

THE RHYTHM OF STORYTELLING AS INVITATION:  
A WHITEHEADIAN INTERPRETATION OF  
“THE WOOD BETWEEN THE WORLDS”

A Thesis Submitted to the College of  
Graduate Studies and Research  
In Partial Fulfillment of the Requirements  
For the Degree of Master of Education  
In the Department of Educational Foundations  
University of Saskatchewan  
Saskatoon

By

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## ABSTRACT

Imaginative storytelling offered as an invitation to learning dovetails with the notion of Romance in cyclical, organic learning. It is upon the theme of rhythmic storytelling and its relationship to Alfred North Whitehead's cycle of Romance/Freedom of "The Wood between the Worlds" that I concentrate in this thesis. The thesis proceeds in four chapters to facilitate such understanding. Chapter One reawakens the childlike wonder of the stories my father related to me when I was young; my personal academic trajectory traces out the Whiteheadian pattern of the overlapping tri-cycle of Romance/Freedom, Precision/Self-Discipline, and Generalization/Freedom. Chapter Two introduces the enchanted Narnian "Wood between the Worlds" envisioned by Clive Staples Lewis with reference to the literary and sensory forests I have known. Chapter Three presents the Voices of the Children from my Grade Two class over a period of one year, based upon my memories and personal anecdotal notes of their stories as well as their creative use of storytelling. I also explore Antonio Machón's consideration of children's *drawings* as storytelling. In conclusion, Chapter Four describes my journeys with First Nations pilot programs *Math Warriors* (Saskatoon Catholic School Board) and *Indigenous Knowledge in Science* (Saskatoon Public School Board), leading me to better appreciate Indigenous educational philosophy. In the process I consider insights shared by Verna Kirkness (Cree), Jo-ann Archibald (Stó:lō and Coast Salish), and others. Finally, I interpret "The Wood between the Worlds" from a Whiteheadian perspective, reflecting upon contrasts and commonalities Whitehead may share with Aboriginal thought.

## ACKNOWLEDGEMENTS

I am grateful to those who have shared the joy of this journey.

My sincere, deepest appreciation to my thesis supervisor Dr. Howard Woodhouse, truly a creative, influential member of that *band of scholars*, whose stimulating support and insight were inspirational to my delight in writing.

Thanks to Dr. Shaun Murphy, Oral Defense Chair, Dr. Dianne Miller, Internal Examiner, and Dr. Daniel Regnier, External Examiner. I appreciate the generosity of all those investing time and effort on my behalf.

Thank you to the Saskatoon Public School Division for your support and trust in granting me a year's Academic Educational Leave to realize a lifelong dream.

Thank you to the Social Sciences and Humanities Research Council of Canada (SSHRC) for their generous support of this research initiative. May it indeed help develop talent, generate insights, and forge connections to change people's lives and ensure a better future for Canada.

Loving gratitude belongs always to my beloved boys Greg, Gideon, James, and David. Your enduring & heartening humour, encouragement, cheering onwards & upwards, Masters modeling, healing walks, and Michelin Star meals gave me strength to continue this celebratory expedition.

## DEDICATION

This work is dedicated with deep love to my father, Jim Clark (1938 – 2005) without whose wondrous stories and flights of imagination I would not be who I am.

**Ad memoriam Jacobi Josephi Clark patris carissimi Kee filia dedit a.d. mmxv**

καὶ ἐμπιστος χαρούμενος εὐγενῆς φίλος Στρίδερ xxi-xxv

## TABLE OF CONTENTS

PERMISSION TO USE.....	i
ACKNOWLEDGEMENTS.....	ii
DEDICATION.....	iii
ABSTRACT.....	iv
TABLE OF CONTENTS.....	v

### CHAPTER ONE: STORYTELLING AS A ROMANTIC AND IMAGINATIVE INVITATION TO LEARNING

1.1	My Father’s Stories: Romancing by Storytelling	1
1.2	The Rhythm of Storytelling as Invitation: “The Wood between the Worlds”	3
1.3	Whitehead's Cycles of Growth and their Relation to My Own Experience	6
1.4	Statement of the Problem	9
1.5	Purpose of the Thesis	12
1.6	Hermeneutics as Interpretation	14
1.7	Brief Definition of Concepts	16
1.8	Summary of Next Chapters	19

### CHAPTER TWO: “THE WOOD BETWEEN THE WORLDS”

2.1	Structure of the Chapter	21
2.2	Some Forests I Have Known	21

2.3	Lewis’ “Wood between the Worlds”	23
2.4	Metaphors within “The Wood between the Worlds”	26
2.5	Different Kinds of Tales	30
2.6	Why “The Wood Between the Worlds:” A Whiteheadian Prospect	35
	Notes	36

### CHAPTER THREE: VOICES OF THE CHILDREN IN MY CLASSROOM

3.1	Introduction	39
3.2	The Story Woods: Children’s Improvised Verbal Storytelling	39
3.3	Writing Stories Responsively to Narnia’s “Wood between the Worlds”	40
3.4	Interpretative Considerations for Children’s Storytelling in the Whiteheadian Romance Cycle	42
3.5	The Voice of Graphic Representation in Art and Storytelling: Antonio Machón	45
3.6	Machón on Drawing as Storytelling	47
3.7	Connections: Applying an Ontological Hermeneutical Approach to Understanding Children’s Stories	49
3.8	Storytelling, Empathy, and Masks	49
3.9	Children’s Stories: Beginnings and Endings	50
3.10	Children’s Stories: Emergent Themes	52
3.11	Conclusion: Stories, Themes, and Emotions	53
	Notes	54

CHAPTER FOUR: *MATH WARRIORS*, STORYWORK, AND “THE WOOD BETWEEN THE  
WORLDS” FROM A WHITEHEADIAN PERSPECTIVE

4.1	Introduction	56
4.2	Re-awakening the Old Stories	57
4.3	<i>Math Warriors</i>	59
4.4	<i>Math Warriors</i> Interpreted Through Aboriginal Thought	63
4.5	Christie’s Story: Enhancing Science with Indigenous Knowledge	68
4.6	Whitehead and Storywork: Commonalities and Contrasts	69
4.7	“The Wood between the Worlds:” A Whiteheadian Interpretation	71
	Notes	73
	References	76

## CHAPTER ONE: STORYTELLING AS A ROMANTIC AND IMAGINATIVE INVITATION TO LEARNING

### 1.1 My Father's Stories: Romancing by Storytelling

As my father and I drove to school together every morning at 7:15, he used to recount for me the most amazing tales of ancient peoples, places, and wondrous events. My favourites included tales about a powerful king who went mad, growing his fingernails long and grazing upon grass like a cow; a people who carved awesome stone winged lions, taller than our house, to place on both sides of a monarch's throne; bloodthirsty warriors who dragged conquered peoples off as booty to resettle or enslave; young boys defying an absolute monarch and so being thrown into a fiery furnace to be burned alive; kings who could not be approached by anyone on pain of grisly torture and hideous deaths; incredible discoveries of antiquated libraries of clay cuneiform tablets written in strange scratches and triangles; horrifying tombs in which tyrants and slaves were buried alive; hanging gardens that were so gorgeous that they were considered a world wonder of their time. The gruesome glory of these peoples enthralled me and kept me awake nights; I was captivated.

My father's chronicles provided more than enough romance to enchant my imagination. I would wake up Sunday mornings thrilled with knowing my father was going to relate one of his corker stories to his boys' Sunday School class. An avid lover of the Hebrew Scriptures and also, surprisingly, a straight-laced Presbyterian of fierce Ulster Scot heritage, my father was an eccentric conundrum. My great-grandfather, Joseph T. Clark, senior editor of the Toronto Star, had forged roots with Knox Presbyterian Church on Toronto's Spadina Avenue in 1898, and we were firmly entrenched as a clan. My father, James Joseph Clark, traditionally taught the Grade 4 Boys' Class and my nine-year-old self would sneak into his sessions to witness the alchemy of his yo-yo championship moves while discussing Babylonian legends, his depiction of ferocious ancient battles with mere flannel graphs, and his renderings of grim Hebraic proverbs into treasure hunts. All through the sermon and on the drive home, I would open my Old Testament to discover where he had found his story – most often in Kings, Chronicles or Proverbs. I would ask him many questions; he would direct me to dictionaries and concordances. I was elated to

unearth details in my sleuthing to share with my father whose face would register pride and pleasure in my discoveries.

It was only later that I learned about *seanchaithe* – traditional Irish storytellers and historians – with whom my Ulster, County Tyrone, Omagh-roots father could claim fraternity. I first learned about *seanchaithe* from Frank McCourt’s *Teacher Man*:

Why would anyone want to know about my miserable life? Then I realized this is what my father did when he told us stories by the fire. He told us about men called seanachies [sic] who traveled the country telling the hundreds of stories they carried in their heads. People would let them warm themselves by the fire, offer them a drop, feed them whatever they were having themselves, listen to several hours of story and song that seemed endless, give them a blanket or sack to cover themselves on the bed of straw in the corner...

I argue with myself, You’re telling stories and you’re supposed to be teaching.

I am teaching. Storytelling is teaching. (Mccourt, 2005, p.26)

These respected storytellers, servants to their tribal chiefs, kept track of clan information and were bearers of “old lore” (*seanchas*). In the ancient Celtic culture, the history and laws of the people were not written down but memorized in long lyric poems which were recited by bards (*filí*). *Seanchaithe* used a spectrum of storytelling conventions, styles of speech, and gestures peculiar to Irish folk tradition which characterized them as practitioners of their art, passing tales from one practitioner to another without ever being written down. One vital role of the *seanchaithe* was to act as custodians of indigenous oral tradition. Some *seanchaithe* were not part of a clan but were itinerants, traveling from one community to another offering their skills in exchange for food and shelter. Others were members of a settled community as village storytellers who told their stories and tales at ceremonies and community events (see Colum, 1985).

Canadian authors Farley and Claire Mowat mention “mummers” in their reminiscing stories about their life in Newfoundland:

For weeks... they had been telling Farley and me about mummers. All the Dog Cove children had been telling us - warning us, in the way of children trying to scare each other with tales of bogey men. I’d never heard about mummary until that winter, though Farley had read about it somewhere in connection with customs of England in earlier times. As he understood it, mummers were originally wandering bands of musicians and actors who performed during the Christmas season but had vanished from the English scene as long

ago as the early 18<sup>th</sup> century. But this ancient custom had somehow managed to survive in Newfoundland... (Mowat, 1983, pp. 44-48)

While the Newfoundland tradition of mummers is somewhat different from that of the *seanchaithe*, it too has enabled people in isolated communities to celebrate and communicate with each other over the Christmas season. At contemporary events such as the Mummers' Festival in County Galway, Ireland, storytellers preserve the stories and oratory style of the *seanchaithe*, displaying their art and competing for awards.

It was my father's stories, drawing on the tradition of the *seanchaithe*, which first romanced me into a lifelong intellectual love affair, continuously bringing me an elation that sweeps into my life and spirit as steadily as the song of rhythmic ocean waves. I did not know then, as I do now, of Alfred North Whitehead's philosophy of learning as Romance. But my intellectual life has been hallmarked with it, and my spirit resonated to it as soon as my eye fell upon the first page of *The Aims of Education*, just as my heart thrilled to it in another Irish author's work, C.S. Lewis' *The Magician's Nephew* (1955) in which he writes about "The Wood between the Worlds," an imaginary realm in which children move, play, and learn in free and unrestrained ways. In the course of this thesis I show how these two works refresh my own work as a teacher by providing a theoretical and practical source for my own learning. For I have come to realize that I want to be a *seanchaí*, like my father; a primary teacher who can use the rhythm of storytelling to summon seven-year-olds to dive into a beckoning pool and discover an intellectual life bringing purpose and joy into their lives.

## 1.2 The Rhythm of Storytelling as Invitation: "The Wood between the Worlds"

My father's stories had so nourished my passion for ancient history that I wanted to be able to open a Hellenistic text and understand its narratives. So, in Grade 11, I changed high schools to where the last of a dying breed could be found: Miss Rowley, a Classics Teacher. I attended her Classical Greek class with two other students at 7 a.m. every morning, and when she complimented me on the use of my iota subscript, I was determined to throw myself into full-fledged self-discipline to learn and master every facet of this language. I was the only one of Miss Rowley's three students to continue into university linguistic studies, but without the ground for such learning having been prepared by my father's romantic storytelling, it is unlikely that I would have flourished in this way.

The learning experiences nurtured first by my father and then by Miss Rowley profoundly influenced the direction of my life, my university study, and professional choices. Now I wanted to be able to decipher the ancient languages spoken by the Sumerians, Assyrians, Babylonians, Hebrews, Chaldeans, and Greeks. And I did. My University of Toronto years were spent deliciously savouring strange letters, parsing verb forms, translating by the hour in the Emmanuel and Knox College alcoves and under leafy trees on Philosopher's Walk, burying myself in covert carrels on the 12<sup>th</sup> floor of Robart's Library. My lexicons were my code breakers and I was inseparable from them, weighty as they were. I rarely came up for air.

Much later, when I was introduced to the educational thought of Alfred North Whitehead, I came to understand the importance of the rhythm of learning or what he refers to as the rhythmic cycles of growth. For Whitehead, there are three overlapping cycles in the learning process: Romance/freedom, precision/self-discipline, and generalization as a return to freedom. The rhythm is the alternating pattern of freedom—self-discipline—freedom, “an alternation of dominance... a distinction of emphasis, of pervasive quality” (Whitehead, 1929/1967, p. 28). It is worth noting that without this rhythmic quality, the cycle will be out of balance. Romance, for example, is characterized by freedom in which the learner browses unimpeded in the world and amongst ideas she finds of interest. Without freedom, Romance shrivels and dies. Whitehead himself writes about Romance/freedom as a “golden age of ideas, facts, relationships, stories, histories, possibilities, artistry in words, sounds, form, colour, stirring feelings, exciting appreciation, inciting to impulses” (1929/1967, p. 21). Romance is this spirit: a little child of radiating face, widened eyes focused solely upon the face of a storyteller, parted lips, racing heartbeat, clasped hands, quiet body cast in a spell by the mind-pictures drawn by the words of the storyteller; I imagine this child sitting in sweet grass under a mature tree whose leaves cannot remain still, dancing in whispers of breeze, dappled sunlight, and snippets of birdsong. This is the initial part of the learning process which entralls the mind and heart, giving glimpses “of the vivid, possible, novel, unexplored” (1929/1967, p. 17) as invitation to the intellect through an emotional process of wonder and adventure. And this romantic and emotional adventure should be nourished by “discursive activity amid a welter of ideas and experience” and “plenty of browsing and first-hand experiences involving adventures of thought and action” (1929/1967, pp. 32, 33). I see this as very much like the forming of a fairy tale quest or Arthurian-type

legend: the adventurer is autonomous, travelling freely, exploring, and discovering along the way with no set destination.

It is the rhythm of Romance/freedom at the core of my lifelong intellectual love affair around which the thesis revolves – The Rhythm of Storytelling as Invitation: A Whiteheadian Interpretation of “The Wood between the Worlds.” The title draws from C.S. Lewis’ 1955 novel *The Magician’s Nephew*. Even as a young child, Lewis’ Wood, described briefly in the following quotation, beckoned to me as my portal to enter any magical world I chose:

I don’t believe this wood is a world at all. I think it’s just an in-between place...a place that isn’t in any of the worlds, but once you’ve found that place, you can get into them all...I think we can get out of this place into jolly well Anywhere! We don’t need to jump back into the same pool we came up by. Or not just yet. (Lewis, 1955, p. 37)

The Wood enchanted me: my mind and heart desired ancient history and language codes, but I have learned that children of diverse interests choose different pools in which to allow their imaginations to bathe and frolic. And I consider this precious Wood as the act of storytelling – the inviting, romancing, and beguiling of another to be transported into any intellectual world of their mind’s desire: the beginning of a lifelong intellectual love affair. It is upon this theme of rhythmic storytelling and its relationship to Romance/freedom of “The Wood between the Worlds” that I concentrate in this thesis.

