teachers hold towards Indigenous Knowledge and how are these links reflected in teaching situations?* This was answered by the research findings that found five ways of teaching evident from the teacher sample interviewed when they discussed and described their engagement with Indigenous

Knowledge. The chapter will begin by identifying with the notion of situated teaching in relation to Country. Situated teaching is a relational quality of Countried pedagogies. The research findings describe the awareness of place as Country as an important relational characteristic of pedagogy as teachers guide the situated context of learning evident in forms of Indigenous Knowledge creation and production.

Teachers informed by the situatedness of Place on Country, can begin to engage in more meaningfully significant teaching practices when they respectfully locate themselves on and with place as Country for an educational setting. The chapter explores further the contribution *Comparative, Adoptive, Practical, Reflexive and Integrative Ways of Teaching* makes to teacher awareness and engagement with Indigenous Knowledge within the classroom setting as well as suggest implications and areas of future research.

7.4.2 Situating Pedagogical Placeness of Country

The continued desire by both Indigenous educational researchers and teaching professionals in secondary school settings to develop critical junctures of transformation and translation in Indigenous Knowledge education cannot be understated (Higgins et al., 2015; Madden, Higgins, & Korteweg, 2013; Brooke Madden, 2015; Madden (nee Costello), 2011). Sarra's (2005, 2006, 2011) salient calls for improved achievement levels among Indigenous students has wider impact on all students to know and relate to Indigenous histories, Knowledges and relationships to and with Country that everyone inhabits. Where the research findings discuss the transformations in teachers from knowing the concept of (indigenous) land and then becoming aware of how Country navigated deeper relational qualities in pedagogy, suggested this awareness is an important attribute to developing the sensibilities of Countried pedagogies.

Hattie's (2003) contribution regarding teaching quality and teacher feedback point to the continued intentions of developing expert teachers. Expert teachers *willing* to guide students towards concepts that are more integrated and more coherent, and at a higher level of abstraction than the understanding achieved by other students. Hattie (2003) points to the ways this research project can signpost such notions. Dunlosky, Rawson, Marsh, Nathan, and Willingham's (2013), suggest teachers should be encouraged to maintain a consistent approach in their teaching to ensure students adopt the appropriate learning techniques. The potential forms of ways of teaching that this project contributes echoes this salience by proffering a teaching framework for Indigenous Knowledge delivery that is based on an implicit awareness of relationality to ways of learning. In effect, this

discussion suggests; to what end do the latent qualities of ways of teaching identified in this project attend to developing secondary school teaching practice with; through; and connected to; Indigenous Knowledge and Country.

7.4.3 Comparative Ways of Teaching

The benefit and consequence of *Comparative* ways of teaching is evident in forms of *being explicit* about differences in knowing and meaning that exist in socially mediating school teaching and learning environments (Kumar, Karabenick, & Burgoon, 2015). What Chávez et al. 2012, K. L. Martin, 2003, Tuck et al. 2014 and Tuck & Yang (2012) mean regarding decolonisation in Land education is something entirely different to what proponents of place-based education may attend to in meaning (Greenwood, 2008; Gruenewald, 2003b, 2003a).

Experienced teachers have measurably different achievement outcomes for student learning as compared to expert teachers (Hattie, 2003). This difference potentially can be found in the active knowing and understanding that informs explicit knowing of the environmental context in which teaching occurs (Cochran, DeRuiter, & King, 1993). Secondary school teachers are an active part in knowing the environmental contexts of Australian secondary schools. The research findings describe how teachers think about the environmental aspects of their teaching experience. These experiences describe notions of connection between Indigenous peoples and Country.

In suggesting Land and Water assumptions these storied forms of relatedness guide relationality between teaching experience and contributions from Indigenous Knowledge (Rhea, 2018). These principles are evident in current research whereby Land and Water pedagogy as a distinct aspect of contextual awareness of valued connections Indigenous Knowing and histories of colonisation contain towards Land and Water. Indeed the notion of *terra nullius* for generations of school educators informed skewed notions of the continental scape towards meanings that suggested the continent was an *un-peopled Country* (Schlunke, 2007; Vass, 2014).

The effectiveness of discussing Land and Water as elements of Storying Country guide teachers to explore more nuanced interpretations of Country Pedagogies. The effectiveness of *Comparative* ways of teaching provides scope for entry dialogues re-informing such contextual assumptions surrounding what Land, Water and Sky country connections are as basic tenements connected to; with; and alongside; Indigenous Knowing. The distinction between what teachers know about what they teach and what

they know about teaching (Cochran et al., 1993) highlight how transformations in knowing content meanings as part of colonising histories can inform different ways of relating to Country and Indigenous Knowing.

7.4.4 Adoptive Ways of Teaching

The research findings talk about the strengths and limitations of teaching practice when teachers adopt either a modelling, replicating or reproducing process in their way of teaching. The challenge of teachers not being explicitly aware of the ways modelling and replicating processes displace the situative nature of Indigenous knowledge, such findings hold salience with the critical junctures in placed based education (Bang et al., 2014; Korteweg, Gonzalez, & Guillet, 2010b; Korteweg & Russell, 2012; Tuck et al., 2014).

These instances, identifying the nuanced placed notions of Country knowledge argues environmental education can circumvent the decolonial intentions of place-based interventions to speak to wider discourse regarding knowing and the conduit of knowing through teaching pedagogy. The research findings found that modelling and replication teaching processes while effective in assisting non-indigenous teachers to place different epistemes in situated places around the world, these processes limited deeper contextual engagement with knowing as they effectively propagated surface representations of Indigenous meaning and relatedness.

The alternative in the research findings was to heighten reproductive processes as part of adoptive ways of teaching. In this instance seeking meaningful guidance with Elders helped teachers to effectively mediate and mitigate damage centred teaching practices to situated Indigenous meanings. Indeed Madden (2015) suggested whether teachers' attempts to 'model' Indigenous approaches to teaching and learning will resonate with Indigenous students and families is not guaranteed. However, despite such concerns these teaching processes do exist and are employed daily by educators such that they do hold merit to convey some kind of meaning.

Osborne's (2013) example from a remote Australian school raises the question of context for teaching process. In this regard teaching process as a kind of 'work' challenges teachers to think through the teaching process more meaningfully. Indigenous Knowing doesn't waste anything, everything is utilised, and is important to our Knowing. In this context while modelling and replicating are a part of the daily teaching experience, thinking through and with more reproductive teaching processes in mind suggests teachers have

avenues available to them to negotiate the ways of teaching they have at hand to teach more meaningful connections with Indigenous Knowledge.

Considering the intent of reproductive processes in adoptive ways of teaching, the opportunity to build more explicit and related Indigenous meanings offers teachers deeper avenues of meaning making. Maggioni and Parkinson (2008) and Maggioni, VanSledright, and Alexander (2009) and Vázquez (2011) discussed the relationship between teachers' beliefs and the translation of personal epistemologies into the way they chose ways of teaching. They suggested, the influence of these beliefs on their pedagogy seemed to depend on their overall individual epistemology, suggesting that educational intervention may affect teachers' beliefs about learning without translating into changes in pedagogical practice whenever they conflict with the teachers' epistemic beliefs (Maggioni & Parkinson, 2008). The example of *translation* as permeable and plural provides scope to interrogate the ways teachers adopt certain teaching practices as well-meaning despite not being aware such practices can contain *unintended* meaningful consequences.

In the research finding while length of professional teaching service was not interrogated specifically, the latent qualities of seeing newer teachers with shorter in-service experience flexibly mediating engagements with Indigenous Knowledge compared to more experienced teachers being more consistent in their approaches. These findings debate the assumption novice teachers tended to revert to traditional beliefs and pedagogical practices at the beginning of their career; with experience, most of them embraced a more relative view of truth and their beliefs about teaching and learning (Maggioni & Parkinson, 2008). In the context of Indigenous Knowledge, the consequence of not understanding the importance of inalienability to Indigenous Knowing as Countryed and situated, identifies the importance of relatedness between Country and situated epistemy as an important implication for future research. In effect, these consequences can be thought of as the *thinking of the borders* that challenge modern/colonial system of thinking and the ways we contain parameters of legibility in our thinking (Vázquez, 2011).

Maggioni et al. (2009) also points to identifying history teacher pedagogical orientations consistent with the epistemologies of teaching history. In thinking through the teaching of Indigenous Knowledge, if certain modelling and replicating processes are evident in domain specific teaching, then the challenge is to identify ways teaching interventions can carefully guide more meaningful connections to the teaching of Indigenous knowledge. By revealing and identifying common teacher pedagogies as a

result of social desirability; potentially argues that processes that are consistent to the thinking, socialising teacher may actually be limiting (Maggioni et al., 2009).

7.4.5 Practical Ways of Teaching

Journeys and destinations define active pedagogical knowing for lifelong learning (Madden, 2015; M. A. Meyer, 2013). Just as pedagogical pathways define journeys, pedagogy as a destination is about the productive and the problematic in eventual awareness of meaning negotiated (Madden, 2015). Manu Aluli Meyer talks about bringing forward knowledge not just its parts as an intention of Indigenous Knowing. Such assumptions for *Practical* ways of teaching argue for the contextual places along the way to knowing such contextual places. In other words, the contributions of *Practical* ways of teaching, suggest the situatedness of knowing is as much about the experience as it is about being within the experience of knowing. The ‘A’ in PEARL education, (Political, Embodied, *Active*, Reflective, Learning) (Mackinlay, 2012; Mackinlay & Barney, 2012); stands for ‘active, antiracist, anticolonial’ (Mackinlay & Barney, 2014, p. 11). In this way teaching practices that provide for a shift in awareness towards relational qualities of meaning beyond the boundaries of what constitutes a school educational setting, inform the nature of *wise excursioning*.

Wise excursioning can be described as the ways of being insightful about the places we inhabit and know to be the way they exist (Basso, 1996; Langton, 2006; K. L. Martin, 2003; D. M. Mertens et al., 2013). In these instances knowing and being for secondary teachers takes on the significance of places to hold knowing (Amundsen-Meyer, 2015; Ermine, 1995; Lewthwaite et al., 2015; M. A. Meyer, 1998; Osborne, 2013). Chambers (2006) extension of Indigenous *and* place-based education; attest to the ways school teaching practices ought to express forms of accountability and respectful relations with Indigenous Knowledge through the journeys and destination both literal and conceptual navigated through wise excursioning (Madden, 2014). Such achievements would convey *animating IK* (M. Battiste & Henderson, 2009); *honouring* deeper relations between human, natural, and spirit worlds (Madden, 2014); *reconciliatory* (Corntassel et al., 2010; Gebhard, 2017; Scully, 2012; Tupper, 2014) and *being participants* (Malin & Maidment, 2003).

Wise excursioning also attests to the ways teachers engage with notions of Indigenous traditional models of teaching. Tanaka (2009) and Tanaka et al. (2007) insistence on preservice teachers learning their profession in different ways; could also

translate to the different ways or *in-between ways* secondary school teachers come to understand how Elders inform Indigenous relatedness (N. Harrison, 2005). Building on this assumption, Elders use familiar places, names, plants, and stories to guide a level of in-Place competency (Madden, 2015). Such competency's as Storied Country facilitate meaningful interactions as teachers identify with Storied geographies of affective intent (Kenway & Youdell, 2011).

Styres (2011) argues that Land informs pedagogy through storied relationships between humans, other than humans, and more than humans. Such disruptions to an understanding of Land as object; are reflective of the same ways Water is held in deep storied relationship (Diaz, 2016; Hau'ofa, 1993; M. A. Meyer, 1998; Whitehouse et al., 2014). Dion's, (2007b, 2009) argument for transforming relations between Aboriginal and non-Aboriginal Canadians holds salience with the Australian experience. By providing the opportunity to examine spatial locations beyond the classroom but also under, over and through the classroom; provides active examinations in knowing with; and alongside; Indigenous Australian historical and contemporary experiences.

7.4.6 Reflexive Ways of Teaching

Critical education approaches for secondary school teachers emerged from transformative agendas that suggested teachers must assume a pedagogical responsibility for attempting to understand the relationships and forces that influence their students outside of the immediate context of the classroom (Giroux, 2011; Giroux & McLaren, 1986). Extending on such notions, *Reflexive* ways of teaching contributes to the transformative intentions of *decolonial* (Chinnery, 2010; Donald, 2012; Heyer, 2009; Iseke, 2008); *anti-racist* (C. E. James et al., 2011; Mackinlay, 2012; Mackinlay & Barney, 2012; O'Dowd, 2010; Strong-Wilson, 2007; Tompkins, 2002); and inherently *transformational* pedagogies (Dion, 2007b, 2009; O'Dowd, 2010).

Further junctures within critical education have begun to explore notions of unknowing or unthinking (Mackinlay & Barney, 2014; Rhea, 2015). This antithetical terminology has been brought to bear in relation to reactions by Indigenous theory regarding notions of self-reflexivity and surface representations of decolonial agendas (A. Smith, 2013; Tuck & Yang, 2012). Indeed, Reflexive ways of teaching highlight that transformational settings while transformational; only create the conditions for possibility.

Well-meaning transformations do indeed occur within Reflexive ways of teaching yet how critical education moves the development of pedagogical processes beyond

polarising assumptions is still to be furthered. Mackinlay and Barney's (2014) *unknowing* example within critical self-reflection domains challenges researchers and educators alike, to consider intuitive forms of action whereby not knowing is an implicit form of active respect to enter into dialogues with Indigenous Knowledge. In the research findings, teachers do acknowledge a lack of knowing and at times an indifference towards the teaching of Indigenous knowledge because of such unknowns. A. Smith (2013) specifically interrogates these assumptions of indifference to challenge educators not to rest upon self-reflexivity but to interrogate the forms of indifference that encumber their teaching practice through the process of self-reflexivity. Mackinlay and Barney, (2014) offer salient avenues to respond to horizontality, mutuality, and interrelatedness rather than hierarchy domination and control as tangible reflexive outcomes regarding educator's professional development.

7.4.7 Integrative Ways of Teaching

The terminology of *unknowing* or not knowing (Mackinlay & Barney, 2014) is a form of pedagogical intention, that potentially guides secondary teacher practice towards finding suitable teaching models that go beyond the polarizations that *Reflexive* ways of teaching can be known to promote. In this sense attempting to go beyond the *indifference* of knowing as 'neglecting the intellectual demand' within teaching practice (Lingard & Keddie, 2013, p. 428); or for that matter - 'reproduce[ing] knowledge in the selective traditions of curriculum construction and pedagogical practices' (Lingard, 2007, p. 246). Integrative ways of teaching provide the opportunity for secondary teachers to develop a sense of the uncharted territory of teacher student interrelatedness.

A. Smith's (2013, p. 275) notion of radical relationality as a form of 'taking power to make power' points to creating the conditions of potentiality that secondary teachers ought to consider in regard to the interrelatedness they share with students. Respectfully, notwithstanding, Andrea Smith's interpretation is based on the growth of Indigenous Sovereignities; the assumption potentially holds salience for moving beyond indifference, as well as growing active forms of respectful ignorance through unknowing teaching processes.

Unknowing teaching processes can be thought of in two ways. Firstly thinking through; alongside; and with; notions of horizontality, mutuality, and interrelatedness in governance systems [inclusive of teaching process] defined as avenues for further self-reflexive (A. Smith, 2013); and teaching professional growth (Baskerville & Goldblatt,

2009). Secondly, accepting the levels of ignorance inherent in the forms of miseducation that do occur as part of educational assumption to teach and know through structural forms of knowledge creation and production and maintenance (Angulo, 2016; Reay, 2017).

Horizontality, mutuality, and interrelatedness highlight the ways we become aware of the educational debt as opposed to the educational achievement towards marginalised groups [inclusive of Indigenous sovereignties and Knowledges] (Ladson-Billings, 2006). Being aware of teaching processes deployed in the classroom that guide students towards miseducative regimes of knowing suggest for Indigenous Knowledge, the interrelatedness of knowing as reflective in both student and teacher requires a shift in inter-relational awareness.

Miseducation itself is not new. Woodson (1933) speaks about the ways African American youth were actively miseducated by the schools they attended highlighted the historical legacies of ignorant education. Indeed, the Australian context of miseducation is storied extensively in both Oral history and literature regarding the ways we should teach the indigene (Dunn & Tatz, 1969). Reflecting on Reay's (2017) notion of social mobility, for the sake of understanding Indigenous Knowledge as a socially mobile construction of aligned meaning and meaningfulness – to what end did miseducation inform, curtail, limit, conscript, and stunt the growth and agency of such Knowing; through different and competing forms of educational governance (Angulo, 2016).

Pedagogies that continue the development and growth of radical relationality, have seen potentiality in the way we (as learners and teachers in Australia) relate through Land and Water pedagogies (Rhea, 2018). In this sense drawing upon the interrelatedness of core elements of earth, teaching process that acknowledge the ways we ought to be dirtying or watering Story as a nutritive form of witnessing Student learning may germinate within Integrational ways of teaching. Indeed, the notion of *breathing* in Story as an aspect of Sky pedagogy could also potentially inform already developing Land and Water Pedagogies.

7.4.8 Conclusion

This section has discussed the importance of teachers becoming aware of the situated notion of Indigenous Knowledge. Indigenous Knowledge and the Countryed existences of such Knowing, guides the ways education begins and becomes relationally situated in ways of meaningful intention. Ways of teaching provides entry points to teaching Indigenous Knowledges and the implications to curriculum and assessment of Indigenous Knowledge

as a valuable epistemic truth. The systematic ways of identifying ways of teaching Indigenous Knowledge contributes to a wider discourse on how non-Indigenous and Indigenous teachers begin to engage with Indigenous pedagogies that identify critical junctures of reflexive action that integrates entry, transition and exit teaching process for teaching IK. Entry points to borders of meaning can be thought of as *Comparative* ways of Teaching. Transition points can be thought of as *Adoptive, Practical and Reflexive* ways of teaching. Exit teaching processes from borders of meaning can be thought of as *Integrative* ways of teaching.