The reason for my emphasis upon rhythmic storytelling is that by using Whitehead’s theoretical framework, I am able to consider how such storytelling is strengthened by his account of the rhythmic cycles of growth, especially that of Romance in which freedom is dominant. The first time I read Lewis’ description of “The Wood between the Worlds,” I recognized that I had simultaneously entered an Otherworld as well as a place that I already knew – that I had always known – intimately, within my own spirit: the rich, warm silence, the fullness of life, within this Wood in which you could almost hear the trees growing. Lewis’ “Wood between the Worlds” represents a type of mythic fantasy story well suited to the Romance cycle in which the child can freely explore its meaning. The Wood is a place of wonder and enchantment, where s/he can use her imagination in novel ways that “stir his [sic] feelings, excite his appreciation, and incite his impulses to kindred activities” (Whitehead, 1929/1967, p. 21). This precious Wood is the very *act* of storytelling – the romancing of a

child's imagination to intrinsically desire to dive into any subject or discipline that is drawing, or calling to, them.

I believe that "The Wood between the Worlds," used as a pedagogical device, provides an appropriate example of the rhythm of Romance/freedom advocated by Whitehead; this is what I go on to argue in the thesis.

### 1.3 Whitehead's Cycles of Growth and their Relation to My Own Experience

Whitehead's cycle of Romance/freedom is a prolonged phase, necessary for the process of learning, for without it "at best you get inert knowledge without initiative, and at worst you get contempt of ideas— without knowledge" (Whitehead, 1929/1967, p. 33). Ideally, the joy of the journey leads to the cycle of precision/ self-discipline in which the "wonder... [and] romance of human thought [becomes]...curiously uncertain about the formulation of any detail of our knowledge. This word 'detail' lies at the heart of the whole difficulty... We must fix upon details...and discuss their essences and their types of interconnection" (Whitehead, 1934, p. 9). Given the appropriate time in Romance/freedom and the provision of an environment which enhances curiosity, the learner gains the self-discipline enabling her to pursue more complex ideas. This intrinsic motivation fixes the learner's complete focus, concentration, and absorption onto "understanding the exactness of formation, to add knowledge to knowledge, to analyse bit by bit adding new facts as they fit in a systematic order" (Whitehead, 1933, p. 29). This systematic ordering is the "beginning of organized thought and action...[which] incorporates aspects of reflection, collaboration, differing perspectives, dialogue and a growing autonomy...guided by new found knowledge and capabilities ..[in] preparation for battling with the immediate experience of life" (Flynn, 2005, pp. 79-80). This ordering is also "a phase of mastering details and placing them in context of other relevant knowledge" (Woodhouse, 1995, p. 348). To use the fairy tale parallel once again, this would be the point in the story when the knight has met the weird witch on the road and has learned about a complex curse upon a beautiful damsel. Now he is presented with a destination, a calling, a challenge to break an enchantment that will demand precision, persistence, perseverance, unfaltering discipline, and single-minded fixation to triumph in his task. Freedom and Romance still hover in the air, but self-discipline and precision dominate in order to succeed in his mission. He will be changed and his quality will be tested.

The cycle of generalization/return to freedom occurs when the learner relates the principles of knowledge understood from precision/self-discipline and applies them to concrete facts, particularly those of her own experience. By moving back and forth between these principles, or abstract ideas, and the experiential facts comprising her world, the learner comes to make knowledge her own. But generalization can only occur where a broader, deeper freedom than that of Romance is experienced so as to give full reign to an understanding of the beauty and value of knowledge and the world, “the sense of beauty, the aesthetic sense of realized perfection” (1929/1967, p. 40). As Whitehead puts it, “the essence of this stage is the emergence from the comparative passivity of being trained into the active freedom of application” (1934, p. 37). He believes that universities should be dominated by generalization as a “return to romanticism with the added advantage of classified ideas and relevant techniques,” but he criticizes them for being places where “the paralysis of thought induced in pupils by the aimless accumulation of precise knowledge, inert and unutilized” (1929/1967, p. 37). Here once again is a stern warning of the dangers of precision producing “inert ideas” that paralyze the capacity to think for oneself, because such ideas packed into the mind do not move and fail to connect with the learner’s experience. By way of contrast, generalization at any level should enable the application of novel applications and interwoven possibilities, “adding individualized differentiation to individual things” (Whitehead, 1947/1967, p. 164). This means that “Whiteheadian education would need to be particular to each cultural group and each temperament in such a way that little could be said, beyond what he has himself said, that could be generalized to all” (Cobb, 1998, p. 105).

In terms of my own experience, I moved out of the cycle of precision/self-discipline once I passed my exams at The University of Toronto, which consisted of translating several obscure pages of texts and readings from original manuscripts. Aptitudes had been acquired, rules and laws were apprehended, and now I wanted to use my knowledge in novel ways. My ensuing generalization/return to freedom was gained after I graduated rather than during my time as a university student. As a graduate of a four-year specialist degree in Near Eastern Studies, I was hired by the history department as research assistant for the Royal Inscriptions of Mesopotamia Project. We published an academic treatise aptly entitled, *The Royal Inscriptions of Mesopotamia Assyrian Periods Volume I: Assyrian Rulers of the Third and Second Millennia BC (TO 1115 BC)*. I worked interdependently with scholars and professors to make Akkadian

transliteration corrections from Assyrian kingly inscriptions engraved in cylinder seals, impressions, alabaster vases, silver discs buried in mounds of pearls and shells, plaques, spearheads, clay and gold tablets, stone blocks, bricks, door sockets, stone slabs and cylinders, pillars, statues, porcelain chests, bronze temple plates, turquoise and agate eyestones, cultic figurines, jar rims, clay cones, amulets, potsherds and steles. This was my first real experience of the broader, deeper freedom referred to by Whitehead as the soil from which the application of knowledge can grow. And my work on the historical artifacts of Assyrian peoples brought me back to my father's romantic storytelling, a cycle in itself.

Whitehead's Rhythm of Education — Romance/ freedom, precision/ self-discipline, generalisation/ return to freedom (Whitehead, 1929/1967) — is an organic process of unfolding, mingling cycles in which emotional and intellectual growth are enabled and enhanced. They are *not* linear, age-related, distinct, sequential, isolated, or separate from each other. As he puts it:

My main position is that the dominant note of education at its beginning and at its end is freedom, but that there is an intermediate stage of discipline with freedom in subordination. Furthermore, that there is not one unique threefold cycle of freedom, discipline, and freedom; but that all mental development is composed of such cycles, and cycles of such cycles. (Whitehead 1929/1967, p. 31)

By “cycles within cycles” as interpreted by Flynn (2005), Whitehead means the periodic nature of learning, the idea that the critical ingredient of emotional connectedness is present in any incident of learning within the workings of periods of freedom and Romance within periods of discipline, and the growing precision of thought. Periods of freedom are mixed together with periods of self-discipline... each period of learning intermingles with and informs the next (Flynn, 2005, pp.76, 78, 81). Whitehead avoids making sharp distinctions among the three cycles of growth; rather, he sees them flowing into one another, distinct only in terms of emphasis, alternation of dominance, and pervasive quality exerted during different periodic phases (Woodhouse, 1999, p. 193).

Whitehead's account contrasts with that of Piaget, for example, who assumes intellectual development follows a linear path in which the emotions are “external motivators” (Flynn, 1995). Whitehead wants to avoid the “false psychology of rigid, uniform, steady mastery of a sequential, distinct, unaltered pace of advance” (Whitehead, 1929/1967, p. 17): his aim is to free

us into embracing the organic, rhythmic, joyous phases of learning which kindles Romance and an active love of knowledge, adding zest to life (Woodhouse, 1999, p. 193).

#### 1.4 Statement of the Problem

I was baffled the first time (of countless to follow) I heard a colleague bark at a daydreaming “off-task” six-year-old student, “Do your job!” What could this expression possibly mean to a Grade Two child? During my first year as an elementary teacher, I was to uncover some entrenched (yet new to me) beliefs about the contemporary purposes of education that are being implemented and lived-out on a daily basis in a plethora of ways in elementary classrooms across North America.

The problem I am considering in this thesis is the prevalence of mechanical teaching and mechanical learning in schools. Students are often expected to learn in a machine-like manner and are frequently treated as machines to be fed certain amounts of pre-determined information at pre-determined blocks of time. Learning thus may depreciate into a manner of military controlled “training” of repetitive skill practice within an environment of behavioural conditioning. Teachers too often reinforce this approach in their pedagogy with an overemphasis on skills training (Hare, 1993). Where did this machine-like idea originate?

Sir Ken Robinson claims that the currently failing education system is economically driven by an antiquated, Industrial Model of education seeking to provide skills required to earn a living and to become economically productive (Robinson, 2011, p. 67). However, this system is based upon the fallacious premise that assumes that the future will be very much like the past (Dewey, 1997, p. 19); even the contemporary business world is no longer based upon this premise. The Industrial Revolution brought a mass model to education with its clear boundaries separating it from the outside world and placing it within factory-like institutional buildings, set hours of operation, prescribed rules of conduct, principles of standardization and conformity, organization and movement through the system based upon “date of manufacture,” transitions marked by buzzers or “bells,” assembly line teaching marked by division of labour, progress from room to room, and overall operations built up on the manufacturing principle of linearity (Robinson, 2011, p. 57).

Additionally, standardized testing begins creating anxiety and dread within children from as early on as the age of three, robbing them of any joy by applying the intense pressure of having their learning “continually pulled up [like] a plant to see how well it is growing” (p. 77). Teachers “preoccupied with intelligence testing and behavioural objectives,” and schools “as part of an industrial order that has sought to subdue rather than sustain... have been organized to prepare employees for work in financial, corporate, and state institutions... diminish[ing] education from living life... to a secondary preparation... to serve the industrial state” (Regnier, 1995, pp. 396, 402, 405).

According to Robinson, we live in times of knowledge transformation: times demanding completely new questions that open up whole new ways of seeing and thinking (2011, p. 89); times needing the vitality of imagination (“the ability to bring to mind things that are not present to our senses,” p. 141), creativity (“applied imagination,” p. 141), and innovation (“applied creativity,” p. 142) as cornerstones of a creative revolution in education (p. xvi). For the educational benefit of children, we need to reconstruct our curricula and teaching methods to find balance (so strongly advocated by Whitehead) within a rich image of the child as an *imaginative*, as well as a logico-mathematical, thinker. Imagination is a powerful and energetic tool of learning, especially in the early years (Egan, 1986, p. 17).

I believe one way of speaking to the need for a “creative revolution in education” can be found in the Romance and freedom cycle of Whitehead’s – a process in which the student’s “curiosity and awe” are romanced “in order to give the path of learning a heart” (Schindler, 1991, p. 72). The romancing process (in which the teacher matches her own enthusiasm with the children’s to create an environment in which students are glad to freely explore ideas) is essential to enabling “the joy of discovery” (Whitehead, 1929/1967, p. 2). These affirming feelings give rise to emotional delight which may bring fervor in pursuing present and lifelong intellectual interests and goals. People who achieve great things in any given field are driven by a love for it, by a passion for the nature and the processes involved (Robinson, 2011, p. 188); for example, discoveries in science result from “unexpected leaps of imagination” (p. 190) and “the ability to make unusual connections” (p. 158).

It is important to note here, however, that Sir Ken Robinson does not mention class privilege, nor does he provide any class or race analysis, as Anyon (1981) does, to probe the

problem of embedded inequity of class position with respect to greater or lesser freedom, license, and opportunity to gain knowledge and experience. Anyon puts forward the idea that teachers align their expectations and pedagogy to the social class of the students they are teaching; therefore, class management will look very dissimilar. Teachers interpret curriculum and the nature of school work depending upon their perception of student capabilities based upon the social class of the students sitting in front of them. Working class values include obedience, practical and utilitarian work habits, prompt and unquestioning compliance to “get the job done.” She describes the middle-class professional classroom with its greater emphasis on creativity. Upper middle classes value the challenging of authority and the *status quo* because its members will become the CEOs and strong business leaders of the future. Élite values include the teaching of how to control the masses, as its youngsters will be placed in power positions based upon their class privilege. Whitehead was deeply concerned with class and oppression; this was, and remains, a serious issue that limits possibilities based upon class rank, gender, and race. Anyon further explores how social class affects how teachers think about their work within the structures of their class-stratified school and community environments in *Social Class and School Knowledge* (1981).

Herbert Kohl writes:

Nurturing children’s abilities to imagine ways in which the world might be different is a gift we owe all children...telling children stories, for example, allows them to enter worlds where the constraints of ordinary life are transcended. The phrase “enter into” is not merely a metaphor: children step into good stories ... and listen as if in a trance. (2009, p. 9)

Like Kohl, I believe that playful imagination, aesthetics, intuition, emotion, intellectual thought, and practical problem solving skills are all kindled when the power of storytelling is used to extend an invitation into wonder and possibility. Storytelling invites us to step out of the here and now, to take a different view of the present, to form and play with creative problems and solutions, to put ourselves into the minds of others, to try to see with the eyes of others, to feel with their hearts, to anticipate and create many possible futures, to be liberated from the immediate, and to venture into the realm of possibility of transformation (Robinson, 2011, p. 142). Storytelling enhances these diverse forms of understanding among young children and keep them buzzing with ideas (p. 2).

To take an example from my own teaching of “The Wood between the Worlds,” we find Digory who notices a girl “at the foot of a tree...her eyes were nearly shut but not quite, as if she were just between sleeping and waking...then she spoke in a dreamy, contented sort of voice...” (Lewis, 1955, p. 33). A timelessness pervades the Wood: it is a place of wonder and enchantment, where a sense of dreamy, forgetful contentment, like a trance, overtakes children who feel as if they had always been in that place and never been bored. This state of reverie follows storytelling that suspends reality and invites children into another world in which imagination can become a living, powerful tool in creating new possibilities. Students can then engage their bodily and sensual imaginations to smell, feel, touch, see, hear and taste. In this way, the process of storytelling defies the problem of mechanical learning: students’ minds are illuminated with vitality, new ideas are tested, used and recombined, emotions are engaged, and knowledge is applied in various creative and imaginative ways connecting to their lived experience, senses, emotions and interests.

## 1.5 Purpose of the Thesis

The purpose of this thesis is to show that storytelling is a powerful pedagogical tool capable of overcoming the mechanical learning inherited from the schools of the Industrial Revolution. When coupled with Whitehead’s framework of the cycles of growth, rhythmic storytelling enables the flourishing of children’s imaginations, and opens up new vistas and possible avenues of thought, feeling, and action.

As an elementary school teacher, I am particularly interested in the use of rhythmic storytelling with younger students. The term *rhythmic* essentially means “the conveyance of difference within a framework of repetition” (Whitehead, 1929/1967, p. 17). Rhythmic storytelling carries forward this emphasis on difference and repetition as a characteristic use of story intended as an ongoing invention of visions of what might be, moving the young (within a Western context where critical thought is encouraged) to begin to ask, in every tone of voice, “Why?” (Greene, 2000, p. 6). Rhythmic storytelling uses story as an invitation, not story as an illustration; to stir thought, not to set ends; to function dialogically, not didactically (Bullough, 2010, p. 156); to begin a question, not end it. Rhythmic storytelling is not an interpretatively closed, over explained confirmation of what is already understood; it is story used as imaginative, romantic invitation to consider and play with new meanings and possibilities. My

thesis first took root in my pedagogical practice in the classroom, and it has both a practical and theoretical purpose: on the one hand, to explain how storytelling as a rhythmic process of learning is a well-founded concept, while on the other, to show how it may further illuminate my work as a teacher.