Chapter 8

Limitations and Conclusions

8.1 Introduction

This section contributes the significance of limitations for Indigenous Knowledge research, methodologies, future research areas and summations for the research project. Beginning with two areas for future research identified as part of the limitations of this research project which discuss cognitive *motility* and cognitive *mobility* as applicable to the research findings. These potential findings were methodologically constrained from being reported in this research project. The section also continues to discuss issues with Indigenous research, Indigenous methodologies, self-reporting data sets and concludes with the notion of privileged institutional sites of Knowing as complicit in the production of this dissertation inclusive of the researcher themselves.

8.2 Limitations

Two areas emerged out of the research data in the form of *cognitive motility and cognitive mobility* (discussed below) but were not able to be fully explored as a result of limited prior literature reviews, and the constraints of the methodology employed. These areas can be considered as areas of future research surrounding the extensions of situated perspectives (Bang, 2015; Bråten et al., 2011; Järvenoja et al., 2015; Turner & Nolen, 2015). Firstly, thinking changes in the way students moved between different ways of learning lends itself to exploring nonverbal interactions with verbal interactions. Secondly, the development of an intellectual language attributed to Indigenous Knowledge or *Indigenised* Knowing describes the formulations of where such privileged knowing exists as a situated form of institutional value in formal settings. Both ideas represent a deeper contextualising of the internal and external interactions and the way they actively promote how we (researchers and scholars) potentially construct Learning and Knowing as Indigenised. Additional limitations also extend from the body of research identified and scaffolded to contribute towards Indigenised knowing.

8.2.1 Cognitive Motility

Elements of my research notes make mention of observed non-verbal changes in students and teachers as a proxemic (use of interpersonal space to communicate attitudes), chronemic (use of pacing of speech and length of silence in conversation), paralinguistic (variations in volume, pitch, and quality of voice), and kinesics' (body movements or postures) (N. K. Denzin & Lincoln, 2012; Gorden, 1980; Onwuegbuzie, Dickinson, Leech, & Zoran, 2009; J. Prosser, 2011; G. Rose, 2016; Spradley, 1979, 1980). Such variations between different participants emerged while working and interviewing alongside myself as a researcher and educator. These observed thinking changes occurred as we worked together to develop awareness of IK, teaching and learning material and task outcome goals.

Such an assumption of potential internalised governance or regulation describes the ways, an internalised cognitive motility interrelates with; and to the complexity of external ecological human and environmental relations. Such interactions could be observed as ways of thinking regarding learning and teaching. Cognitive motility as a formative interpretation, describes the ways participants move from one way of thinking about learning or teaching to another as part of the ways they think when promoting a didactic

intention of relatedness. Such motility is determinant on the relations people have with the external learning environment. In effect the ways the environment stimulates and/or constrains the ways participants are expected to develop learning potential in effectively and organisationally meaningful and developmentally productive ways (Martin, 2006; Martin & Dowson, 2009; Martin, Nejad, Papworth, & Ginns, 2013).

Ojibwe scholar Megan Bang et al. (2007) highlighted cultural differences between non-Native and Native (Menominee) American and European children and adults living in close proximity in rural Wisconsin. Employing novel observation techniques, she identified differences in nature affinity between participants. Their results highlighted epistemological orientations affect memory organisation, ecological reasoning, and the perceived role of humans in nature. These formative results speak about distinct interactions between internal and external relations when considering the relationships Menominee have to Country.

The potential to speak about internalised mentalist processes situated in a deeper interaction with the external environment of sociocognitive relations, speak about the ways Aboriginal and Torres Strait Islands conceptualise notions of inalienability to Country. In this regard, the ways an internal organisation of thinking changes encountered through attachments to Country potentially describe the effectivity of negotiating conceptual changes between differing epistemic bodies of knowledge.

Aboriginal and Torres Strait Islands students can reflect deeply on epistemic contrasts in relation to how Country is made inalienable or alienable as an epistemic consequence. Identifying ways to reduce negative friction as a function of concept changes for the sake of positive friction and more effective concept change instances (Vermunt, 1996; Vermunt & Verloop, 1999). Methodologically, Bråten et al. (2011) and Järvenoja et al. (2015) identified observational methods and a documents model as a form of content analysis. Blending such methods with verbal data generally employed for qualitative data suggested by Fontana and Frey, (2005), potentially highlights future directions methodologically in this research area.

8.2.2 Cognitive Mobility

Cognitive mobility as an external governance in comparison to *motility* appears well researched regarding socio-cultural movements. Such areas of external governance have been sought by investigations in *observation* (d'Alessio, 2012; Dymont, 2005; Fisher, 2001; MaItese, BaIIiet, & Riggs, 2013; Mogk & Goodwin, 2012; Windschitl, Dvornich,

Ryken, Tudor, & Koehler, 2007) and *embodied movement and mobility into teaching and learning spaces* (Hutchins & Renner, 2012; V. R. Lee, 2014; V. R. Lee & Drake, 2013; Ma, 2017; Stevens, 2012; Taylor & Hall, 2013).

Notwithstanding such contributions, the salience of Järvenoja et al's (2015) commentary describes the difference between sociocognitive perspective which provide a solid understanding of individual learning, and the sociocultural perspective which explains how learning is a culturally bound enculturation process. He notes for *future* situative perspectives the clarification of how the situation-specific and contextual variation influence the process of regulated learners, all of whom have different individual characteristics and unique backgrounds and who interact within a certain learning culture.

The potential of exploring the *indigelect* as a socially and linguistically defined sense of the inherency of privileged knowing through the notion of language ideology (Hymes, 1996; Mumby, 1989; Silverstein, 1976), was identified within the research project. My research and the participants all actively contributed through the conventions of a formal grapholect to share Indigenised meanings as a formal engagement with the informal meaning making processes of extracting from Community and Country the resource valued by institutions. Further, the researcher's complicity in this process of operating from privileged institutional places, can potentially be a contributing factor of situating Indigenised meanings and Knowing as institutionally privileged. Community and Country will always rally against such accentuating processes (Kenway, 2015; Kenway & Prosser, 2015). As one of the student participants voice *the Knowledge is everywhere* (N4) [not only institutionally].

In these instances, how such institutionalised process and school places contribute to one form of the grapholect to the detrimental segregation and marginalisation of alternatively meaningful grapholect forms for Indigenous youth, holds salience towards this future research direction. In such situations, the guiding reflexive awareness of Knowing how such authoritative processes can impact future developments can be effectively examined through methods aligned with discourse analysis and longer term ethnography (Cope & Penfield, 2011; Fisher, 2001; Ingold, 2010; McCarty, 2009; McCarty & Wyman, 2009).

8.2.3 Indigenous Research

Essentialism and cultural relativism have been defined as qualities of Indigenous methodologies and the research outcomes (Mihesuah, 1998; Porsanger, 2004). Indeed, at

a pragmatic level, institutional academics being complicit in the reduction of rigour expected from ‘insider’ researchers (Mihesuah, 1998, p. 14). Yet, Indigenous methodologies are not about rejecting or avoiding alternative epistemologies. Rather, Indigenous research is about critically observing the indissolubility of all research relations with notions of authority (Porsanger, 2004). Evidenced through institutional, epistemic, or privileged beings, Indigenous research is seen through both insider and outsider assumptions of Indigenous lived experiences (Mihesuah, 1998; Paradies, 2006; Porsanger, 2004; A. Smith, 2013; L. T. Smith, 1999).

Paradies (2006) highlights that deeper engagements with *pan-indigeneity* as an inter-subjective interpretation within Australian settings, problematises the individuality of being Indigenous. The diffusion of Indigenous research as equally urban and middle class in context against/or complementary to assumptions of Indigenous research as spiritually bound (Foley, 2000) and land based (Moreton-Robinson, 2003). Employing taxonomic research endeavours to develop the argument that the small and growing middling class of Indigenous identities and the research assumptions of legitimating such identities hold value and salience for Indigeneity and as such Indigenous Knowing more broadly (ABS, 2003; Cowlishaw, 2000; Zubrick et al., 2004). The argument that it is okay to be Indigenous, middle class and have no latent connections with Country, Language or family raises debates regarding what is Indigenous research if it is to grow and develop from a centering of Indigenous ways of knowing and being as middled, institutional and urban. Furthermore, to what degree does Indigenous research resolve to accommodate the institution and the systemic assumptions that predicate the ways we are to create and do our research for the sake of longevity.

Such assumptions by Paradies (2006) hold merit; however, the centering of higher educational endeavours within larger Australian urban metropolises ought not to disavow the pragmatic responsibilities of such powerful metropolises of privilege and the ways Indigenous research merely accommodates their powerful presence. Universities resource their Indigenous scholarships with regional and remote Indigenous students (S. Cameron & Robinson, 2014; Gore et al., 2017). Such students privilege the continuation of deep connections to Country, Language and Family as evident in this dissertation. Indeed, my field data evidences such emergent assumptions through my situated work as an Indigenous support worker in a major metropolitan university institution. Granted the Indigenous intelligentsia has developed unique and localised enclaves of privileged knowing - such that this thesis developed in Cambridge, UK ascribes complicity.