My experience of using different stories, especially Lewis' "Wood between the Worlds," supports this approach. Whitehead resonates with me because he dovetails joy, romance, wonder, curiosity, harmony, and balance in his concept of teaching as a mutual and reciprocal relationship. These emotions were, and are, already reflected in my life. The freedom of Romance is *always* present in learning, and though Whitehead acknowledges the importance of the Precision cycle, he does so so that a deeper, broader freedom can be experienced following the self-discipline of Precision in a cycle of Generalization. This cyclical rhythm is like a heartbeat: long (freedom) – short (self-discipline) – long (freedom). Whitehead seeks an educational balance between Rousseauian child-centred freedom and the Industrial Revolution's mechanical precision and skill-drilling. I expand upon this in the body of the thesis: one chapter analyzes the ways in which this story of "The Wood between the Worlds" appeals to students, and another considers their own voices as storytellers in their own right. In order to avoid a sole focus upon Eurocentric accounts of storytelling, I spend one chapter describing how Indigenous stories and practices enabled Aboriginal youth to better understand mathematics.

Many of my own students are quite capable of exploring imaginative possibilities open to them in Whitehead's cycle of Romance/freedom. Whitehead believes that unless schools allow this phase to run its course, learning is stultified and the result is "'inert ideas' – that is to say, ideas that are merely received into the mind without being utilized, or tested, or thrown into fresh combinations" (1929/1967, p.1). Some authors go further and claim that children are equipped with intellectual capacities that reach their peak in the early years and that at five, the abilities to recognize and generate appropriate metaphors (one aspect of what we refer to as "the imagination") peak and decline thereafter (Gardner & Winner in Egan, 1997, p. 342). There is need to exchange mechanical learning with the kind of imaginative learning that rhythmic storytelling allows; therefore, my thesis explores the possibilities of imaginative learning through storytelling as a basis of schooling in contrast to the Industrial Model.

Whitehead's account of learning as a process of growth is an appropriate theoretical basis for rhythmic storytelling. And it is capable of enhancing the storytelling I wish to continue practicing as a teacher. The cycle of Romance/freedom is an optimal phase for the use of stories, since it is an age of "ideas, facts, relationships, stories, histories, possibilities, artistry in words, in sounds, in form and in colour, [that] crowd into the child's life, stir his [sic] feelings, excite his appreciation, and incite his impulses to kindred activities" (Whitehead, 1929/1967, p. 21). The rhythmic pulse of Romance enables younger students to exert their freedom and grasp the imaginative and artistic ideas prevalent in stories and in other forms of learning. This is what attracts me to Whitehead's educational philosophy: the thrill of answering to the wonder and joy of a child's new awakening to learning and discovery of the beauty of the world. Here we find a vision that is opposed to the mechanical learning prevalent in schools today.

#### 1.6 Hermeneutics as Interpretation

*Hermeneutics – "a term whose Greek looks, theological past, and...pretentiousness ought not put us off because, under the homelier and less fussy name of interpretation, it is what many of us...have been talking all the time." (Geertz, 1983, p. 224)*

Hermeneutics is a theory and philosophy of interpretation which addresses a range of questions regarding *how* humans understand themselves and the social world (Kerdeman, 2014, pp. 375, 382). In Greek mythology, Hermes is the young Olympian god with winged sandals, cap, and herald's staff, responsible for conducting messages between the gods, or between the mortal and the divine. He protects travelers venturing into new and unknown terrain, yet is paradoxically known to be a trickster who can outwit the gods with unclear interpretations. The word *hermeneutics* is thus the study and theory of interpretation.

Hendry (2010) expresses the fear that the hegemony of science is so powerful that as a single human construct it is considered the only source of truth. As a result, the realm of the symbolic constantly strives to become more like science: that is, experience is being stripped of value to become "objective" in nature in order to count as knowledge. Different methods are implemented to systematically evaluate symbols, stories, and metaphors to deduce reliability, validity, generalizability – disregarding the fact that the symbolic seeks to interpret and not explain (p. 76). The interpretation of human experience and the various symbolic forms in which

it is expressed is not reducible to the “scientific method” of measurement, prediction, and control (Sullivan, 1990).

As a researcher writing this thesis, I use an interpretative approach based in ontological hermeneutics, which frames interpretation in ontological terms (how humans experience the world). Interpretation here, then, is considered neither as method nor methodology, nor as an act of cognition, nor as a theory of knowledge – as it is so regarded within an epistemological framework. Rather, I use an approach which respectfully considers texts and people as conversational partners with whom we co-create and co-determine meaning and with whom we “fuse horizons” (Gadamer in Kerdeman, 2014, pp. 379); that is, we come to co-interpret a truth about life’s meaning that we could not know outside of participating with a partner in dialogue. And we are thereby transformed.

In the same light, Kerdeman (2014) describes education itself as transformative – *Bildung*, or an ongoing experience of self-formation and transformation in which we learn to be receptive to ways of being that differ from, and may even challenge, our own. Education conceived as *Bildung* is consistent with a hermeneutic approach to research because it seeks to disrupt utilitarian, technical, market-oriented influences on skill development in order to help students become reflective as their learning grows in ways neither they nor the teachers can foresee.

I hold to Gadamer’s ontological hermeneutic view (Gadamer, 1960/1975) which includes the following tenets: first, “science” does not refer exclusively to the natural sciences, since the humanities have a different, interpretative mode of scientific thinking; second, the hegemony of the “scientific method” needs to be de-centred because reliance upon method “delegitimizes,” “occludes,” “ignores,” “alienates,” “warps” understandings that we cannot control or divorce from our self-understanding and historical situation; third, understanding and interpretation are experienced as a conversation and dialogue, events that we live through; and fourth, people **and texts** are not sources of data, but are conversation partners ( p. 379).

There is an overemphasis on methods and methodology, or “methodolatry” which conflates research with technical method, specifically randomized field trials, and disregards research as a uniquely human practice (Phillips in Kerdeman, 2014, p. 382). This practice

distances researchers from their lived experience, discounts experiential dimensions of critical reflection, regulates understanding, and fails to transform (Gadamer in Kerdeman, 2014, p. 380). Although my understanding will be limited by my own experience and abilities, I ask the reader to take from these interpretations only what can be discovered for oneself: to be open, take risks, trust, learn, and be transformed by participating in the interpretative power of storytelling.

In the context of this thesis, research *is* the text and I am the researcher constructing and reconstructing this text. My rationale is that the hermeneutics approach allows me to interpret my own experience as text: text as text, faculty as text, and students as text. Working with children is used as example not as criterion because of the very nature of the choice of hermeneutical approach which employs unique individual dialogical interpretation and interaction rather than mass data collection, analysis, and reproducibility. I draw on certain themes from children's written stories by memory, existing literature, and an analysis of my own experience to move towards a theory of storytelling as a powerful pedagogical approach within Whitehead's Romance cycle of education and learning.

## 1.7 Brief Definition of Concepts

**Rhythmic Storytelling** – Rhythmic storytelling is the use of stories (narratives) as open-ended invitations to the listener to explore and exchange experiences, interpretations, and perspectives through dramatizing real or imagined events and create word pictures and mental images to compare in a process of self-understanding. I believe stories are organic, cyclical “spaces for probing rival musings and interpretative openings, spaces which reject the linear” (Gallagher, 2011, p. 52); spaces that are “consensus-resisting” and polyvocal (Lyotard in Gallagher, 2011, p. 52); and, ways “one trains the imagination to go visiting” and to think “without a banister” (Arendt in Gallagher, 2011, p. 52). Storytelling invites us to step out of the here and now, to take a different view of the present, to form and play with creative problems and solutions, to put ourselves into the minds of others, to try to see with the eyes of others, to try to feel with their hearts, to anticipate and create many possible futures, to be liberated from the immediate and venture into the realm of possibility of transformation (Robinson, 2011, p. 142).

In a pedagogical relationship, both the child and the teacher are the storytellers. Adults, honoured by a child's invitation, may enter, via empathy and imagination, that child's realities through his/her stories, poems, songs, and journals (Greene, 2000, p. 4).

**Whitehead's Rhythm of Education** — is a tri-cycle learning process consisting of Romance/ freedom, precision/ self-discipline, generalization/ return to freedom. The adaption of freedom and self-discipline to the natural sway of development is what Whitehead called *The Rhythm of Education* (Whitehead, 1929/1967, p. 31). This is an internal, organic process of unfolding, mingling cycles in which emotional and intellectual growth are enabled and enhanced. These cycles are *not* linear, age-related, distinct, sequential, isolated, or separate from each other. Whitehead avoids making sharp distinctions among the three cycles of growth; rather, he sees them flowing into one another, distinct only in terms of emphasis, alternation of dominance, and pervasive quality exerted during different periodic phases (Woodhouse, 1999, p. 193).

**Romance** – is the first of the three organic learning cycles of A.N. Whitehead in which the child's interests and experiences form the basis of their unimpeded exploration of the world and of ideas. As the initial phase of the learning process in which the mind and heart are enthralled in “the joy of discovery,” Romance provides glimpses “of the vivid, possible, novel, unexplored” (Whitehead, 1929/1967, pp. 2, 17). Curiosity, wonder, imagination, and adventure combine in the “great romance [which] is the flood which bears on the child towards the life of the spirit” (p. 22): its essence is browsing and the encouragement of vivid freshness.

Because the magic and mystery of learning are often absent from the currently dominant educational discourses (Bullough, 2010, p. 157), the first task of the Whiteheadian teacher is to *romance* the students by creating an environment in which their enthusiasm is matched by her own enjoyment to provide the kind of knowledge which makes them glad to be there (Whitehead, 1929/1967, pp. 38, 40). Woodhouse (2014) affirms that a teacher's own ideas should spring forth from a lifelong passion so as to provide a learning-friendly environment.

**Rhythm** – in a Whiteheadian context, this refers to the pattern of freedom/self-discipline/ freedom in “an alternation of dominance... a distinction of emphasis, of pervasive quality;” where this alternation constitutes the rhythm of the cycles (Whitehead, 1929/1967, p. 28). For Whitehead, the process of growth is a rhythm of interweaving cycles in which the whole process

is dominated by an entire cycle, which has the same general character as what he calls “its minor eddies” or smaller turbulences. Furthermore, good teaching should be guided by the rhythmic phase in which the students find themselves (p. 27).

**Imagination** – is the ability to bring to mind things that are not present to our senses (Robinson, 2011, p. 142). It is “a breaking free, a leap and then a question” (Greene, 2000, p. 6). Imagination makes empathy possible to cross empty spaces, to give clues, to look through a stranger’s eyes and to hear through their ears, to give credence to alternate realities and set aside the familiar distinctions and definitions (p. 5). Egan (1986) states that “imagination is a powerful and neglected tool of learning, and we need to rethink our teaching practices and curricula with a more balanced appreciation of children’s intellectual capacities [including] ... imagination” (p. 18). However, Whitehead takes this theme up in a slightly different way:

Imagination is not to be divorced from the facts: it is a way of illuminating the facts...by eliciting the general principles which apply to the facts, as they exist, and then by an intellectual survey of alternative possibilities which are consistent with the principles. It enables men [sic] to construct an intellectual vision of a new world, and it preserves the zest of life by the suggestion of satisfying purposes. (Whitehead, 1929/1967, p. 93)

Here Whitehead is suggesting that any flight of the imagination is to be integrated with the facts of experience from which it emerges. The power of the imagination lies in its ability to illuminate these facts by unearthing relevant underlying principles and then elucidating alternative possibilities based upon them. The process of engaging in “an intellectual survey” enables the learner to construct a vision of a new world that embodies their passion for life by satisfying their intellectual and emotional goals. I hope to show that rhythmic storytelling embodies this kind of imaginative learning process.

**Invitation** – is the encouraging, enticing, and inspiring of the child to learn through a process of rhythmic storytelling that engages her imagination. There must be a romancing of the learner in the sense clarified above, since learning cannot be forced, coerced, nor compelled by clear conclusions established by power and authority that tells and directs (Bullough, 2010, p. 159). Rather, the child must be free to feel, think and act for herself (Whitehead, 1929/1967, p. 33).

**Wonder** – is that transcendent, emotional and cognitive state of marveling, reverence, pure delight, and “intensified consciousness” (Greene, 2000, p. 6) of endless possibilities and imaginings. Schools should provide opportunities for students to experience an aesthetic sense of wonder in students’ lives through “some love of music, some enjoyment of drama, some joy in beauty of form and colour... [and the] means for the satisfaction of these emotions’ (Whitehead, 1929/1967, p. 41). As Whitehead exclaims, “cursed be the dullard ... who employs methods that assassinate interest ... who destroys wonder... [s/he] should be prosecuted for soul murder... an unskillful practitioner can easily damage a sensitive organism” (pp. 34, 36, 57).

## 1.8 Summary of Next Chapters

In Chapter Two, I explore the metaphor of “The Wood between the Worlds,” articulated by Lewis in his 1955 children’s novel *The Magician’s Nephew*, as a process of storytelling. Before doing so, I examine some of the different kinds of stories in order to clarify the reasons for using Lewis’ story and metaphor. “The Wood between the Worlds” is particularly well-suited to the process of romancing children’s imaginative understanding in a Whiteheadian sense. By freeing their imaginations, the story taps into their emotions, amplifying their freedom to explore the world of ideas, and it strengthens their romantic curiosity.

In Chapter Three, I examine Voices of the Children from my elementary classroom over a period of one year, based upon my memories and anecdotal notes of their responses to using storytelling as a pedagogical tool. The voices will be anonymous. I consider how the children may have felt about hearing the Narnia story, and how they told their own stories both responsively and autonomously.

In Chapter Four, I recount my experiences working with Aboriginal students in an Indigenous *Mamawohkamatowin* mathematics program, *Math Warriors*, with inner city elementary children that utilized stories and the wisdom of Elders as a vector of instruction. The use of both Indigenous stories and practices from their communities enabled children to come to a stronger understanding of mathematical knowledge. By utilizing stories and practices from Aboriginal cultures, the students grew in confidence as they made connections between their own experience and the abstractions of mathematics. The positive experiences of teachers and

students in this context directly relates to my thesis of exploring both Indigenous and non-Indigenous storytelling as a romantic, imaginative invitation to learning as a basis of schooling.

## CHAPTER TWO: “THE WOOD BETWEEN THE WORLDS”<sup>1</sup>

### 2.1 Structure of the Chapter

In this chapter, I explore the metaphor of “The Wood between the Worlds,” articulated by Lewis in *The Magician’s Nephew*, as a process of storytelling. Before doing so, I examine different forest archetypes introduced to young children, and some diverse kinds of tales to clarify the reasons for using Lewis’ story and metaphor. “The Wood between the Worlds” is particularly well-suited to the process of romancing children’s imaginative understanding in a Whiteheadian sense. Story taps into children’s emotions and imaginations, amplifying their freedom to explore the world of ideas, strengthening their romantic curiosity.

### 2.2 Some Forests I Have Known

Forests possess a power to change lives and alter destinies; they captivate essential elements of childhood: a thrilling jumble of fear with fantasy, the wild and unknown with magical possibility, dark lurking places of unexplored human psyche with limitless imaginative release from familiar rules. My earliest introductions to enchanted woods were early on offered me by Grimm and Lang (with significant visual assistance of Disney) in tales such as *Hansel and Gretel*, *Little Red Riding Hood*, *Snow White*, and *Beauty and the Beast*. These thick, wild depths of forests were often portrayed as unfriendly places of potential punishment in which to get lost, meet menacing beings, be lured into danger, get eaten by ferocious animals... really, anything dreadful could happen to an inquisitive child who did not “mind what her mother told her,” who strayed into new territory, who defied boundaries. Dante’s *selva oscura*, the dark wood of *Inferno* Canto I:1-60, and *erronea selva*, the meandering forest of *Convivio* 4.24.12, fit this archetype of the Dark Ages’ forest in which spiritual, physical, psychological, moral, political disorientation lurk (Raffa, 2007). This fear-inducing place was a “harsh, wild, and impenetrable” dark wood, “scarcely less bitter than death,” “where the direct way was lost.” Fuelling Dante’s dark wood concept was an image of a primordial, unnamed wood (*silva*), Virgil’s forest entrance to the underworld Hades (*Aeneid* 6.179), Augustine’s association of sin and error with regions of

“unlikeness” (*Confessions* 7.10), and the mediaeval Romances in which wandering knights must disentangle themselves from dangerous forests.

The forests I loved, however, were those of the Greek Myths, Narnia, and Middle-earth. In ancient Greece, forests were home to the dryads (from Greek *δρῦς* meaning “oak”) or wood nymphs, spirits living in the trees. Each tree species had its own form of nymph who was a semi-divine visible manifestation within nature of the divinities; rivers, springs, grottoes, trees, groves, and mountains were thus fraught with life and charms. A sense of being in the same spatial world as mortals, yet with a different concept of time, or timelessness, pervades these types of woods. The Greek myth of the semi-divine musician and hero Orpheus and his beloved oak nymph wife, Eurydice, marries music, art, and poetry to the spirit of the trees.

In Narnia, as in Greek and Roman mythology, dryads live and die with the trees of which they are the spirits. Physically, dryads reflect the characteristics of their trees: birch girls are pale and head-tossing, beeches are regal. Most trees of Narnia are sacred talking trees, but there is mention that some may be spies and capable of betrayal and evil-doing. Narnian trees are truly alive, and species include oaks, hollies, beeches, silver birches, rowans, firs, pines, sweet chestnuts, and apple trees (Ford, 2005, p. 294). “The Wood between the Worlds” is an ancient enchanted forest, a profoundly peaceful place from which one can travel to any number of other-worlds, the identical portals to which are magical pools of water nestled every few yards within a forest floor of sweet grass and rich reddish brown soil (which smelled nice). The leafy trees are grown so dense that the light suffuses green, the air is warm, no sky can be seen, and one could almost feel the trees drinking the water up from the pools with their roots. A lush living quiet and a feeling of time suspension lead to a dreamy state which may muddle the memory.

An interesting thread is Lewis’ mention of the *World Ash Tree* upon which sacred trunk are written the words of the Deep Magic. The *World Ash Tree* hearkens to Yggdrasil<sup>2</sup>, the great tree of Scandinavian mythology which holds the universe together and the destiny of all is connected to it. This tree, the symbol for existence, possesses branches towering into the heavens, a trunk upholding the earth, and three great roots reaching deep into the realms of the ancestors, giants, and gods. Under the third root is the holy fountain of fate, the Well of Urd, where daily the gods convene for council. At Yggdrasil dwell the three Nornir: Past, Present, and

Future (the maidens are also called Fate, Being, and Necessity); thus, it is described as a place without time that holds the created order together.<sup>3</sup>

Lewis shares with J.R.R. Tolkien a deep love of trees: Tolkien's enthralling forests of Middle-earth have hallmark traits and individualities. *Lothlórien* ("Dream-flower") was the name given to the ancient western Golden Wood by the Elves. It was the matchless forest of Middle-earth, for only there were to be found the great *mellyrn*, the mallorn-trees which gave the Golden Wood its name. *Mellyrn* were similar to birches: their bark and boughs were smooth, silver-grey; their leaves were golden and remained on the tree throughout winter, only falling to cover the ground in spring when new green, silver-lined leaves sprouted and golden flowers bloomed; they grew to a height beyond the measure of all other living things; the noble Elves of the Golden Wood dwelt in the woven branches of the mighty *mellyrn* on high platforms and thus were called the Tree-people or *Galadhrim*, protected by Galadriel, the lady of light, whose power set the wood apart from the stream of time. The hobbit Frodo said he could feel the life of the tree when he touched Lothlórien's *mellyrn*.

In the Third Age, the southern *Greenwood The Great* was the mightiest surviving forest in that whole region of Middle-earth. After the raising of the evil tower of Dol Guldur, it began to be populated with evil things and its name was changed to *Taur e-Ndaedelos* or *Mirkwood*: "Forest of Great Fear." This wood became ill, a great shadow lay upon it, evil things hid away within its dense thickets, and it began to spread its sickness into adjacent lands.

*Fangorn* ("Beard-of-Tree") *Forest* was an eastern, wild, exceedingly ancient wood guarded by talking Ents or *Onodrim*, the most ancient race of all Middle-earth. Physically, each of the individual Ents most resembled the family of trees for which he cared and tended, possessing the personality of that tree line. Thorough observing, long thinking, slow ageing, reluctant acting, the Ents, when aroused, possessed enormous power and immense strength of age-long action of trees compressed in seconds.<sup>4</sup>

### 2.3 Lewis' "Wood between the Worlds"

In my elementary years, my younger sister and I would be allowed to wander the Toronto Science Centre *by ourselves* for hours. One spot to which I returned over and over again was the Space Science wing's Corridor of Silence, a completely soundproof walkway where only one

living soul could enter at a time into the most utter and profound blanket of stillness imaginable. It was the most unqualified moment of solitude I can recall experiencing throughout my childhood, providing a moment and a location in time and space where I could hear my own heart, breath, thought, spirit, and life in perfect hush. There were present some indescribable components of calm buoyancy and spiritual transcendence.

By way of contrast, there was one cherished literary place that was distinctive in its power to captivate my imagination and afford me calm. It provided treasured elements for me that other forests of fantasy did not: rich quiet, timelessness, and threshold. Reading Lewis' description of "The Wood between the Worlds" provided me the same metaphysical sense of ageless float as the Corridor of Silence, as is clear from the following lengthy quotation taken from *The Magician's Nephew* upon which I comment in the next section:

"Wouldn't you like a ring, my dear?" said Uncle Andrew to Polly.

"Do you mean one of those yellow or green ones?" said Polly. "How lovely!"

... There was certainly something strangely attractive about those bright rings. She moved closer to the tray.

"Why! I declare," she said. "That humming noise gets louder here. It's almost as if the rings were making it."

"What a funny fancy, my dear," said Uncle Andrew... exactly as he spoke, Polly's hand went out to touch one of the rings. And immediately, without a flash or a warning of any sort, there was no Polly. Digory and his Uncle were alone in the room...

"The sooner you go [after Polly], the sooner you'll be back," said Uncle Andrew cheerfully [to Digory]...

Uncle Andrew and his study vanished instantly. Then, for a moment, everything became muddled. The next thing Digory knew was that there was a soft green light coming down on him from above, and darkness below. He didn't seem to be standing on anything, or sitting, or lying. Nothing appeared to be touching him. "I believe I'm in water," said Digory. "Or *under* water." This frightened him for a second, but almost at once he could feel that he was rushing upwards. Then his head suddenly came out into the air and he found himself scrambling ashore, out on to smooth grassy ground at the edge of a pool.

As he rose to his feet he noticed he was neither dripping nor panting for breath as anyone would expect after being under water. His clothes were perfectly dry. He was standing by the edge of a small pool – not more than ten feet side to side – in a wood. The trees grew close together and were so leafy he could get no glimpse of the sky. All the light was green light that came through the leaves: but there must have been a very strong sun

overhead, for this green daylight was bright and warm. It was the quietest wood that you could possibly imagine... You could almost feel the trees growing. The pool he had just got out of was not the only pool. There were dozens of others – a pool every few yards as far as his eyes could reach. You could almost feel the trees drinking up the water with their roots. This wood was very much alive. When he tried to describe it afterwards Digory always said, “It was a *rich* place; as rich as plum-cake.”

The strangest thing was that, almost before he had looked about him, Digory had half forgotten how he had come there...he was not in the least frightened... If anyone had asked him “Where did you come from?” he probably would have said, “I have always been here.” That was what it felt like – as if one had always been in that place and had never been bored, although nothing had happened. As he said long afterwards, “It’s not the sort of place where things happen. The trees go on growing, that’s all.”

After Digory had looked at the wood for a long time he noticed a girl lying on her back at the foot of a tree a few yards away. Her eyes were nearly shut but not quite, as if she were just between sleeping and waking. So he looked at her for a long time and said nothing. And at last she opened her eyes and looked at him for a long time and also said nothing. Then she spoke, in a dreamy, contented sort of voice.

“I think I’ve seen you before,” she said.

“I rather think so, too,” said Digory. “Have you been here long?”

“Oh, always,” said the girl. “At least – I don’t know –a very long time.”

“So have I,” said Digory.

“No you haven’t,” said she. “I’ve just seen you come up out of that pool.”

“Yes, I suppose I did,” said Digory with a puzzled air. “I’d forgotten.”

Then for quite a long time, neither said any more... the girl sat up, really interested at last. They stared very hard at one another, trying to remember. And then, at exactly the same moment, she shouted out “Mr. Ketterley” and he shouted out “Uncle Andrew,” and they knew who they were and began to remember the whole story...

“What do we do now?” said Polly... “Go home?”

“There’s no hurry,” said Digory with a huge yawn.

“I think there is,” said Polly. “This place is too quiet. It’s so – so dreamy. You’re almost asleep. If we once give in to it we shall just lie down and drowse for ever and ever... we’ve got to get back.”

“By the way, how *do* we get home?” asked Digory.

“Go back into the pool, I expect.”

They came and stood together at the edge looking down into the smooth water. It was full of the reflection of the green, leafy branches: they made it look very deep...

“I’ve just had a really wonderful idea,” said Digory. “What are all the other pools?... Why, if we can get back into our own world by jumping into this pool, mightn’t we get somewhere else by jumping into one of the others? Supposing there was a world at the bottom of every pool! ... But suppose there were dozens?”

“You mean, this wood might be only one of them?”

“No, I don’t believe this wood is a world at all. I think it’s just an in-between place... a place that isn’t in any of the worlds, but once you’ve found that place, you can get into them all... I think we can get out of this place into jolly well Anywhere! We don’t need to jump back into the same pool we came up by. Or not just yet.”

“The Wood between the Worlds,” said Polly dreamily. “It sounds rather nice.”

“Come on,” said Digory. “Which pool shall we try?... Any pool will do. Come on. Let’s try that one.”

“Stop!” said Polly. “Aren’t we going to mark *this* pool?”

They stared at each other and turned quite white as they realized the dreadful thing that Digory had just been going to do. For there were any number of pools in the wood, and the pools were all alike and the trees were all alike, so that if they had once left behind the pool that led to our own world without making some sort of landmark, the chances would have been a hundred to one against their ever finding it again...

“It’s a good thing *one* of us has some sense,” said Polly. (Lewis, 1955, pp. 31-37)

#### 2.4 Metaphors within “The Wood between the Worlds”

The previous passage from “The Wood between the Worlds” is replete with several metaphors designed to invite children’s imagination. They include: The Wood, The Pool, The Worlds, The Children, and The Storyteller, the latter which I have added.

The Wood, portrayed as “peaceful,” “beautiful,” and “very much alive,” was “the quietest wood you could possibly imagine,” where “the trees grew close together,” the “green daylight was bright and warm,” and “you could almost feel the trees growing” -- it was a “*rich* place: as rich as plum-cake.” This space represents the very act of storytelling itself, when children are sitting transfixed and lost within a story, their quiet bodies cast in a spell, widened eyes focused solely upon the storyteller (or upon the pages of a book), and minds completely entranced within the private world of their imagination. Kohl (2009), for example, remembers telling stories to his young kindergartners, who considered their story time sacred: “If someone came in and

interrupted an absorbing story, the children would look up as if awakened from a dream and would often chase the intruders away. It seemed as if a violation of their inner space had occurred, some involuntary awakening from another world” (p. 9). Digory explains the Wood as an “in-between place” which is like a “tunnel you can go along” and can get out and find yourself “jolly well Anywhere!” (Lewis, 1955, p. 37). The Wood is the story itself from which any number of portals can open up within the imagination of each listener; the story invites a dive into innumerable possibilities of individual emotional and intellectual thought, exploration, and investigation.

Storytelling of this kind helps children with their “simultaneous struggles to be seamlessly meshed in the social fabric and to know how to signal oneself as a being with specificity... distinguishable from the rest” (Davies, 1993, p. 21). Through stories, a child may locate her own narrative of herself and also learn to be a coherent member of others’ narratives: that is, *I am the subject of a history* and *I am part of others’ stories* (Benhabib in Davies, p. 22). Storytelling has the power to enable children to meet and overcome life’s difficulties, for as Bronwyn Davies (1993) puts it, “[c]hildhood is a time that is difficult to capture, so rich as it is in new associations, emergent senses, connections, formings, and unformings.” And stories are a means of presenting “the consciousness of other groups...public opinions, what other people say and think; all those magnets which attract us this way to be like that, or repel us the other and make us different from that” (Virginia Woolf in Davies, p. 21).

As children roam and reflect within stories that invite their imagination, they discover social and emotional guidance, relief from the anxieties of daily life, comfort, inner resources to cope, and creative solutions to present problems (Charles, 2009, p. 15). Children learn new “ways of seeing made possible by various ... practices [as storytelling] of the social groups of which they are members... an ability to read and interpret the landscape of the social world, and to embody, to live, to experience, to know, to desire *as one’s own*, to take pleasure in the world, as it is made knowable through available practices...to read situations correctly... knowing how to be positioned and to position oneself” (Davies, 1993, p. 22). This is a form of re-creation; change begins in the imagination. As an intellectual capacity, imagination permits us to give credence to alternative realities, to break with the taken for granted, to set aside familiar distinctions and definitions, to make empathy possible (Greene, 2000, p. 3). Disch (1994) further

underscores that storytelling discloses arbitrariness of appearance, opens one's thought musings to rival orderings, and invites contrary interpretations (in Gallagher, 2011, p. 51).

The Pool from which Digory emerges “was not the only pool. There were dozens of others – a pool every few yards as far as his eyes could reach. You could almost feel the trees drinking the water up with their roots...looking down into the smooth water [i]t was full of the reflection of the green, leafy branches; they made it look very deep.” These extraordinary ponds, of which there were countless identical ones throughout the wood, leave the swimmer neither dripping wet nor panting for breath after being underwater. That is because they are profoundly magical portals, each leading to a distinct world. By leaping into any of the pools, Polly and Digory may travel to and from any number of other-worlds.

The Pool leads to Other Worlds: Could the pool be an opening to all sorts of possibilities in the lives of the children who hear the story? Or could it be understood as the threshold to a world of intellectual passion in which each child is drawn to a unique pool by their capacities and emotions? Whatever the interpretation, the story of the pool, considered as inspiration rather than didactic imposition, becomes the doorway of invitation, beckoning the children to dive into the pool of their choice: to explore, to quest, to venture. This lure and beckoning is quintessential Whiteheadian Romance, for it accords with the “joy of discovery” at the heart of learning (Whitehead, 1929/1967, p. 2). Bullough (2010) is in agreement, advocating storytelling that is sensitive and creative, capable of providing endless possibility of interpretation, and provoking surprise, engagement, and delightful irritation (p. 154). Gallagher (2011) suggests using story as an invitational method, or *rhythmic* storytelling as I referred to it in the previous chapter, emphasizing its context in Whitehead's cycle of Romance in which new ideas stir and ferment thought, not set ends in order (1929/1967, p. 18 and Bullough, 2010, p. 156).

The Children represent relationship: relationship between child and child, child and storyteller, child and story. Polly and Digory are deliciously alone *without adult supervision or disapproving grown-up domination*. This freedom is a key element to the euphoria of exploration on one's own: children may taste the power of taking their *own* decisions. Whitehead portrays this Romance stage of “first apprehension: The subject matter has the vividness of novelty; it holds within itself unexplored connexions with possibilities half-disclosed by glimpses and half-concealed by the wealth of material” (Whitehead, 1929/1967, p. 17). Originally, Lewis wanted to

name this book *Polly and Digory*: this speaks to how central the children's relationship is to Lewis' very heart of the story. The lifelong friendship which begins in childhood between Polly and Digory is that of equals who trustfully work (and sometimes bicker) with one another in deciding how to solve problems and what actions to implement.