Yet, the assumption of the Australian urban metropole is to teach students to stratify, codify and provide protocols of meaning to live within the metropole in congruent ways. Indeed Australian schools, metropolitan or otherwise, aim to develop liberal, secular, moralised and regulated individuals be they non-Indigenous or Indigenous learners (Mooney et al., 2016; Riley, Howard-Wagner, Mooney, & Kutay, 2013; Scott & Armstrong, 2014).

The danger of middling and institutionalising Indigenous identity is reflective of Reay's (2017) commentary tied to historical reflections by Woodson (1933). In these instances, to what end are we teaching and educating the marginalised through the knowing we wish to privilege and know; to the detriment of what we do not know. The notions of Indigenous identity that find intellectual salience in metropole regions is an opportunity to connect and grow with and alongside regional and remote Indigenous identities and voices. The arguments that align with developing notions of Indigenous whiteness would rather be beneficial as critiquing assumptions of urban and regional privilege more so that reflecting upon the deficit logics of black and white binaries.

K. L. Martin (2008, p. 30) highlights how in the context of negotiating Native title claims, illuminate the 'ever awareness' of privileged assumptions, as a significant warning and danger for Indigenous communities negotiating legal and political domains. Such intra-Indigenous moments of awareness enculturate and grow the next generation, rather than preclude such interactive moments of intention. The feeling of being Indigenously segregated along borders of meaning; can potentially be challenged through generative ways of shaping institutional identities in positive and meaningful ways of collaboration with the very students sourced from regional and remote regions (N. Harrison & Greenfield, 2011; N. Harrison, Page, & Finneran, 2013).

8.2.4 Indigenous Methods

Indigenous research methods have largely been shaped by the necessity to challenge the dominance of deterministic methods based within the scientific tradition of positivistic assumptions (N. K. Denzin et al., 2008; A. Moreton-Robinson et al., 2009; L. T. Smith, 1999; Walter, 2005). Further this awareness has been founded on traumatic memories still held in the community where strong feelings of resentment at how community members as scientific specimens, were stripped away of human dignity in the research process (Walter, 2005). Further still, the lack of Indigenous statisticians for large scale nation state quantitative research agendas limits the ways such powerful statistical analyses by the

nation state, can actually relate data sets meaningfully to Indigenous lived experiences. Finally, the limited quantitative data set capacities is restricted to how such collections of statistical data, can significantly reframe conversations regarding the cultural, social or economic differences between Indigenous and non-Indigenous Australians or to address the specific data needs of Indigenous populations (Walter, 2005, 2010; Walter & Anderson, 2013).

The development and use of qualitative methods for this research project can infer a desire of the researcher to not engage with methods that ‘traditionally’ have been quite conducive to effect change powerfully. Further to change discourse agendas our methods inclusive of quantitative analysis need to be evident. Indeed, the development of Indigenous quantitative frameworks do offer unique methodological assumptions to ensure when such quantitative work is completed with indigenous participants such ways of Knowing and Being can be complicit in the research questions and outcomes in more respectful and ethically transparent ways for community.

The development of qualitative measures in this dissertation can be thought of as an initial entry point to qualify the exploratory nature of the questions and assumptions identified in this dissertation. Subsequent work in this research area can respond to Indigenous quantitative frameworks more readily, once the types of research questions and assumptions of research have been significantly questioned and critiqued. Indeed, the somewhat pejorative veil towards statistical research has been questioned and formative proactive research is emerging in line with an Indigenous quantitative framework (Bodkin-Andrews, Whittaker, Harrison, et al., 2017; Walter, 2005; Walter & Anderson, 2013; Walter et al., 2017).

8.2.5 Self-Reporting

Self-reporting biases within highly contextual data sets have been argued to conflate the strength of the data or reduce the effectivity of attempting independent reviews. Such an assumption has been suggested as a flaw in researcher subjective and arbitrary judgements to confound the findings (Flyvbjerg, 2006). Selective memory, telescoping, attribution and exaggeration by participants all are potential weaknesses in qualitative data sets (Cibangu, 2010, 2012; Cibangu & Hepworth, 2016; Flyvbjerg, 2006).

Connelly and Clandinin (1988) suggest that making meaning of human experiences is about the process of endlessly telling and retelling of stories to both reconfigure the past and create purpose in the future. Further, such meaningful storytelling that this dissertation

has promoted, has a co-constructive strength of both situating self-in-place for Indigenous peoples and research outcomes. This manifested strength of the ways Indigenous Knowing has existed for significant millennia, speaks more to the weaknesses in chorographic intention than to the oral storytelling ways present in participant lives (Iseke, 2013; Iseke & Brennus, 2011; Iseke & Desmoulins, 2013; L. G. Phillips & Bunda, 2018; Todd, 2018).

Oral storytelling has always emplaced meaning in respectful, empirical and contextual processes of verifiability. Revealing such ways of meaningful engagement with human experience, attends to the existence of our stories in the forms that we wish to continue to tell them. This in part has been an excursion towards identifying the agential components of meaning making for the normative and standardisations which contextualise such truths in meaning. Our ways of telling truths should not be a function of the limited engagement standardised conventions make meaning, rather standardisations need to be conducive to the changes brought on by more culturally responsive testing and assessing for educational practice (Bodkin-Andrews, Whittaker, Cooper, et al., 2017; Klenowski, 2009).

8.2.6 Privileged Assumptions

Garneau (2012a) succinctly epitomises the very feelings I have towards this dissertation in that the privileged assumptions I work with, attest to my view of being a native informant for privileged spaces. In the same way this thesis has situated knowing in alternatively privileged spaces, so this thesis is situated in an alternatively privileged space of knowing and meaning. That bridge between the two places is the ways of thinking about privilege I attended to throughout my doctoral experience. Invariably every native scholarly voice attends to this dilemma because it is the dilemma of institutional spaces that wish to know in the way they wish to know as an informed meaning making process of translating the informal to the formal. Further it attests to the insatiability of the institution to know. Well before this dissertation and knowledge production was completed, the value of Indigenous knowledge had been assumed, worked out, and commodified. This process of wanting to know and the native informants that inebriate the process contributes to such assumptions.

An original assumption of my desire to apply for a scholarship to Cambridge and Oxford to undertake post graduate educational research was based on the foundation that ‘better’ research ‘better’ skill and exposure to international voices might hold salience in such critical debates back in Australia. What was of more salient significance in the isolation and challenge of speaking from such distant and ‘disconnected’ places, has been

the formatively respondent nature of listening rather than talking. Finding my voice as both an academic and providing a valued human contribution to global discourse surrounding Indigenous Knowledge, has been scaffolded to find space to breathe and grow while aligning my research outcomes in meaningful ways across international research landscapes.

Such contributions to advocate on behalf of the voices marginalised by educational political discourse by citing complicit Indigenous and non-indigenous academics to a listening audience, has guided the meaningful intentions of developing this dissertation. In concert with this has been the explicit transparency of negotiating the tension of being considered an informant while being cognisant of the ways I can find meaningful contribution to community from such privileged spaces.

Collins-Gearing and Smith (2016, p. 160) illuminate for Indigenous education, at a university level, inclusion in English of an *Indigenising* form assists in elaborating the nature of ‘interrogating the human, generating empathy and challenging others.’ Considering the limited work in secondary school settings on how such Indigenising can occur internationally (Madden, 2014); is where this thesis situates the contributions towards teaching practice in Australia by providing additional research literature to the development of critical Indigenous pedagogies and Aboriginal and Torres Strait Islander ways of learning.

Indeed, Klenowski (2009) noted the bulk of research investigating teacher quality and high quality intellectual tasks for Australian contexts has come from overseas. This ought not to be an inference that the quality of educational research conducted within Australia surrounding Indigenous Knowledge is of limited value; but rather, the need to form international research alliances for the sake of speaking back to hegemonic assumptions in more conducive, complicit, and innovative ways for future educational research (Harrison, 2007; Harrison, 2008; Lewthwaite et al., 2015; Paige et al., 2016; Rigney, 2001, 2001).

8.3 Conclusion

8.3.1 Introduction

The latent aspects of Indigenous Knowledge can be qualified for education as a response to three related areas of knowing. Such qualifiers of engagement refer to (i) embedding IK

in curriculum (ii) IK relatedness to alternative epistemes, and (iii) assessment practices (Klenowski, 2009). This thesis has attempted to attend to all three areas by describing and interpreting the different ways Community Indigenous Elders, Indigenous Students and non-Indigenous teachers attend to the conceptual notions discussed, elaborated and defined as a process of Storying Country in meaningfully relatable ways. Additionally, to what extent such assumptions can be contextualised from explicitly privileged sites of scholarship also attend to how such knowledge scholarship contributes to the wider global discourse on Indigenous Knowledge as a significant form of epistemic strength and critical intent. Thirdly to what extent developing and relating Indigenous knowledge can contribute to the lives of students and teachers who live and experience Country as a form of inclusivity to sustaining and pragmatic intentions of learning with; alongside and connected to Aboriginal and Torres Strait islander Peoples.