It is important to note here the notion of agency and the long history of women and girls being portrayed as passive characters and the effect this may have on the psyche and imagination. Popular culture often reinforces this message of worthwhile action as male, often even when it purports to challenge it. This recurring theme should be noticed and carefully considered in literature and stories, particularly in the fantasy and *faërie* genres I am addressing.

As A Storyteller, it is vital to get out of the way of the story, and to align oneself as an equal ally with the young listeners to create an environment of fun, unimpeded, imaginative expression and experience: to create this atmosphere takes expertise. It is a serious contemporary oversight that storytelling (one of the three "main school arts" along with questioning and studying, according to H.H. Horne in Bullough, 2010, p. 155) is not part of the teacher education curriculum; it should be. The teller must be as actively engaged in the story as the child, inside the learning with the learners themselves: "Everyone is a dreamer of dreams, an unruly spark of meaning-making energy on a voyage of discovery and surprise, as well as a conqueror, a creator, an actor, an artist" (Kohl, 2009, xiii).

There is a relationship between the child and the story which is "essentially a private one... [which] can be viewed as a dialogue between the essence of a person and the nucleus of the tale. Each individual has a unique dialogue with the tale" (Charles, 2009, p. 16). Stories themselves are organic, animate, cyclical: as one shares living story, one will receive fresh reflections, life-breathed renewal of the story as it is being experienced by the wonder of the listeners, and the kindling and igniting of new meanings into diverse lives. Ultimately, the impulse to learn and the capacity to respond to a story come from *within* each student as they relate to their learning environment and begin to transform it (Whitehead, 1929/1967, pp. 39-40; Woodhouse, 2014, p. 850).

## 2.5 Different Kinds of Tales

Every culture has used oral tradition to express its beliefs, history, and values from one generation to the next. Children are captivated by the power of a story, fuelled by their rich imaginations and longings for the fantastic while simultaneously craving familiar patterns, justice, and emotional connection. Youngsters may step into a tale, become a champion, project actual faces upon scoundrels and heroes, and perform great feats. Some of the types of stories used for teaching the primary age group include folktales, fairy (*Faërie*) tales, fables, Why or *Pourquoi* Stories, Trickster Tales (which I respectfully both consider, and impart, as a sacred tale like Bible or traditional cultural Creation stories), legends, and myths. In this section I clarify the differences among these kinds of stories, and situate “The Wood between the Worlds” in light of the distinctions I have made.

Traditionally, elementary students have been introduced to the folktale, fantasy, and fairy tale genres as segues into teaching identification of story elements, familiar patterns, multicultural literacy, and writing with meaning. It should be noted here that *Fairy Tales* are not about winged little creatures, but about *Faërie*, the “Perilous Realm” (J.R.R Tolkien, 1964, p. 16) where fantastical, wonderful, enchanted creatures dwell, where animals speak; a dimension alongside the mortal world, just beyond our periphery and grasp (Charles, 2009, p. 10). A fairy tale uses stock characters (either all bad or all good), a magic being, a task that the protagonist must complete, a reward, and repetitive features (i.e. predictable beginning/ ending phrases like “Once upon a time...”, “And they lived happily ever after.”; recurring duos or trios such as *two brothers, three wishes, three tasks*). This genre uses the Aristotelian pattern of unity affecting texture, flow, structure, sequencing, and pinpointing beginnings and endings (Kvernbekk, 2007, p. 307). Employing a clear beginning, middle, and end, it establishes setting and character, introduces a problem, and ultimately resolves the problem. Often, the hero is young and faces troubles such as poverty, ridicule, loss, or abandonment yet triumphs through loyalty, kindness, and courage. Fairy tales are accepted by children as fictional and fantastic, possessing reassuringly common themes and motifs.

*Fables* are brief stories featuring talking anthropomorphized animal characters, told with the purpose to teach specific lessons or morals practically applicable to everyday life, usually emphasizing the use of one’s intelligence and cunning to outwit an enemy. Elements include a

title, humanized animal characters, a problem, action, and a stated moral. The Greek slave Aesop (600 BC) is famous for this genre and, over the centuries, storytellers in Africa and Europe adapted Aesop's fables geographically and culturally whilst keeping the essential morals intact. Jataka fables from India (500 BC) reflect Eastern culture and philosophies, possessing several layers of meaning and thus do not directly state a moral: the listener is to discover his or her own lesson within it (McCarthy, 1997, p. 35).

*Why or Pourquoi* stories present playful explanations of why animals look or behave as they do. The animals speak and have human personalities, problems, and motives. Usually, the stories are humorous and the tellers and listeners understand that these types of stories are meant primarily for entertainment. Many *Pourquoi* stories have traits that link them to fables (with an imbedded moral) or Trickster Tales (in which a trick is played).

*The Trickster Tale* always has a protagonist, or trickster, who is clever, often dishonest, and mischievous and whose pranks may cause trouble for others. The trickster usually goes unpunished but sometimes falls victim to the trick he plays; he makes readers laugh and amuses audiences with his creative naughtiness. All traditional cultures tell stories which feature specific tricksters: Coyote, Raven, and Hare from North America; Tortoise, Anansi the Spider, and Zomo the Hare from West Africa, brought to America where Zomo became Br'er Rabbit (McCarthy, p. 13); Badger from Japan; and, Fox or Wolf from Europe and South America. The enduring affection for the trickster might have to do with his position as nemesis for the vain, the gullible, and the greedy, since most of the targets possess these traits and become wiser after their embarrassing encounter with the trickster.

It is very important to state here that Indigenous Trickster Tales are to be regarded as sacred; they are not to be treated as, or compared to, fictional fairy tales. Whenever Trickster Tales are shared in a classroom, it is imperative to approach the tale with respect, humility, and an open teachable spirit. University of British Columbia First Nations anthropology students Leona, Maria, and Joe talked about issues of respect:

My dad would tell me a story but to ask a question [I never would]...if I think of a question then through the story it will come. I listen to the story to find my own answer in there.... Native people believe that certain aspects of culture should only be discussed at certain times. Anthropologists do not know or respect the rules... Myth is not dead. It is real to people. They live by it. I don't like to treat them [myths] as dead museum pieces.

There are some things that are closer to people's hearts. Ways of thinking that aren't talked about in anthropology. Raven stories give me a feeling of ecstasy. It doesn't just explain history. It is more than that. It is trying to figure out the meaning of life. What they [the professors] call legend doesn't have any sacred qualities... It is kind of funny here. All these experts teaching us about ourselves. But we already know about us but we are studying to be us. (Te Hennepe, pp. 251, 255, 256, 257)

In light of the fact that anthropologists and professors may misunderstand the living nature of myth and storytelling, I as a teacher feel the need to invite Elders to the classroom to tell Trickster Tales. In this way, proper protocols and respect are observed, modeled, and taught to the students. The Saskatoon Public School Board (SPSD) has an exemplary *First Nations Inuit and Métis Education Unit* in which Cultural Resource Liaisons are available to provide resources and support at any time. Traditional Knowledge Keepers represent their Nations to all SPSD teaching staff with excellence and professionalism: currently, as of June 2015, Elders representing Métis, Michif, Dakota, Sioux, and Cree First Nations, as well as a First Nations Cultural Youth Mentor, are employed full-time. Any teacher may contact the Unit to schedule an Elder visit and initiate the proper protocol process. Aboriginal Educational Assistants have always been open and willing to tell traditional stories within the classroom. At our elementary school in 2014, an Elder storyteller visited and recounted "How Beaver Got His Tail," we held Indigenous Knowledge Sharing Days (offered to the students over two full days and consisting of multiple workshops such as storytelling, drumming, worldview, dance, song, traditional games, art, treaty education, Celebration Assembly, and Community Supper/Performance), and as an entire staff we were provided with exemplary Professional Development days specifically focused upon First Nations Treaty Education.

*Legends* are more serious stories that tell about beginnings or changes in natural phenomena. "A legend has a very strong human message" (Te Hennepe, 2000, p. 257) and reflects an ancient universal sense of animating qualities present in the natural world. Legends deal with relationships between real humans (often heroic) and the environment, and may contain imaginative truths based upon events that can place them within a specific historical time period. They often encompass spiritual beliefs and symbolism from their culture of origin.

In a complementary relationship to legend is *Myth*, which is based upon tradition or legend and conveys deep symbolic meaning and a truth to those who tell and listen to it. Some myths can be centuries-old accounts from a timeless past, transformed by time, place, and

figurative meaning. Myths explain universal or local beginnings, involve supernatural and divine beings, and include creation stories about how things came to be – the land, water, stars, humans, animals, trees, and plants.

“The Wood between the Worlds” encompasses the romantic elements of Greek myth, *Faërie*, and fantasy. *Narnia* is a world of another time and dimension, set within a timeless medieval-like historical setting (as fairy tales are), with extraordinary access attainable only by magical summons. It is a place sated with enchantment, witches, royalty, fantastical mythical creatures, talking animals, and young child protagonists freed from all adult control. It offers a plethora of imaginative adventures, creative possibilities, joyous powers, clarity of good and evil, betrayal and justice, fear and might, oppression and triumph. *Narnia* invites a young child, psychologically developing and dealing with heightened emotions, a place where she may safely play with fire; that is, face her terrors and desires, be validated in her struggle with conflicting feelings, and be reassured that she will overcome and everything will be fine in the end. The power of magic, fantasy, and *the radiant ones* (Lewis, 1982, p. 67) there to rescue you “from the awful, blistered feet of the real world, and the socks running down into your shoes and the food you don’t like to eat and the people who tease you and the fact that you can’t do a cartwheel or that you’re cold or hungry or not feeling well... the power of the mind to heal everything and transport the soul” (Wells in Marcus, 2002, p. 213).

Egan (1997) concurs with my suggestions: stories orient the emotions of children whose imaginative lives apparently peak at 5 years of age (p. 342). At this stage, storytelling as teaching provides a mythic framework, based upon the *poetic* features (not the concrete, empirical logico-mathematical—which some young children take more time to understand) which spur on their intellectual development. “We see prodigal metaphoric invention, talking middle-class rabbits, titanic conflicts of good and evil, courage and cowardice, fear and security”(p. 342). Egan believes this “mythic/romantic framework”<sup>5</sup> enables lessons to be organized and presented by the educator in the form of a story. Boström (2008) gives a marvelous example of this approach: to begin a chemistry lesson, she shares the story of the August 2000 sinking of the Russian submarine, the *Kursk*, and asks the children about what they considered the chemical issues involved in the medical issues of increased pulse rate, dizziness, convulsions, and loss of consciousness (lack of oxygen, too much carbon dioxide). Chemistry is thus set in the context of

story so it can come alive to introduce children to a fascination with the dangers of heat, pressure, energy, and nuclear power (Egan, 1986).

## 2.6 Why “The Wood between the Worlds:” A Whiteheadian Prospect

*Fairy land arouses a longing for [the child] knows not what. It stirs and troubles him with the dim sense of something beyond his reach and, far from dulling or emptying the actual world, gives it a new dimension of depth. He does not despise real woods because he has read of enchanted woods: the reading makes all real woods a little enchanted.* (Lewis, 1982, pp. 65-65)

I have argued that storytelling possesses the power to enhance the playful and joyful capacities of children; it enables students to engage their imaginations in the senses of the body – to smell, feel, touch, look, hear, taste the mysteries of the world. In this section, I show how teaching young children through the use of Lewis’ story and metaphors is strengthened by Whitehead’s account of Romance.

“The Wood between the Worlds” with its enchantment, myriad of pools, living drinking trees, autonomous children transported by magic rings, non-wet water, and rich timelessness is itself a quintessential romantic blend of the mythic, fantasy, *Faërie* story best suited both to Whitehead’s Romance cycle and to the particularly creative age group of 6-9 year olds. By freeing their imaginations, stories tap into children’s emotions, amplifying their freedom to explore the world of ideas, and strengthening their romantic curiosity. In similar fashion, Whitehead describes the flowing wave of romantic feeling experienced by the young as they learn about their worlds:

[T]he great romance is the flood which bears on the child towards the life of the spirit... [its] essence of browsing and encouragement of vivid freshness... Romantic emotion is essentially the excitement consequent on the transition from the bare facts to the first realizations of the import of their unexplored relationships (1929/1967, p. 22, 18).

Whitehead describes a “bare fact” in *Adventures of Ideas* as a partial, minor truth which may, in isolation, distort and beget major error (1933/1961, p. 243); a “bare fact” possesses “a certain limited relationship of identity” (p. 266) and fails to make living connections. The life of the spirit of Romance is the child’s experience of the “joy of discovery... the vividness of novelty” (Whitehead, 1929/1967, p. 32) which breathes adventure into the exploration of how a “bare fact” may transition from being inert and dead into an active, relevant, connecting

knowledge relating to students' concrete, lived experience and interests (Woodhouse, 2014, p. 850). Then the child may use her newly discovered ideas, throwing them into fresh combinations in an active and imaginative pursuit (Whitehead, 1929/1967, pp. 1-2) of living learning.

Whitehead integrates emotional delight into the very heart of the Romance learning cycle which gives life to the entire process. As he puts it elsewhere: "Life is the enjoyment of emotion, derived from the past and aimed at the future. It is the enjoyment of emotion which was then, which is now, and which will be then" (Whitehead, 1938/1966, p. 167). Emotion is a vector through time which enables the enjoyment of life, both past and present, in facing the future: Whitehead explains that "immediate existence requires the insertion of the future in the crannies of the present," that the future "lives actively in its antecedent world," and that the present enjoyment of an "experience is initiated by an enjoyment of the past as alive in itself and is terminated by an enjoyment of itself as alive in the future." Thus, "the future is immanent in the present" (1933/1961, pp. 191-194).

Stories offer this world of wonder by inviting children to be buoyed up and transported into another time, place, person, situation, cultural milieu, problem, and adventure; stories actualize the possible, bring the "potentiality of the imagination into the actuality of everyday life" – transforming everyday life by making actual what had only previously existed in imagination (Woodhouse, 2012, p. 67) – "new expressions of beauty, novelty, and creativity" (Taggart, 2004, p. 57). Stories allow bare facts to ignite passionate pursuit by keeping knowledge alive (Whitehead, 1929/1967, p. 5), evoking curiosity, exercising the power, interest, and possibilities of ideas in the "here and now" (p. 6), conveying the value of life in imagination and in reality (Woodhouse, 2012, p. 68), creatively calling something new and beautiful into existence (Garrison in Woodhouse, p. 69).

Children in the cycle of Romance desire freedom to explore, crave the thrill of play, and hunger for the magical: this is what Whitehead refers to as the *rhythm* of the students' learning in this cycle. This is an internal, organic process of unfolding, mingling cycles in which emotional and intellectual growth are enabled and enhanced. These cycles are *not* linear, age-related, distinct, sequential, isolated, or separate from each other. Whitehead avoids making sharp distinctions among the three cycles of growth; rather, he sees them flowing into one another,

distinct only in terms of emphasis, alternation of dominance, and pervasive quality exerted during different periodic phases (Woodhouse, 1999, p. 193).

Essential to learning are Flynn's (2005) research findings which demonstrated that the primary aspect of lasting learning is "emotional significance" (p. 73), that "emotion is the primary feeling from which consciousness and learning grow" (p. 75). Flynn (1995) also states that "emotions mediate awareness and connectedness" with growth and learning (p. 365) so that the joy of learning is at the core of Romance. As Whitehead put it, "Joy is the normal healthy spur for the *élan vital*" (1929/1967, p. 31). Woodhouse (2012) asserts that the teacher must connect ideas to emotions, that "imaginative teaching appeals to the intellect and emotions" (p. 3), that a teacher should "allow students authority to pursue inquiry wherever it may lead" (p. 4) in which "the initial impulse is one of joy towards the rest of nature of which one is a part...the child's playful discovery of the world" (Woodhouse, 1995, p. 352).

In conclusion, storytelling inspires children in the Romance cycle and becomes a doorway of invitation, beckoning the children to dive into the pool of their choice: to explore, to quest, to venture. This lure and beckoning is quintessential Whiteheadian Romance. Using story as an invitational method, or *rhythmic* storytelling as I have called it, produces new ideas, stirs and ferments thought, not set ends in order (Whitehead, 1929/1967, p. 18 and Bullough, 2010, p. 156). Story in my classroom became a place to *begin* inquiry and imaginative fantasizing that will last the lifetimes of my students through the affective filter of joyous emotion associated with learning and listening to stories. For children in the Romance cycle, stories engage the emotions underlying important realities and interests in their "now," relating them to their past experience and to future possibilities. Fantasy and *Faërie* ennoble and make childhood experiences enduring, and memorably teach content with joyful emotion that is not easily forgotten: "The Wood between the Worlds" does just that.

## NOTES

1. "The Wood between the Worlds" was inspired by William Morris' novel, *The Wood Beyond the World* (New York: Ballantine Books, Inc., 1969). Lewis highly esteemed Morris.

2. From Ford (2005): “The expression ‘the trunk of the World Ash Tree’ is found only in the American editions of [Narnia]. According to the White Witch, the words of the Deep Magic are written on at least three sacred places: on the Stone Table, on the trunk of the World Ash Tree, and on the scepter of the Emperor-beyond-the-Sea... the written words suggest *runes*, magical letters carved into stone or wood by many early North European cultures. The World Ash Tree is Yggdrasil, the great tree of Scandinavian mythology, a symbol for existence” (p. 311).
  
3. Yggdrasil is described as a place without time that holds the created order together. Some Indigenous Creation stories also share features of a timeless tree called *The Sacred Tree*. Nicholas Black Elk (1863 – 1950) of the Oglala band of the Lakota Sioux Nation, had a 12-day vision, at nine years old, which included the fourth grandfather of the South giving him a red stick sprouting leaves representing the sacredness of life, telling him of a sacred tree that would grow in the centre of the nation. In the dream, Black Elk was commanded to plant this stick in the centre of a yellow hoop representing the cycle of life where the tree would bloom, but before he could do so, the earth, air, and sky grew sick, animals and humans grew frightened, and an evil blue man representing greed, dishonesty, and selfishness empowered the illness. In the vision, Black Elk killed the blue man and planted the red stick which grew into a sacred tree under which children of all nations gathered, many other hoops joined with the sacred hoop of his people to create one, and all things grew fresh and healthy; thus, the entire life cycle of Mother Earth was complete. In a pipe ceremony on Harney Peak in the Black Hills of South Dakota, Black Elk spoke hope: “It may be true that some little root of the sacred tree still lives. Nourish it then, that it may leaf and bloom and fill with singing birds” (Neihardt, 1961, p. 221). Also see Krull, (1999, pp. 67-73, 107). Many First Nations’ peoples believe that Creator has planted this *Sacred Tree* for all the people of the earth, under which they may gather to find “healing, power, wisdom and security. The roots of this tree spread deep into the body of Mother Earth. Its branches reach upward like hands praying to Father Sky. The fruits of this tree are the good things the Creator has given to the people: teachings that show the path to love, compassion, generosity, patience, wisdom, justice, courage, respect, humility and many other wonderful gifts” (Bopp, 1992, p. 7). The whereabouts of this Tree and its fruits have been carefully guarded and preserved within the hearts and minds of the Elders. It was foreseen that the people would wander away from the Tree’s protective shadow, forget to seek its nourishment, turn against the Tree and try to destroy it thus leading to sorrow, quarreling, dishonesty, illness of heart, anger, gloom, loss of power, and the inability to dream dreams or see visions or survive in their own land. “Little by little, they will poison themselves and all they touch” but the “Tree would never die. And as long as the Tree lives, the people live” (p. 7) and would again search for *The Sacred Tree*. For more about Black Elk, see Chapter 4, note #2.
  
4. *Fangorn Forest* was watered by the Entwash (a large meandering river which flowed from sources in *Fangorn Forest* to a north delta) and the Limlight (a river flowing eastwards from the northern marshes), and guarded by Ents. Ents were the Shepherds of the Trees, the wandering Tree-Herders, friends to the Elves, protectors and defenders of

the tree-spirits, “the fathers of the fathers of trees, remembering times when they were lords” (Tyler, 1976, p.153), indistinguishable from actual trees, speaking long and slow tree-talk. When provoked, they could crack rocks and move large quantities of earth easily and quickly. Infrequently, in times of great need, the Ents would meet in ritual assembly called Entmoot at Derndingle, in the heart of *Fangorn Forest*. It might also be interesting to note in passing that J.K. Rowling, a popular children’s storyteller of our time, has drawn heavily upon forests (*The Forbidden Forest, The Dark Forest, The Forest of Dean*) within her Harry Potter series. Her Bachelor’s Degree was in Classics and French, so it is hardly surprising that myth should feature so strongly in her tales. Rowling uses Celtic associations with different woods from distinct types of trees in the art of wand making. For instance, Harry’s wand is made of holly (associated with life and protection), Ron’s first was made of ash (faithfulness, growth) and then willow (healing, imagination), Hermione’s is of vinewood (flexibility), Neville’s is of cherry (new awakening, compassion), Draco’s is of hawthorn (duality), Bellatrix’s is of walnut (unyielding), and Dumbledore’s wand is made of elder (representing sorrow, death, rebirth, and renewal); Tom Riddle’s wand is made of poisonous yew.

5. However, with all his talk of mythical frameworks, Egan seems to subscribe to a Piagetian theory of the linear stages of development (see Kieran Egan (1999) OP-ED Education’s three old ideas, and a better idea, *Journal of Curriculum Studies*, 31(3), 257-267, DOI:10.1080/00220279183115 in which Egan summarizes his Vygotsky-inspired linear developmental theory consisting of five successive stages which he refers to as “tools” or “understandings”: Somatic, Mythic, Romantic, Philosophical, and Ironic.) This is a key difference between Egan and Whitehead: Whitehead rejects the linear development model, articulating instead the tri-cycle learning process consisting of Romance/ freedom, precision/ self-discipline, generalization/ return to freedom. The adaptation of freedom and self-discipline to the natural sway of development is what Whitehead called *The Rhythm of Education* (Whitehead, 1929/1967, p. 31).

## CHAPTER THREE: VOICES OF THE CHILDREN IN MY CLASS

### 3.1 Introduction

In this chapter, I examine the Voices of the Children from my elementary classroom over a period of one year. The story I tell is based upon my memories and my personal anecdotal notes of their stories and their responses to the use of storytelling as a pedagogical tool. I have ensured that the voices remain anonymous. I consider how the children both spontaneously and responsively tell their own stories, and how they have felt about hearing Narnia's "The Wood between the Worlds." I use an ontological hermeneutical approach as a prism to interpret the children's written, verbal, and graphic stories within the context of the Whiteheadian Romance cycle. I also take into account Antonio Machón's<sup>1</sup> *Graphic Representational Studies* (2013) because his forty year research compilation and study of children's artwork - accompanied with a plethora of coloured plates of visual examples - offers a unique kaleidoscope through which to consider children's *drawings* as storytelling. In the final section of the chapter, I emphasize the ways in which storytelling enables children to express their emotions and show how Whitehead's conception emotion is consistent with my approach to teaching and learning.

### 3.2 The Story Woods: Children's Improvised Verbal Storytelling

All year, a lovely copse of pine trees beckoned to us just outside our classroom window. The children suggested several names for this grove and, after we democratically voted with our bar graph magnets, we agreed upon *The Story Woods*. Every fair day of autumn and spring, we would sit together under the perfumed pines and relate stories to one another as we ate our lunches.

That was where I was daily captivated: at the feet of the trees and the children as I listened with joy and delight to their *histoires du jour*. One girl kept her peers almost weeping in laughter with her impromptu, additive stand-up comedy routine of her family's tall-tale camping trip in which a ferocious bear put in an unforgettable appearance; another girl related memories of a family seashore vacation in which a living treasure hunt was set up in "The Story Woods" so that each part of her story was instigated by the discovery of a prized object she had hidden; a

boy told hilarious Barbie and Ken tales in which Ken kept screwing up in his valiant attempts to save Barbie who never did seem to need rescuing; one student loved to recount Chinese dragon mythologies and folktales; yet another drew oil pastel pictures in vibrant, joyous, fantastic colours to illustrate the fairy tales as she recounted them; a further boy used simple pencil cartoons in film strip style to share his traveling adventures with cars, planes, and trucks.

To capture the essence of childhood storytelling, we must embrace a playful approach to life which revalues and redeems life's accidents in a game of self-creation and affirmation. Qualities such as adventurousness, risk-taking, freedom from convention, demands, and commands hallmark the child creator who "plows through the world of wiggled roads and frightening creeks to come out the other side with a smile... breaking rules, going beyond borders, and traversing new lands in an attempt to create a life worth living" (Held, 2011, p. 26), traveling her own way.

### 3.3 Writing Stories Responsively to Narnia's "Wood between the Worlds"

After reading and studying "The Wood between the Worlds" as a class, I recall from memories and anecdotal notes several interesting stories emanating from the students including diverse themes such as friendship, family, enchanted forests, singing trees, magical islands, time travel, and fearful ponies.

One girl wrote a journal response about "Best Friends" – she was going to miss her friends, even if she was away for just one day, because her class friends were "like the best friends" she could ever have. Another young author wrote a history of *The Enchanted Forest*, and how it came to be: when a magic spell was broken, the trees stopped grabbing people and began to sing and gently sway in the wind. A third student composed and presented a six-page story (completed, typed, and printed) that told about a girl on a magical island on a mountain. This story was an expression of emotions, those of heart-racing fear and curiosity mixed with wonder and fascination in the face of an invitation to magical time travel into the unknown. A girl falls asleep and is awakened by a noise. Looking around, she sees sparkles forming in circles falling from the sky. Even though she is scared, she steps into the circle and then time changes very fast: day, night, rain, and fog. It is magical: everything speeds up, then everything goes

white and calm. She is in a new land and walks along the new world path, the seasons changing all around her. She is disappointed because there is no winter, but as soon as she wishes it, winter arrives! She plays in the snow, makes a snow fort, skies, and sleds, and then it becomes dark and foggy so she cannot see. Then the craziest thing happens: she starts to hover, then float, then fly fast. She closes her eyes and when she wakes up, she is at home in bed. She had a great dream!

A fourth student wrote about a five-year-old pony that was “scared of a lot of things - she had a very big problem.” At a first fearful BOOM! she ran home. At a second BOOM! “she didn’t go all cocoo.” The third time, she cried. Then she saw another pony and her sister who asked if she wanted to be a family. There was another BOOM! and they were all a little bit scared and they all yelled HIDE! and so they all hid together.

Each of these children’s novel stories plucks upon a particular theme related to the original (or old) Narnian tale that resonates with the individual child. The stories realize a personal connection which, in turn, provides a commonality of experience for the entire class. For instance, the friendship between Polly and Digory struck a chord with our author on the vitality of friendship in her life (which all Grade Twos cherish); in contrast, another writer was romanced by the concept of time travel which sparked a dream sequence of travelling through circles of sparkles into time warp.

As an entire class, we wrote a fairy tale called *The Poseidon Epic*, together in which everyone shared additive power:

Once upon a time, there was a Time Traveler father who had three sons – Zeus, Hades with his pet chicken, and Poseidon. One day, the father told them to find a dinosaur bone by travelling on a flying squid. On the way to find a dino bone, Zeus fell off the squid and got stuck in a hole, Hades’ chicken laid a golden egg in the Underworld, and Poseidon discovered a time machine along with his long-lost trident on the bottom of the ocean. Poseidon fell back into the sea when he tried to put the time machine on land and a shark attacked him, but he found a ladder and climbed out of the water. When he got out of the water and got into the time machine, a squirrel jumped and landed on his head, and he met a magical dying rat inside the machine. The rat told him to go to 65 million years ago to find a dino bone, so he went 65 million years back in time to dig, and found the dino bone! Then he traveled back home, but his dad was sad because Zeus did not return with Poseidon. But Zeus had revenge on Poseidon and then they all lived happily ever after. The End.

The entire class contributed to this story - discussing, brainstorming, and sharing plot, character, and story development. We had been reading books on Greek mythology and African/European fairy tales in English Language Arts, and had been studying dinosaurs and archaeology in science classes. Classmates picked up on varying themes from “The Wood between the Worlds” in melding their group fairy tale, deciding to employ a traditional fairy tale opening and closing. Themes included magic, mythological characters (Poseidon, Zeus, Hades) and imagery (trident), father relationships, fantasy time travel via animal and machine, triumphant problem solving, visiting Other worlds, relationships (and competition) between siblings, water and dry land, and no adults within the adventure itself – only the sons did the deciding and traveling. In *The Wood*, the helpers are the magic, bright, humming rings that transport Polly and Digory between worlds; the talking animal helper (the dying rat) was an interesting addition to the class tale. The helper represents inner strength and that strong part of ourselves that steps in to save us and help us grow, change, and renew (Harvey, p. 50). The story ends with an age-characteristic safe and reassuring conclusion, though a vague “revenge” must be exacted first.

### 3.4 Interpretative Considerations for Children’s Storytelling in the Whiteheadian Romance Cycle

The task of an interpreter is like that of a pearl diver: one descends to the seabed “to pry loose the rich and the strange, the pearls and the coral in the depths, and to carry them to the surface” (Arendt in Benjamin, 1936, pp. 50-51). I am that pearl diver as I “wrest and gather” from children’s storytelling – from their “language of truth, the tensionless and even silent depository of the ultimate secrets with which all [their] thought is concerned” (Benjamin, 1936, p. 77) – and from the ocean floors of their voices which arise in their responses to Narnia’s “Wood between the Worlds.”

My elementary students told stories primarily through languages of stand-up comedy, spontaneous verbal family tales, written fantasies, and graphic representations. Any real translation of their work will be transparent; it will “not cover the original, nor block its light, but will allow its pure language to shine” (Benjamin, 1936, p. 79). As these children speak, I will lovingly and in detail endeavour to produce a “harmonious echo of the intention of their original

expressions and the representation of their significance” (p. 76). I seek synchronization between my own language and the languages of the children.

When attuning to the voice of a child, there are many elements to identify about the child author herself and the tale she tells in oral, written, or graphic form. We understand that within stories, truths are revealed. Truths are different from facts, in that truths are about what events *mean*, and how events are perceived by, the child. A power dynamic is at play: the point of view adopted by the teller. Point of view affects how and why choices are made within the storytelling: whose voices are privileged, whose are silenced; what is left out, what is included; whose experiences are described; who gets the last word. These questions also apply to myself as the storyteller. *How* is the teller choosing to speak about, portray, represent, and remember any given character or family member? Is the narrator omniscient? We will consider four lines of inquiry I must make as I delve into the truths expressed by children’s voices within their stories: i) point of view; ii) story fundamentals; iii) physicality; and, iv) graphic representation.