8.3.2 Embedding IK Curriculum

In Chapter 4 of the research findings, creative and exploratory ways of identifying relationships between Storied IK and relatable notions of curricula items became evident. Weiner's, (2011, p. 194) example of the relationship between Storied Land (*Ballina and Angels Beach*) identifies Storied Country as a '*significance to a whole that is an Aboriginal landscape from the Indigenous point of view, but which is inherently bifold in its historical and contemporary constitution and significance.*' Educationally, Story that sits across; under; through; and over; Country holds and constitutes the significance of meaning as curriculum for Country. In other words, we learn and teach from a *Countried* existence of meaning making.

M. Nakata's (2013) contention that a middle ground for post-secondary Indigenised Education is a developing area beyond notions of a cultural interface, inter-subjectivity, inter-culturality and third-space ideas; illuminates the assumptions that these significant educational theorisations are constitutive of the whole. Underscoring such assumptions is the genuine desire to identify respectful, meaningful and trustful persuasions within competing master narratives at state and federal levels; where contestations over curriculum content invariably develop the notions of a National curriculum through a veil of epistemic truth.

The exemplified risks of positing a dichotomy between institutional practice and Indigenous community practice as antithetical to the integrative aims of identifying related conceptual goals; is tantamount to respectful meaning making for the inclusivity of IK

curricula forms in secondary school curriculum (M. Nakata, 2013). Further, the notion of *corrupted* meanings develops a sense that to what extent can we truly trust the forms of IK present in secondary school instances (Klenowski, 2009; M. Nakata, 2007; Martin Nakata, 2004; Williamson & Dalal, 2007). Such epistemic truth assumptions are founded on the explicit awareness among Indigenous parents and students that tokenistic recognition of culture in curricula forms [as well as teaching practice] do exist (Lewthwaite et al., 2015).

Indeed, the prevailing concerns just described warrant the investigations of this dissertation in Chapter 4 to critically engage with *what* is Indigenous Knowledge. The interpretation of findings describes how significant Community Elders inform the epistemic assumptions of knowing. Such informed Knowing is grounded in the awareness that they are the recognised keepers and custodians of IK situated both within contemporaneous and historical legacies of meaning. K. L. Martin, (2017) shared the significance of *history, respect, identity, knowing Country* as four major themes among 12 others, defined by parents as important for Indigenous students to *grow up strong*. In describing the significance of the findings in this project as situated within Storied Country; Story as an appreciably interactive meaning making device for curriculum, potentially responds to these findings through its Countried existence.

Curriculum like Story can be described as the different ways we try to make meaning of knowing within the middling ground of contemporary Countried discourse. Country sustains us all; our middle *ground* is Country. When we attend to Country and the Story that is Countried in both literal and conceptual understanding, we find broader and more relatable ways to engage with the rest of the World. Educating intergenerationally is what teaching and learning attends to through formal educational processes. Identifying Countried curricula forms, indexes the formal education processes of teaching and learning, by providing meaningful forms of knowing and being that scaffold the values and core beliefs relayed over millennia.

Storied artefacts provide the scope and intention of implicit IK innovation to identify relatedness with; between and connected to; existing and potential relationships of meaningful engagement with curriculum. Actively engaging in research scholarship that details and honours Indigenous ways of relating to Country impresses a contiguous and relatable form for those that live a Countried existence. This intention is to develop educational curricula example items from Story through; with; and connected to; emergent meanings. This contributes to a form of meaning making and forming of curricula frameworks of and for Indigenised Knowing. In this way interpretation is not about

quantities of meaning but importantly the qualities of Indigenous Knowing that this dissertation has illuminated as important for both educational curricula content forms and evidential research findings.

8.3.3 Relatedness to Alternative Epistemes

Deploying the contextual examples identified in ways of learning, describes the contexts with which ways of thinking can be explored as active constructions of epistemic conceptual change. Much research has continued to describe the challenges for educational institutions tasked with the responsibility of guiding, assessing, and growing the ways we understand Aboriginal and Torres Strait Islander Student achievement (Bodkin-Andrews, Whittaker, Cooper, et al., 2017; Collins-Gearing & Smith, 2016; A. Day et al., 2015; Devlin, 2009; Klenowski, 2009). Indeed, the point that holds consistent salience is the notion of ‘knowledge contest’ (A. Day et al., 2015, p. 504).

The often hidden or explicit knowledge assumptions regarding the ways institutional rubrics frame, employ, represent and manipulate Aboriginal and Torres Strait Islander students, reveals the affective layers students negotiate daily as part of their educational environments (A. Day et al., 2015). In other words, Indigenous Knowledge is either tokenistic or simply hidden as an assumption of null curriculums. Such miseducation results in the polarisations felt on both sides of the contest. Reay's (2017) account of managing the working class through education holds parallels with the marginalisation of Indigenous learners as managed subjects framed through the standardised notions of achievement.

Yet ways of learning in Chapter 5 attempts to provide active constructions of negotiating such complex dynamics in concert rather than contest with ways of teaching. Exploring the thinking changes that students make to develop and gauge how they negotiate such contested spaces, provides the opportunity to instil latent patterns of meaningful significance into curricula and teaching models and practices deployed into the didactic environment. In one example of ways of learning a student noted: *“I wouldn’t feel a part of it anymore because anyone could pay \$600 bucks you know.”* (P6). In this instance, the nature of learning and thinking for this student is reflective of the accountability measures that align alongside the ways we learn to experience rather than the experience of learning reflected within student voice (Osborne, 2013; Osborne & Guenther, 2013).

In these instances, Aboriginal and Torres Strait Islander students are reflexively cognisant of the ways they are employed for valued meanings across the spectrum of

discourse surrounding how and why their identity and ways to learn are constructed for external social accountability. In one debatable example A. J. Martin, (2006) and A. J. Martin and Dowson, (2009) and A. J. Martin et al. (2013) found salient research findings in the notion of academic buoyancy. Datu and Yuen, (2018, p. 207) raises the question regarding why transition beyond dissonance specifically for Aboriginal and Torres Strait Islander students requires an ‘ongoing’ concern. The research findings of this project on cognitive processes would otherwise challenge the governance structure that actually encumbers their resilient desire to excel.

Countried existence grows from *Grounded* ways of learning where the affective, motivating and feeling components of experiencing learning develop. This deep and ever strengthening and nutritive dimension to ways of learning allows student thinking to grow and relate through forms of dissonance encountered and *transition* through (Datu & Yuen, 2018; A. J. Martin, 2006; A. J. Martin & Dowson, 2009; A. J. Martin et al., 2013) into more integrative ways of learning. In this way students experience learning the ways of attributing meaning in respectful and meaningful dimensions of epistemic conceptual change (Mason, 2003, 2007; L. Smith, 2004; Vermunt, 1996; Vosniadou & Verschaffel, 2004).

8.3.4 Assessment Practices of Epistemes

Indigenous education research has long questioned the assumptions of assessment (Onus, 1969). In very pragmatic terms, to what end are we (educators and researchers and institutions) making claims upon education and assessing such claims as educationally purposive to ‘achievement’ for Aboriginal and Torres Strait Islander Students. Indeed, pedagogy is present from early childhood to primary to high school to tertiary and adult education (Biermann & Townsend-Cross, 2008).

Klenowski's (2009) impetuous towards culturally responsive assessment practices is an example of the inherent challenges evident in standardised testing, as well as the measures identified for testing. This critique is reflective of the challenges made to the assigned norma inscribed with socially constructed meanings; and the ways empirical verifiability of such meanings impresses upon the ways teachers *think* about the changes they see in student learning development (Bodkin-Andrews, Whittaker, Harrison, et al., 2017; Craven, Bodkin-Andrews, & Yeung, 2007; Longino, 1990; Walter et al., 2017).

Collins-Gearing and Smith (2016) contextual example of identifying deeper latent qualities of teaching for university settings suggested awareness of theorisations is not the

issue; rather, practice-based assumptions remain the challenge. Two teacher participants from Chapter 6 noted as a transition or shift in teaching practice, where they moved between *Adoptive* (G7) towards *Reflexive* (F6) ways of teaching:

“how am I supposed to...” (G7)

“[A]ctually working with Elders to be able to see how those connections and communities work.” (F6)

Biermann and Townsend-Cross, (2008) offer the argument that expressions of *Indigenous Pedagogy*, at least at a tertiary level, depend on the significance of localised expressions of connection between pedagogy and Place. Tailoring pedagogical expressions at one secondary schools’ way of teaching IK across subject domains was evident in my research findings. Elders and teachers worked together to ensure localised, IK expressions when done appropriately can be transdisciplinary in nature as teachers were learning different ways to embed IK in their respective STEAM programs (Science, Technology, Engineering, Arts, Mathematics).

The methodological assumptions of Storying such relational qualities describe the parallel international examples that highlight how Story can meaningfully inform such pragmatic pedagogical intentions (Madden, 2014, 2015; Madden & McGregor, 2013). Certainly, we can suggest that *‘it is the institution’s story that is being told through its textual practices and processes’* (Restoule, Gruner, & Metatawabin, 2013; Restoule, Mashford-Pringle, et al., 2013, p. 2).

Responding to such claims, it becomes necessary as part of a whole school reflexive turn to understand the mission of education that it holds clear and true too; that guides meaningful Indigenous educational outcomes. More specifically, IK is guided by localised protocols and transmitted through traditional approaches to learning such as ‘Storywork’ and ‘experiential learning’ (Hare, 1996; Madden, 2014, p. 71). Identifying the deeper aspects of the whole school storied identity and the Storywork involved in ensuring Indigenous Story is a part of the same mission - accounts for the reconciliatory intentions of Australian secondary school education.

Further while this research project aims to contribute back to remote educational secondary school settings, reflexively, to what end will this research contribute back to communities as a function of external institutional purviews (Osborne, 2013; Osborne & Guenther, 2013); rather than ensuring emancipatory Indigenous educational voices can be heard. In such complex dynamics, teachers can find significant respectful alliances with

Indigenous Elders. Working closely with secondary schools as a whole Elders understand the human and social capital across school and community. Like teaching entities Elders move beyond subject domains as observers, noticers and storied beings, willing to contribute meaningful guidance to such top down accountability challenges. Such affordances provide the necessary teaching voice as constitutive of both Elders and teachers working together towards IK pedagogical outcomes.

8.3.5 Countried Education

The territorialities of value that contest the ways we understand Land, Water and People potentially begins with the way such entities are held in valued *animateness* (Rose, 1991). Ways of knowing and being regarding how English settlers defined the enclosed meanings of exclusivity surrounding Land, Water and People began in earnest with the arrival of the first fleet in 1788 (Rhea, 2018).

Digging into what Rose (1991) argued as a desire to territorialise such entities (Land, Water and People), we can understand how such values were reflected in the cartographic maps that spatialised territories of Indigenous Peoples (Tindale, 1940) (see also Figure 1). Land, Water and People were mapped out and spatialised as part of the anthropological logics of meaning for knowing where the *indigene* and their territories existed across the Country (Tindale, 1940). The spatialised bird's eye view of seeing where things inclusive of People, Land and Water, developed an awareness of Sky Country seen through the settler colonial logics of knowing the existing country through the Stories of Country *selected* to be held within Sky Country, and impressed upon the mapped topography. Detailed maps of where rivers, lakes, streams, coastal fringes, mountain ranges and all topographical markers, together with the exclusive borders between Indigenous groups that neighboured each other could be understood and controlled as part of 'sovereign rights' of a colonial entity (Rhea, 2018, p. 41).

These unsettled meanings and logics now form the legacy of Aboriginal and Torres Strait Islander students identifying meaningfulness with Country through the maps made available to educational institutions (Backhaus, Horton, Szucs, Thring, & Tindale, 2016; Coller, 2007; Horton, 2000; University of Newcastle, 2016). These visual contestations, of who we identify as and through which form, subsequently develop our awareness of the constituent aspects of understanding Country and the nature of being a Countried being as contested entities moving through and with the contested continentality of our ways of knowing.

Beyond the existing cartographical meanings, the pre-colonial era suggested such territorial borders of meaning were negotiated through deep protocols of knowing Country through Language (AIATSIS, 2005). In other words, Indigenous peoples knew borders existed because their language as part of the experience of learning about Country through Ways of Knowing and Being, took Indigenous peoples so far before other groups and other territories came into view and deeper processes of negotiating visitation came into being.

Affective enculturation of experiencing learning as situating placeness, and Eldership of country, stand to reason, that Aboriginal and Torres Strait Islander Peoples see and define a Countriéd existence. In this way we see, but don't feel the existence of country seen through territorialised values mapped out by the colonising other. What we do see is the nature of our being mapped out and negotiated according to the values and beliefs through the stories we all share and negotiate through our sense of being visitors with and alongside sovereign thinkers or sovereignness through our sense of placeness with; on; alongside; and connected to Country. When Aunty KK reminded me of being a visitor and the ways my visitation situated my identifiable placeness with Country, she mentioned the following: "*You know you always have to be mindful of who's country you on*" (Aunty KK). Such inherent ways of being describe a deeper affective process of relating with; through; and alongside Country.

Internationally, the example of affective enculturation is seen through the development of an emotional commitment to *Hopi* or *Hopiit* ideals with Aboriginal lands in north-eastern Arizona (Nicholas, 2009). *Hopi* Youth engender, even without strong links to origin languages; the learning to act, the thinking, and the feeling *Hopi* through active participation in the *Hopi* world. Further, language is only *one* of the many ways to experience and learn one's culture, yet the feeling of *Hopi* situates a deep onto-epistemic desire for experiencing language and Country as Countriéd existence (Nicholas, 2009).

These formulations of being, reflect the relatedness we feel through Land and Water and Sky as meaningfully connected to a Countriéd existence. In the final image overleaf (Fig 6), this dissertation attempts to map our relationality in more nuanced and situated ways of knowing while expressing the nature of contested borders of meaning. Implicitly reflected in the image is the values of Country as a conscious Country alive within the coloured rivers and waterways mapped within the continental black landscape.

Overlayed in white borders of meaning are the same contextual borders reflected in Fig 1 at the beginning of this dissertation. As a visual, philosophically grounded expression, Fig 6 attempts to situate Countriéd Education as a meaningfully implicit consciousness of

Land, Water and Sky. Explicitly, Sky represents the colonising stories overlayed as territorialities of white bordered meaning positioning peoples according to external assumptions. The rivers and waterways mapped and coloured represents the consciousness of life ways and story ways, Country and known in alternative ways of bordering and relating meaningfulness, feeding and connecting to the black landscape identified in the image.

Such visual spatialisation aims to reflect the Country existences of an inalienability that Aboriginal and Torres Straits Islanders think and feel with and in Place. Educationally situated relatedness to different ways Country existence is Placed, argues that the conceptual language of Country and what it means through Land, Water and Sky takes on alternative conceptual assumptions when teaching and learning locates Aboriginal and Torres Strait Islander students on Country when they find themselves relocated to major urban environments or in communities where secondary schools are situated.