First, the critical components that affect point of view include: *age* (affecting the way life and experience are viewed, which stories draw and hold interest), *gender* (influencing who gets to act within a story and with whom a child may sympathize), *geographic location* (forming the concepts of home, roots, loyalties, continuity with the past, sense of identity, parental relationships, family relationships), *cultural background* (concerning the peer groupings and cultural stories to which the child is exposed, which can offer immediate connection or barrier to an audience), *temperament/health* (shaping the child’s relationship to the world around her), and *class or socio-economic background* (influencing who the heroes and villains are, common struggles, and how a story is narrated to peers so characters are relatable).<sup>2</sup> This is an example drawn from my own experience as a teacher: a young Arab boy, especially close to his mother, is drawn to hearing and telling stories that emphasize that same kind of close maternal relationship; he seems more inclined to consider stories sympathetically from a mother’s point of view. A strained relationship with an older brother draws that same young boy to choose to read class library stories in Free Reading Times that feature similar sibling struggles. He gravitates more to a peer group and audience that understands the familiar Arabic cultural stories and background with which he is familiar, as he just recently moved to Canada. He prefers short conversations to slow-moving descriptions, so he likes his stories to get quickly to the point. This affects his

decisions, when he becomes the storyteller, as to what gets left in his story, what gets left out, whose voices are privileged, whose voices are silenced, whose experiences are mentioned, whose experiences are missing, and who gets the last word (see Harvey, 2012, pp. 73-74).

Second, reflect upon fundamentals within the child-created story itself. What genre of story (as described in Chapter Two), has been selected, and why – personal narrative, myth, fable, tall tale, family, *faërie*, legend, trickster, folktale, ghost? Is self-reflection at play: is a mirror being held up to self, listener, or culture? Is the structure that of a Hero's Quest following that pattern of separation from the familiar, initiation into new understanding, and return to the known world? Or is it based upon a clear "beginning, middle, end" prototype? What images are repeated? Within the story, what are identifiable as commonalities of experience such as background, upbringing, choices, and personality? What characters, places, times (both in historical moments and past/present/future verb tenses), "tensiveness" (conflict or dynamic pull between opposing forces), and tensive desires drive the story and keep the listener curious? For example, one boy chose a fairy tale genre ("Once upon a time") with a clear beginning, middle, and ending because he loved the potential of heroic and magical adventure afforded by such a medium. He named his king "Wilddave" (a self-reflection of his own *joie de vivre*) who had two sons (there were two siblings in his own family) "whose names were Snape and Rex" (he was an avid Harry Potter fan). One son "did everything his father told him," the other did not: this explores the agency that a child has within a story to choose to act in a villainous or valiant manner, reflecting that even though a child may struggle emotionally with contradictory desires, he needs to know everything will be fine in the end, and he can be strong enough to overcome temptation. The repeated image of a "pit of snakes" from which to escape represented the ultimate challenge of individual courage, ingenuity, and perseverance, for which the reward for triumph was a title of honour, "The Snake King," and the penalty for failure was "the dungeon forever." Commonalities between his story and those stories of his classmates included sibling rivalry, personality clashes, competition in a physically challenging event, choosing to obey or resist parental instruction, deciding to ask for assistance or to face a challenge alone, and showing courage in a fearful circumstance. The good son is victorious, the bad son is sent to the dungeon, and "They lived happily ever after. The End." In this emotional dueling for the supremacy of inner goodness and courage, the child's feelings in his struggle to find his transformed place within his family, with his sibling, and with his peers, were foremost.

Third, consider the physical aspects of performed or read-aloud storytelling. Storytelling is an art, a craft: yet, it is primarily different from all other forms of communication and entertainment in that there exists a relationship between the audience and the storyteller (Harvey, 2012, p. 84). There are five steps (p. 57) in a story's developmental process which are interconnected into a cycle: talking, writing, imaging, playing, and rehearsing (though not necessarily in this order).

Practicing the story as part of a shared conversation prevents isolation in craftsmanship and reveals aspects that may not be initially clear – such as humour, adapting, pausing, timing, or additive successes: an audience teaches the storyteller so much about what there is in the story. What physical interaction (standing or sitting), facial expressions, attitudes, pauses and timing, emotional reactions, voice intonation, body language (open or closed), and gestures are being engaged? Playing with stories means exploring possibilities of character development, events and their order, meanings, gestures, and delivery. Is eye contact made, inviting the audience into a trust relationship with the teller, acknowledging the presence of others? Journaling and sketching out ideas helps the child piece together the story and achieve a fuller immersion into the scenes. The teller should be able to see the story all around as the people and places become real and listener and teller are all drawn into the living, organic story. A fascinating method employing this cycle is used by Vivian Paley with kindergarteners to Grade Threes: she writes down a child's story exactly as it is dictated to her in class (storytelling), and then there emerges a growing "excitement over the opportunity to have their classmates become the characters in their story" (Paley, 1999, p. 88), which is story acting. This proves to the child in word and deed that one is accepted, loved, safe, and not invisible.<sup>4</sup>

### 3.5 The Voice of Graphic Representation in Art and Storytelling: Antonio Machón

Antonio Machón's 2013 developmental study, *Children's Drawings: The Genesis and Nature of Graphic Representation*, identifies the key ages between 5 and 7 years as an "arduous" developmental period of graphic representation called "The Period of Schematisation." This stage marks the beginnings of "Figurative Representation" during which formal schooling forces a child out of their natural Romance-like rhythm of free exploration of drawing as self-

expression and storytelling into a Precision-like conformity to adult requirements of representation through standardized, conventional stock images inundating the school environment (p. 314). This is a critical developmental period in which drawing transitions from the symbolic to the iconic. I am aware that Machón's concept of linear development as identifiable *schema* is closer to that of Piaget than to Whitehead's more fluid conception of overlapping rhythmic cycles of growth<sup>5</sup>. But Machón and Whitehead share an opposition to the tendency of schools to deaden "the creative sensibility of children" by expunging "non-representational" forms of artistic activity in favour of "graphic representation" (Machón, 2013, p.345). And Machón's insights into children's art and stories serves to buttress my own account of storytelling as pedagogy in the Whiteheadian cycle of Romance.

Whitehead protests against dead knowledge and inert ideas; so, too, do Machón and Viktor Lowenfeld. They believe the aim of education is to ensure that living knowledge actively motivates the child's work through individual experiences (p. 360). Lowenfeld (1947) advocates a balanced educational system oriented towards developing the "whole" individual, in which "art may well be the necessary balance for the child's intellect and emotions" (Lowenfeld in Machón, 2013, p. 54). This view strongly resonates with Whitehead's *art of life* – the process which enables individuals to reach their potential through a "sense of beauty" (Whitehead, 1929/1967, p. 40) which is taught by means of art in all its forms through a unity of "headwork" and "handwork" (Woodhouse, 2014, p. 850).

Children's drawings are a language and voice which must not be neglected in the appreciation of children's storytelling. Children use the devices of drawing to express their emotions, experiences, and fears. They almost always project their problems and conflicts on to 'the self' through their own body image (Machón, 2013, p. 361). At this stage, through sizes (e.g. figures too small may parallel insecurity, shyness, or aggressiveness), proportions, exaggerations, deformations, omissions, neglect of some parts (especially the limbs), and stylistic alterations, children are dominated by their inner realities determined by their interests (not guided by visible references as adults are). These positive, creative signs are characteristic of the child's artistic style (W. Wolff in Machón, p. 361).

During this stage, which Machón refers to as “The Period of Schematization: The Schematic Stage,” children between the ages of 5 and 7 are capable of graphic representation in both their painting and storytelling (2013, p.421). That is to say, their own experiences furnish creative works which are not mere copies of ideas and subject matter provided by teachers or other adults. Machón also refers to this process as “non-representational experimentation,” a time and place for children to explore feelings of fear, love, hatred, and rejection (the very themes of my own class’s stories) (p.345). As a result, the child “places emphasis on what is important to him [sic] at a given moment and omits or attaches little value to that which lacks affective or experiential interests (p. 361). Machón’s account of children’s experiential search for meaning, value, and understanding as represented graphically in art and stories resonates with me as an elementary teacher concerned with the education of young people in the cycle of Romance.

### 3.6 Machón on Drawing as Storytelling

Like Whitehead, Machón argues that schooling can kill the child’s own creative impulses to engage in learning. For Machón, drawing as storytelling is the first casualty. He writes:

Schools, which are generally more interested in representing reality, should ... always respect children’s interests... [E]ncouraging non-representational experimentation, in addition to boosting children’s creative sensibility, is also a form of contributing to their intellectual and cognitive development. (Machón, 2013, p. 345)

Here, Machón recognizes that children’s “creative sensibility” can flourish if their own capacity for “non-representational experimentation” is encouraged. Graphic representation of their own experience of reality, afforded by painting and storytelling emergent from children’s own experience, emotions, and interests is the key to this process. Schools, however, tend to ignore their interests in the name of “representing reality” by requiring them to paint subjects selected by adults. By engaging in the activities of painting, drawing, and storytelling, children engage in bodily activities which contribute to their intellectual and imaginative development. Machón’s argument is reminiscent of Whitehead’s emphasis on the need for “joy in beauty of form and colour” as promoting “the life of the spirit” (1929/1967, pp. 41, 40). And, more especially, there is a similarity with Whitehead’s belief in the importance of bodily activity as enabling “a reciprocal influence between brain activity and material creative activity” in the learner (p. 50).

Machón continues in the same vein, criticizing schools for stifling children's interests at an early age in a manner reminiscent of Whitehead's warning that such "training is apt to kill initiative" (1929/1967, p. 35). Machón (2013) puts this as follows:

So as not to stifle this intelligent and creative play... systematic teaching of the formal elements of artistic creation (such as composition, balance or colour) at these ages [5-7] [should be avoided, as this formal instruction] could spoil the creative spontaneity... or dampen children's investigative interests... encourag[ing] mental laziness by stifling all possibilities of personal creation – the promising originality and freshness [featured in the pre-school ages]. (pp. 346, 348)

If a child's creative potential is smothered by teaching the formal elements of colour, form, and composition at too early an age, her aesthetic interests are likely to diminish. The result, according to Machón, is the "mental laziness" which accompanies "stifling ... the promising originality and freshness" exhibited by very young children. Machón's emphasis on the need for children to engage in "intelligent and creative play" recalls the Whiteheadian idea that, in freely crafting something novel with their own hands, children experience "a new sense of wonder and a new sense of possibilities" by means of "a marriage of thought and action" (Hendley, 1986/2011, p. 95; Whitehead in Hendley, 1986/2011, p. 86). Both Machón and Whitehead have a vision of creative, playful activity of an aesthetic nature, which is capable of liberating the impulses and interests of children by engaging them in activities which they enjoy pursuing, whether in painting, drawing, or storytelling.

Machón (2013) goes on to describe the arduous transition period of about three years of the child's life in which s/he first encounters formal schooling. According to Machón, this critical moment in the child's development is evidenced by a standstill in drawings; children give up and stop exploring in order to use ready-made models because they first experience self-criticism and a loss of confidence in their own creative capacity. He re-emphasizes the fact that, "[T]his in turn may lead to lack of interest and a creative and investigative passivity that is evidenced in the tedious drawings so common in our schools – drawings full of stereotypes borrowed from the adult models and give rise to monotonous uniformity which have in common a lack of vitality and creativity" (p. 329). Once again, it is the stranglehold of adult-imposed subject matter which can crush children's interests and capacity for creative drawing. As

Whitehead exclaims, “Cursed be the dullard that destroys wonder” (1967/1929, p. 32). Any sense of Romance has been lost.

Is it not also the case that the discourses of popular culture and rampant materialism globally have an even stronger part in stifling children’s imaginations? Never in the documented history of childhood have children been so removed from productive labour and yet so actively targeted as consumers. Children are getting a lot of stories to live by outside of school that also deaden creativity and imagination. This is where instructing children in critical media literacy may prove valuable: asking children what they got out of a film or advertisement and perhaps posing questions, in Socratic style, regarding the realism and values being portrayed.

### 3.7 Connections: Applying an Ontological Hermeneutical Approach to Understanding Children’s Stories

From Chapter One, I argued for an ontological hermeneutics which frames interpretation in ontological terms, that is, how humans experience the world. Interpretation within this framework is considered neither a method nor methodology, nor a theory of knowledge. Rather, an ontological hermeneutics respectfully considers texts and people as conversational partners with whom we co-create and co-determine meaning, as we “fuse horizons” together (Gadamer in Kerdeman, 2014, p. 379). That is, we come to co-interpret a truth about life’s meaning that we could not know outside of participating with a partner in dialogue. And we are thereby transformed, learning to be receptive to ways of being that differ from, and may even challenge, our own: to be open, take risks, trust, learn, and be transformed by participating in the interpretative power of storytelling. The hermeneutics approach allows me to interpret my own experience as text: text as text, faculty as text, and students as text. In this process, I draw on certain themes from children’s written stories by memory, existing literature, and an analysis of my own experience to move towards a theory of storytelling as a powerful pedagogical approach within Whitehead’s Romance cycle of education and learning.

### 3.8 Storytelling, Empathy, and Masks

Storytelling is about connections. Saskatchewan Curriculum stress the importance of teaching children the skill of *making connections* between a text to other texts, between a text to

self, and between a text to the world (see online Saskatchewan Curriculum, Teaching English Language Arts 2, [http://www.curriculum.gov.sk.ca/index.jsp?view=teaching&lang=en&subj=english\\_language\\_arts&level=2](http://www.curriculum.gov.sk.ca/index.jsp?view=teaching&lang=en&subj=english_language_arts&level=2)). However, the most important connection in my mind is that of empathetically and imaginatively connecting a text to **others** (i.e. other people they actually may or may not know; others' lives and experiences) "... because, for each of us, life is a continual encounter with the Other, individuals and groups who aren't just like us" (Jeffcoat in Held, 2011, p. 95). Stories vitally exist by virtue of this connection between an audience/reader and a teller/author: "We read to know we're not alone" (William Nicholson, 1993). The question we should teach children to ask is *why* they might have personally connected to and cared about a story (whether socially, geographically, emotionally, culturally, chronologically, intellectually...).

The perspective that a child uses to tell his story is a mask or *persona* (Latin for "mask")<sup>3</sup> that directs where he looks and what he sees: "Children have a fascination with masks – creating that face for the world. It is fun to dress up and turn the world into a play" (James Marshall in Marcus, 2002, p. 105). The inherent challenge for children to tell stories from diverse perspectives provides a basis for empathy.

Within the delightful tapestry of their tales, considering the child's text as a conversational partner in co-creating and co-determining meaning, a sensitive educator may begin to understand how the child understands herself and her social world, identify her use of symbolism and metaphor, draw themes from the child's written story, and garner truths about life's meaning which can transform the lives of both the child and the educator (or adult reader).

### 3.9 Children's Stories: Beginnings and Endings

Many of the stories written by the children in my class began with "Once upon a time," the indicator of the genre choice of *faërie* and magic. It demonstrates the preferred genre of this age group of primary graders (6-8 years old) is that which romances the imaginatively creative fantasy world of *faërie*, embodied within "The Wood between the Worlds." Their world of *faërie* includes talking animals, stock characters ("the evil guy," an evil witch, good and bad sons, and a bad princess!), legendary beasts (griffins and dragons), spells, primal emotions, tasks,

struggles, and victory. However, not all tales end with “And they lived happily ever after.” One story did not end with an age-characteristic safe and reassuring conclusion:

Once upon a time there lived a girl. She was very poor but one day the prince came to her and said, would you like to come to the castle and be the princess? She said, yes, and she left and the prince left with the girl. So she was the princess and she was not the poor girl anymore. But she turned evil and it was bad ... She destroyed the castle and made it an evil castle and killed the prince and she ruled the world. The End.

An educator would need to sensitively explore “killing the prince,” “turning evil and it was bad,” “destroying the castle and making it an evil castle,” and “ruling the world.” At the end of this section, I show how this could be done.

Each child generated a protagonist of the same gender as themselves, used third person (the omniscient narrator), although many times the authors use direct and indirect speech (limited by not yet mastering quotations in Grade Two). Boys tended to use strong father-son(s)-son relationships in which duels for supremacy were taking place; the girls tended to draw upon family and marriage/couple relationships fraught with tension and emotion. Most stories were set in medieval times of castles, kings, dragons, griffins, with a bit of Harry Potter thrown in for good measure; one story unfolded in *The Jungle* and *The Dark Forest*.