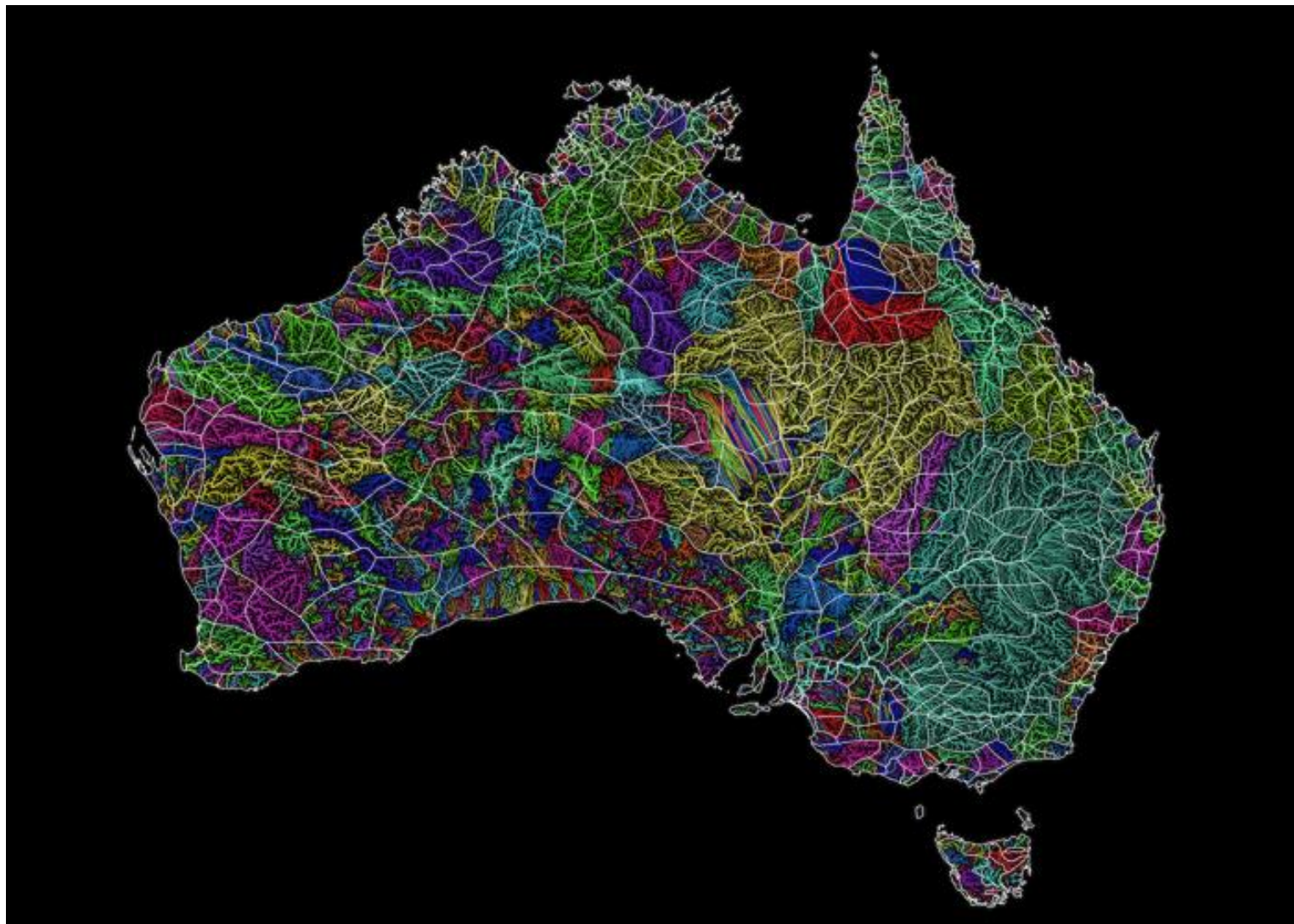


Figure 6: Illustrating the notion of Country Education

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Appendix A

Glossary

Anishnaabe	The Ojibwe are one of the most populous and widely distributed Indian groups in North America, with 150 bands throughout the north-central United States and southern Canada. The Ojibwe themselves use their native word <i>Anishinabe</i> (plural: <i>Anishinabeg</i>), meaning "original people." The Saukteaux and Mississauga are subtribes of the Ojibwe; the Ottawa, though they are closely related and speak the same language, have long held the status of a distinct tribe. Today there are 200,000 Ojibwe Indians living throughout their traditional territories.
Artefact:	The respectful use of the word develops an awareness that thoughts like physical objects are traded between Aboriginal and Torres Strait Islander Peoples. Sharing of thoughts to inform subsequent generations through education, requires the naming of thoughts related to experiences to develop the forms of Indigenous Knowing that Aboriginal and Torres Strait Islanders know, and feel are important.
Aligned Story:	Emplaced and Enacted Storyline being meaningful
Allodial Principle:	Fundamental relationship between communal responsibilities and individual responsibilities to Country
ATSI:	Aboriginal and Torres Strait Islander person
Bodied:	Kind of being in relation to another kind of being, defining wholeness of individual entities that meet and interact
Beingness:	Qualities of relatedness in and between beings
Carers:	Elders are part of the group of entities that look after Country and hold Story of Country
Continentality:	Continentality scientifically describes the temperament between Land and Water and the respective bodies capacity to hold higher temperatures. Metaphorically it describes for me the ways I see relationships between Indigenous and non-Indigenous peoples. The selective memories held by each group and the capacity of each group to hold traumatic memories resiliently.
Country	The preferred Indigenous Australian term for the geolocation of a specific people's land and water place

Countried Existence	Indigenous peoples identify with an implicit and complicit sense of Indigenous identifiability situated in Country as a located form of knowing where Country is and where identity is located in relation to Country. This sense of knowing can be <i>sleeping</i> or <i>awake</i> as a conscious or unconscious process of knowing and enacting relatedness
Communitied Story:	Participants share from their individual storyline's important thoughts about what educational settings ought to teach when talking with; alongside; and connected to the notion of Indigenous Knowledge.
Co-researchers:	Participants in the project interviewed and who share knowledge, as well as researchers in conversation with my aims, as well as the authors I cite in my verbalised form of dissertation.
Co-participants:	Participants in the project interviewed who share knowledge as well as the spatial locations that informs my awareness and understanding of meaning.
Dreaming Stories:	The dreaming is a non-Indigenous interpretation of the creationary period of Indigenous philosophies. Notwithstanding the problematics of the english translation of the time period, each of the original languages pre-invasion located across the (Australian) continental scape had a language word for the 'time' period in question. The stories that are told in contemporary periods have been described variously as 'myths' 'folktales' and 'primitive' forms of meaning making. Dreaming however has been re-claimed and sacredised by Indigenous thought to convey to non-Indigenous thought our ideas of our creationary period.
Eldership:	Shared Indigenous Knowledge of Storied Country
Elevation:	The extent of differences in meaning between two contrasting epistemologies and the assumed gap between epistemologies of equivalence
Equivalence:	The translations between epistemologies will result in equivalent forms of knowing built on the assumption that the gap is what needs to be removed
Claiming Equivalence	By claiming equivalence we assume an evaluated epistemology
Evaluated epistemology	Epistemology assessed authoritatively as valued and worthy
Experiential:	Involving or based on experience and noticing or watching.

Emplaced:	To put in place or position
Emerge:	Become apparent or prominent, to become visible and precept (<i>that way of meaning came from that place</i>)
Genitive Meaning:	Relating to or denoting a case of nouns and pronouns (and words in grammatical agreement with them) indicating possession or close association. E.g. Indigenous Knowledges
Geontopower:	Devolved from the notion of bio-power, geontopower considers the relationship between non-life and being and the ways we don't consider the relatedness as more meaningful to our being than we at first acknowledged
Grapholect:	The explicitly established convention and standardised language to convey meaning (e.g. Australian English)
Guesthood:	Guesthood frames the rights and privileges as a guest you hold in relation to sovereign owners and thinkers on Country or when you use sovereign thinking in non-situated ways
Guesting:	The awareness that you are negotiating Guesthood on someone else's sovereign lands and how you treat such lands and how you navigate such Guesthood privileges.
Haudenosaunee:	The Haudenosaunee, or "people of the longhouse," referred to also as <i>Iroquois</i> or <i>Six Nations</i> , are members of a confederacy of Aboriginal nations known as the Haudenosaunee Confederacy. Originally a confederacy of five nations inhabiting the northern part of New York state, the Haudenosaunee consisted of the <i>Seneca</i> , <i>Cayuga</i> , <i>Oneida</i> , <i>Onondaga</i> and <i>Mohawk</i> . When the <i>Tuscarora</i> joined the confederacy early in the 18th century, it became known as the Six Nations. Today, Haudenosaunee live on well-populated reserves - known as reservations in the United States - as well as in off-reserve communities.
Healing Country:	Situated place knowledge which describes the existence of relationships to Country that are healing or healthy enough to respond respectfully to deep trauma, or the harmful effects to life through physical, affective, biological, social, or meaningful trauma
Hegemony:	Leadership or dominance, especially by one state or social group over others. (e.g. Australian governance of Indigenous Peoples or non-situated knowledges over situated knowledges)
Immanence:	Affecting temporal <i>nowness</i> as close as possible to temporal now in my conscious thinking

Immersive:	Deep mental involvement in something, the action of immersing someone or something in a learning experience
Integrate:	Combine (one or more things) with another to form a whole
Indigelect:	The implicit established and standardised written language to convey meaning of Indigenous Knowledge (in this English Indigenous). Indigelect can be thought of as the metalanguage we use to locate indigenised ways of thinking within english and how this manifests bases on the assumptions of linguistic morphology and invariance.
Institution:	Formal educational settings
Inter-ancestral:	The self as seen intergenerationally and existing in-between
Karrabing:	A group of critical Indigenous thinkers that live with, through and within community in and around Darwin in the Northern Territory of Australia
Land:	The dirt that exists above, between and within Sky and Water that is deployed to make meaning of Sky and Water
Lateral self:	Describing the related connections Aboriginal and Torres Strait Islanders affectively maintain to associated entities
Men's Business:	Traditional ways of meaning regarding how social activities, relations, ceremonies and responsibilities within a community were assigned accordingly by Elders
My Country	A belonging to land, sea, sky, rivers, sites, seasons, plants and animals; place of heritage and spirituality
Morphological invariance:	Describes the linguistic shape and meaning of the grapholect and suggests the conditions of meaningfulness vary while the meaning maintains its territorial shape accordingly
Non-situated	Describes conceptualisations that do not originate from the geo-location of Place. Non-situated is an alternative to using the 'western' notion as a geolocated territory in textual expression.
Noongar:	Noongar have lived in the south-west of Western Australia for more than 45,000 years.
Nyitting:	Noongar Language for glacial cold periods in Earth's evolutionary history
Orality:	Orality describes the qualities or ways of being experienced by practitioners as they navigate ways of meaning within the

	experiential setting where they engage with Indigenous Knowledge
Oracy:	The ability to express oneself fluently and grammatically in speech
Place:	A person, entity, memory, word, story, being, way of knowing that is specifically located to an area
Place Knowledge	Developing from mental Place Thoughts as both literal and conceptual of the Storied ways of defining and situating place
Quandamooka	Constituting <i>Nughi</i> , <i>Nunukul</i> and <i>Goenpul</i> Peoples situated within and around Moreton Bay and North Stradbroke Islands
Reflexive:	Of a method or theory in the social sciences, taking account of itself or of the effect of the personality or presence of the researcher on what is being investigated
Regionalise	Knowing exists in places or regions of knowing that are built up over time to define deeper sense-abilities of knowing a place
Sickness Country:	Situated place knowledge which describes the existence of relationships to Country that are unhealthy or hold deep trauma, or will harm life - physically, affectively, biologically, socially, or meaningfully
Sky:	The space that exists above, and within Land and Water that is deployed to make meaning of Land and Water through Story
Storied Form:	Resultant Storyline of Storied Country
Storied Country:	Storying Country
Transpersonal:	Aboriginal and Torres Strait Islander conceptualisations of being more than one self
Turtle Island:	The name given by some Native American peoples for continental North America
Trunk:	A person's or animal's body apart from limbs and the head, the main stem, part of a living thing as distinct from its external appendages.
Warkarl	Water snake from the Nyitting period in Noongar Language

Water:	The fluid that exists above, between and within Land and Sky that is deployed to make meaning of Land and Sky
We	Referring to Aboriginal and Torres Strait Islander Peoples as part of a body of Indigenous thinkers and learners
Women's Business	Traditional ways of meaning regarding how social activities, relations, ceremonies and responsibilities within a community were assigned accordingly by Elders

Appendix B

Broader Descriptions of IK Constructs

ITMT (Indigenous Traditional Models of Teaching)

This pathway is grounded in what has been referred to as traditional, oral knowledge, Indigenous knowledge (Cajete, 1994; K. L. Martin, 2008; Mowaljarlai & Malnic, 1993). It is important to stress that Indigenous knowledge cannot be considered a uniform concept across indigenous peoples (M. A. Battiste & Henderson, 2000). Alternatively Indigenous knowledge can be considered as knowledges informed and infused by place (Madden, 2015). Particular philosophies and practices emerge through longstanding meta-physical relationships with land that is situated in diverse and complex geographical, historical, spiritual, and political contexts (Cajete, 1994; Donald, 2012; K. L. Martin, 2008; Mowaljarlai & Malnic, 1993).

PFD (Pedagogy for Decolonising)

A significant component of Indigenous education is examining [and] learning from, and challenging historical and on-going colonial structures and relationships (Iseke, 2008). Witnessing Indigenous counter- narratives of resistance and cultural regeneration encourages accountability for the ethical demands history makes upon the present to support decolonial goals, as opposed to presenting a framework for teacher education that ‘achieves decolonisation’ or produces ‘decolonised teachers’ (Tuck & Yang, 2012).

IARE (Indigenous Anti-Racist Education)

Focuses on deconstructing problematic perceptions of racialised and Indigenous peoples and groups. The premise here highlights anti-racist education is founded on the assumption that institutional structures that advance racial discrimination and ethnocentrism exist, resulting in the marginalization of racialised peoples and groups, while privileging those who are white. Anti-racist education addresses race and challenges racial ideologies and discrimination that maintain racialised, classed, gendered, and heteronormative hierarchies.

IPBK (Indigenous and Placed-based education)

This approach brings teachers in relation with situated Indigenous knowledges, as well as Indigenous-non-Indigenous histories and contemporary realities that emerge from

interconnected relationships formed in and through place. Developing a renewed understanding of the places they inhabit positions teachers to regenerate an enhanced relationship to the present within the spirit of spirit of reconciliation. Guided by local Indigenous protocols, teacher educators and teachers learn to visit and feed the places where knowledge sits as a form of renewing relationships between place, peoples, and beings (Chambers, 2006). This context specific process actively encourages teachers to engage with Indigenous groups within the community be it community leaders, families/parental carer givers - to learn and share understanding of learning and its outcomes.

Appendix C

INFORMATION SHEET

PROJECT TITLE: Exploring how students understand Indigenous Knowledge as part of the learning experience

You are invited to take part in a research project looking at the way students learn about Indigenous Knowledge and what they find is important. The study aims to explore the relationships between learning processes and Indigenous Knowledge. The study is being conducted by **Vincent Backhaus**. Vincent is a Kalkadoon & Kiwai man with ancestral links to Mt Isa (Queensland) and Parama Island (Torres Strait) and **your knowledge** will contribute to his Doctorate in Education at the University of Cambridge.

There is one part to your involvement in the study:

Part one will ask you to share in a yarn about 30 mins or longer. The yarn mainly asks questions about your experiences and relationships to Indigenous Knowledge in a learning experience. As a participant you will be asked some questions about Indigenous Knowledge and you will be invited to share.

Taking part in this study is completely voluntary and you can stop taking part in the study at any time without explanation or prejudice. You may also withdraw any information that you have provided.

If you feel that during the study you don't want to participate, and you feel uncomfortable or worried about taking part, you can stop. If after the study, you feel worried and or concerned about what you have said you can talk to Uncle or Auntie (insert name here)

Your responses and contact details will be strictly confidential. The data from the study will be used in research publications for the Faculty of Education, Psychology and Education Department (P&E), University of Cambridge. You will not be identified in any way in these publications.

If you have any questions about the study, please contact: **Vincent Backhaus/ Professor Jan Vermunt P&E Department University of Cambridge**



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Appendix D

INFORMED CONSENT FORM

PRINCIPAL INVESTIGATOR	Vincent Stuart Backhaus
PROJECT TITLE:	Exploring how students understand Indigenous Knowledge as part of the learning experience
FACULTY	Education

Dear Parent/Guardian

Your son/daughter has been invited to participate in a university study conducted by **Vincent Backhaus**. Vincent is a Kalkadoon (Mt Isa) and Kiwai man (Torres Straits) who is studying at the University of Cambridge, UK. The study contributes to his doctorate in Education. The study aims to look at how Indigenous Knowledge is understood by your son/daughter in relation to learning.

Their participation in the study is totally voluntary and the study will be approximately 30 mins or up to a maximum of 40 mins depending on how much knowledge they wish to share.

As a participant your son/ daughter will be asked to yarn up knowledge about their experiences with Indigenous Knowledge as part of a learning environment.

Their participation will involve sitting down for a yarn with the researcher and having their voice recorded. If you consent for your son/daughter to participate you agree that the researcher may use the recording of their knowledge as described in the information sheet.

You acknowledge that:

- Any risks and possible effects of **sharing knowledge in a yarn** have been explained to my satisfaction;
- Taking part in this study is voluntary and you are aware that your son/daughter can stop taking part in it at any time without explanation or prejudice and have the *"Right to withdraw"* any unprocessed data they have provided;
- That any information they give will be kept strictly confidential and that no names will be used to identify them with this study without your and their approval;
- Confidentiality can be assured of **yarn/personal interview** information

(Please tick to indicate consent)

I consent for my son/daughter (insert name) _____
to participate in **Yarning up with the researcher**:

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

I consent for my son/daughter to have their **voice recorded** as part of the study:

Name: (printed)	
Signature:	Date:

Appendix E

INFORMED CONSENT FORM

PRINCIPAL INVESTIGATOR	Vincent Stuart Backhaus
PROJECT TITLE:	Exploring how students understand Indigenous Knowledge as part of the learning experience
FACULTY	Education

Dear Sir/Madam

You have been invited to participate in a university study conducted by **Vincent Backhaus** who is studying at the University of Cambridge, UK. The study contributes to a Doctorate in Education. The study aims to look at how Indigenous Knowledge is understood in relation to learning.

Your participation in the study is totally voluntary and will be carried out at a time to be discussed. Your participation in the study will dependant on how you feel and what knowledge you wish to share during our time together.

As a participant I wanted to yarn up knowledge with you about ways young people can learn about Indigenous Knowledge within your understanding.

Your participation will involve sitting down for a yarn with the researcher either in a group or individually and having yours or the groups voice recorded. If you consent to participate you agree that the researcher may use the recording of your knowledge as described in the information sheet.

You acknowledge that:

- Any risks and possible effects of **sharing knowledge in a yarn** have been explained to your satisfaction;
- Taking part in this study is voluntary and you are aware that you can stop taking part in the interview at any time without explanation or prejudice and have the "*Right to withdraw*" any unprocessed data you have provided;
- That any information you give will be kept strictly confidential and that no names will be used to identify you with this study without your approval;
- Confidentiality can be assured of your **yarn/personal interview** information

(Please tick to indicate consent)

I consent to participate in **an interview with the researcher**:

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

I consent to have my **voice recorded** as part of the study:

Name: (printed)	
Signature:	Date:

Appendix F

DEBRIEF SHEET

“Exploring how students understand Indigenous Knowledge as part of the learning experience”

Dear Participant

During this study, you were asked to participate in a study about your experiences working with Indigenous Knowledge. You sat down with the researcher and we spoke about the different ways Indigenous Knowledge has impacted or influenced your learning experience.

You are reminded that your original consent document included the following information: *“right to withdraw.”* If you have any concerns about your participation or the knowledge you shared please discuss this with me. I will be happy to provide any information I can to help answer questions you have about this study.

If you are really concerned and you would like to have your knowledge withdrawn, and the data is identifiable, we will do so.

If you have questions about your participation in the study, please contact me at vsb24@cam.ac.uk, or my faculty supervisor, Professor Jan Vermunt jdhv2@cam.ac.uk

Please again accept my appreciation for your participation in this study.

Vincent Backhaus