It is important to note here the contrast between two very different types of endings. A peaceful, neat wrap-up of prevailing goodness, “And they all lived happily ever after. The End.” contrasts with a violent battle that terminates with dominant evil: “She destroyed the castle and made it an evil castle and killed the prince and she ruled the world. The End.” My interpretation of this last story would be that, although her choices of gender, point of view, genre, relationship tension, and theme may be familiar to this age group, the young writer has felt some type of frustration and desires power to silence the prince, yet feels that it is wicked to want [female?] empowerment, thus the princess “turned evil.” As a teacher, healthy empowerment is exactly what I would entrust to this girl within the classroom, in group work, allowing bad stories to be shared and acted out by her peers in a safe place, validating her struggle, helping her find her own inner strength that can step in to save her, and assisting her to grow, change, and renew in wholesome ways.

### 3.10 Children's Stories: Emergent Themes

The themes articulated within the stories written by the children in response to “The Wood between the Worlds” (section 3.3) were intriguing; they included relationships, friendships, origins of enchantment, magic woods, heightened emotions, connections with other class learning, magical time travel, other worlds, free choices of the child, fear of the unfamiliar, mythological images, and inner strength. One student was captivated by the image of enchanted woodlands, and wrote her own story entitled *The Enchanted Forest* in which she explores how this magical place may have originated: What magical beings were part of its creation? What spells were cast and broken? What duels had to be fought to make sure the witch died and that good triumphed? What delicious dangers or charmed beings awaited in the forest? What problems and tasks were wrestled down? What talking creatures were to be found?

This creative, brilliant, seven-year-old authoress provides myriads of answers: it was a magical evil witch, entering into the land, who cast a strong spell upon the forest, creating monsters and trees that grabbed people so as to scare villagers out of the forest into the high mountains; no brave knights could break the spell. Only a brave queen living on an island 10-days' journey away was able to triumph in a duel, with the aid of one villager and two brave knights with no armor, battling against the great giant. The witch faded into powder after she cast a wrong spell that changed the monsters into unicorns and allowed the trees to sing and gently sway in the wind. Curiously, after the villagers, queen, and knights returned to the forest and feasted in celebration, they all mysteriously disappeared in the wood, and that is the origin of how the wood came to be known as the enchanted forest even to this day.

Another girl was enthralled with the concept of magically traveling through time. *Feeling scared, yet feeling calm* were emotional links she made with Digory in “The Wood between the Worlds;” being asleep identified with Polly; and the stepping into a magical, sparkling circle must have captured her imagination from the sparkling magic ring that transported the children into another world. It was so fascinating that she wrote about emotion, the “vector” through time (see Whitehead, 1966, p. 167). In the conclusion, I draw attention to Whitehead's concept of emotion as a vector through time ... but isn't it interesting that she herself came up with this? The myriad of choices represented by the pools riveted her, and she explored how her wishes and

choices could be made as a source of powerful truth in this place. Another student identified and pursued the theme of fear of the unknown, calling it a “problem;” in her story, instead of sensing adventure within an enchanted forest, anxiety was triggered within her imagination in the face of the unfamiliar, and a need to find friends with whom to hide in safe places to avoid the unknown.

### 3.11 Conclusion: Stories, Themes, and Emotions

The voices of the children within these their written, verbal, and graphic stories, all reveal to me *the heightened emotional state* and sensitivity of children in this cycle of Romance. As a teacher, I need to validate their feelings in their struggles to find their transforming places within their families, with their siblings, and with their peers (both of the same and opposite gender) in growing, developing, and changing classroom dynamics. The following are all commonalities within the stories crafted by my students: obedience to parents, the joys of friendship, betrayal, the delight of magical transport to worlds without adults, mood swings, alleviating poverty, finding a loyal friend with a true heart, boys hurting girls’ feelings, funny family stories, disastrous adventures, cultural rootedness, and feeling pressured to “claim your territory” as a younger brother or as a child of smaller stature on the playground. While each story may be unique in detail specifics and style, each story is also familiar to every other listening peer and classmate because it reflects a familiar, relatable experience, emotion, and hurdle.

Children in the cycle of Romance are starting to compare their own strengths and weaknesses to those of others (Harvey, 2012, p. 144). Therefore, they need to tell their own stories to explore their own strengths and diverse abilities, to feel themselves strong, to make certain the witch **does** die (Cashdan, 1999). They also need to fashion a place where they may safely play with fire, i.e. to name and give form to their fears and deepest hopes thus gaining power over them, to experiment with different roles and perspectives, and to master and use long words, turns of phrase, descriptive passages, and emotive techniques.

The idea that emotion is somehow related to travel through time that was expressed by one of the children in my class, as well as the heightened emotional states which all the children felt when engaging in storytelling is consistent with Whitehead’s account of emotion. “Life,” he writes, “is the enjoyment of emotion, derived from the past and aimed at the future. It is the enjoyment of emotion which was then, which is now, and which will be then. This vector

character is of the essence of such entertainment” (1966, p. 167). Emotions are vectors inherited from the past, flowing through the present, and moving towards the future, and the enjoyment we experience is of their fluid character. The release of tension which a child may feel when telling a story in which she expresses her fear of parental disapproval, for example, is not limited to one instant in time. It has temporal duration in her experience, a lasting feeling of relief that may find full expression before fading away.

Whitehead refers to this kind of experience as “Life [because it] lies below this grade of mentality... [of] conceptual experience” (1966, pp. 167, 166). What he means is that the life of a child is far more than her conscious awareness. Rather, it is characterized by the emotions at the heart of her experience, a feature which she shares with other human beings and other organisms (Woodhouse, 2015). And the vector character of emotions is interwoven with the fabric of a universe that is itself alive. For the emotional process in which “each occasion [... is] engaged in its own immediate self-realization, is [also] concerned with the universe” (Whitehead, 1966, p. 167). As the child expresses her guilt, shame, and love for her parents, this bundle of emotions may also be experienced by the other children listening to the story. As members of a universe that is alive, they have the capacity to feel, reflect, and take action on what they learn through the process of storytelling I have described in this chapter.

## NOTES

1. This Spanish art educator has directed his own Madrid art gallery since 1973, collected over 30,000 children’s drawings, and devoted his life to the exhibition of child art.
2. See Harvey, Chapter 11, pages 73-78.
3. The word *persona* is derived from Latin, where it originally referred to a theatrical mask. The Latin word probably derived from the Etruscan word *phersu*, with the same meaning, and that from the Greek πρόσωπον (*prosōpon*). See Bishop, Paul (July 30, 2007). Analytical Psychology and German Classical Aesthetics: Goethe, Schiller, and Jung, Volume 1: The Development of the Personality. Taylor & Francis. pp. 157–158. ISBN 978-0-203-96088-2.

4. For more insights, examples, and information on Vivian Paley's storytelling and story-acting, see her other works including *White Teacher* (1979), *Wally's Stories* (1981), *Bad Guys Don't Have Birthdays* (1988), *The Boy Who Would Be A Helicopter* (1991), *You Can't Say You Can't Play* (1993), *The Girl With the Brown Crayon* (1997), *In Mrs. Tully's Room: A Child-Care Portrait* (2001), *A Child's Work: The Importance of Fantasy Play* (2004), *The Boy on the Beach: Building Community through Play* (2010).
  
5. In addition to "The Schematic Stage," Machón (2013, p.421) identifies the "Developmental Graphic Phase," both referred to in my text, and the "Graphic Spatial Device" (pp.371-374). Each has a wide variety of characteristics too numerous to list here, indicating allegedly precise distinctions among them all (pp.334-380).

## CHAPTER FOUR: *MATH WARRIORS*, STORYWORK, AND “THE WOOD BETWEEN THE WORLDS” FROM A WHITEHEADEAN PERSPECTIVE

### 4.1 Introduction

In this chapter, I am going to tell you a story. It is a type of travelogue, relating the journey of where I have come from, and where I find myself now after my experiences working with Aboriginal students in a Saskatoon Catholic School Board-supported, Indigenous-only *Math Warriors Mamawohkamatowin* mathematics program. During my two-year journey with Saskatchewan First Nations Elders (Dené, Woodland Cree, Swampy Cree, Plains Cree, Nakawē (Saulteaux), Dakota, Nakota, and Lakota) within a Saskatoon Public School Board-funded professional development (PD) project, the teacher handbook entitled *Enhancing school science with Indigenous Knowledge: What we know from teachers and research* (2014) was published.

Born in Montréal, I grew up in Mississauga, Ontario, took swimming lessons at Huron Park, visited historical sites like Ste.-Marie-among-the-Hurons, attended Tecumseh Public School, and had family connections to the great Ojibwe Chief Shingwauk<sup>1</sup>, yet I never realized in childhood that any First Peoples still existed today. I was taught the lyrics to the beautiful hymn ‘*Twas in the Moon of Wintertime* (written in the Huron language in 1640 by Jesuit missionary Jean de Brebeuf), and learned about the Jesuits and *voyageurs* who learned trapping and survival skills from the Native population. It was not until I was a young mother living in Edmonton that I first heard the term *Métis* from my son’s classmate who came to play after school. And I did not know what it meant. When I arrived in Saskatchewan, I began Native Studies classes at the University of Saskatchewan where I was humbled, grieved, and challenged by the huge gaps - in an otherwise exceptional education - whenever it came to First Nations culture, history, ways of being and knowing, and contemporary thriving and existence. There have been beautiful moments of resonance and thrilling spiritual connection (The Medicine Wheel; The Sacred Tree); there have been deeply disturbing learnings that have filled me with rage, guilt, and despair at the treatment of Canada’s First Peoples (Oka; Cornwallis and the Mi’kmaq; Hudson Bay Company’s Trader’s Wives). The 2010 cohort I joined for my BEd journey was an anti-racist, anti-oppression, ecological and social justice group of dynamic

professors and students that dramatically changed me. By the time I began my internship, I was committed to facilitating sensitive discussions of Treaty, The Métis Group of Seven, supportive attendance at Powwows, Trickster Tales, historical voices and silenced perspectives, Elders sharing their stories, and practical involvement in Aboriginal community handiwork linked to cultural traditions and beliefs.

The program *Math Warriors* was offered to inner city Saskatoon First Nations elementary-aged children and utilized the stories and the wisdom of Elders as a vector of instruction: the use of both Indigenous stories and practices from their Cree communities enabled children to come to a stronger understanding of mathematical knowledge. The positive experiences of teachers, students, Elders, and myself in the *Math Warriors* and *Indigenous Knowledge* PD contexts directly relate to my thesis of exploring storytelling as a romantic, imaginative invitation to learning as a basis of education. Different approaches to storytelling are considered from a Whiteheadian perspective as well from an understanding of First Nations traditions. What I am trying to do is connect my story, my experiences with *Math Warriors* and *Indigenous Knowledge in Science*, to contrasts and commonalities between my neophyte understandings of both Aboriginal educational philosophy and Whiteheadian educational thought as related to storytelling. I consider and integrate *The Wood between the Worlds* from a Whiteheadian perspective at the end of the chapter.

#### 4.2 Re-awakening the Old Stories

In 1872, Black Elk<sup>2</sup> (Lakota) received a vision of a “day [that] would come when the people would awaken, as if from a long, drugged sleep” (Bopp, 1992, p. 7) to again search for the old ways and the old stories. This “long, drugged sleep” metaphor is echoed by Jo-ann Archibald (2008) who writes of the new Stó:lō and Coast Salish storytellers who are learning the old ways and oral traditions of stories, songs, and talk within a circle, “bringing back stories that have been put to sleep in people’s memories” (p. 80), using ancient oral narratives of *sxwoxwiyam* (myth-like stories set in the distant past) and *squelqwel* (true stories or news describing experiences in peoples’ lives) to teach young people about their identity (p. 84) and to “re-awaken memories” (p. 90).

Archibald speaks of the need of traditionally trained Stó:lö storytellers to individually help guide teachers in how to learn stories and to use them with respectful pedagogy because “it’s what Indian stories are – to awaken the imagination - to awaken the depth of your very soul” (p. 135). The story is to become the teacher, helping one to

learn, heal, take action, and then reflect on this action. However, if these stories are learned within contexts where the principles of respect, responsibility, reciprocity, and reverence are not practiced, then their power diminishes or goes “to sleep” until awakened by those who can use the story appropriately.... The power of the story is gone if you are not teaching it the right way.” (p. 138)

Adam Ballantyne (1999), a Woodland Cree Elder from Pelican Narrows, Saskatchewan, also spoke to his friend, American schoolteacher Prentice G. Downes<sup>3</sup>, about awakening the senses and perceptions whilst wandering and sojourning among the trees of the forest:

If you listen enough, all these sounds which sound so strange at first will become friendly to you. You will know what they mean, and you will feel at last as we do, that once in the forest you are under the good spirits and friendliness of the wondrous trees, and that is your home and protection from all the rest of the world, for here among man’s oldest friends, the trees, the world of men when it is cruel or unkind can never find you; and the forest provides all that you may need. And when you go through the forest, you may think that no one sees you and that you are all alone. Such is not true, as we well know, for the beings of the forest, the fox, a rabbit here, a squirrel there, a bird, a mouse, and the trees themselves, all of them notice your passing and each one tells the others in some way. As you brush against a branch it calls out and this tells the squirrel and the squirrel chatters and this tells the bluejay and the bluejay calls out and this tells the other birds, and thus the rabbit knows and as he runs, thump, thump, the fox who listens very sharply is told and he may call out and so does the deer know, and so you see all the animals and trees know that you are there. This is part of the magic of the forest. (p. 18)

This ancient forest hearkens back to:

the old days... long, long ago in the days so long ago no one can tell; when there was nothing but the great forest of trees and the lakes, the animals and the sunshine. Men were strong then and very few people ever became sick. And there were men like my father who knew great magic and could do wonderful things. There were men of great wisdom, men so wise that they knew many things we have forgotten today... [who lived] long ago when the world was young... long ago in the days when men and animals could talk to each other... long ago when there were much bigger animals than there are today. (Ballantyne, 1991, p. 6)

West Coast Tseshaht Elder, George Clutesi (artist, actor, and writer), re-iterates that his people use the old stories as part of their “rich and cultured society... to teach the young the

many wonders of nature; the importance of all living things... to acquaint him with the closeness of man and animal... that there was a place in the sun for all living things” (1967, pp. 9-10). Recurring phrases are part of Tseshaht stories: a song, story, folklore tale, phrase, or legend heard a full four times is to be grasped in main tune and theme by child and adult alike; Tseshaht children were taught in the old ways, with parables and tales, through understanding and individual meaning making of the morals contained within them (p. 14).

#### 4.3 *Math Warriors*

Having graduated with my Bachelor of Education degree from the University of Saskatchewan in December of 2010, I then interviewed and received a teaching position as an English as an Additional Language (EAL) substitute teacher with the Greater Saskatoon Catholic School Board (GSCS) for January – June 2011 until my formal convocation in June. I began to receive some intriguing invitations for pilot projects and programs via GSCS emails. Although I received a full-time position at Walter Murray Collegiate with the Saskatoon Public School Board in August of 2011, I could not resist this delicious summons incorporating Saskatoon’s First Nations community-identified need and specific request to launch a pilot program initiated by, and partnered with, GSCS: blending elementary mathematics, yoga, nutritious meals, and Elders’ storytelling – all taking place on relaxed weekend Saturdays:

#### **Expression of Interest - GSCS Math Instructors:**

The *Mamawohkamatowin* partnership, Greater Saskatoon Catholic Schools partnership with Saskatoon Tribal Council and Central Urban Métis Federation Incorporated has been successful in a grant application to pilot a program that will target Aboriginal students to increase their learning outcomes in mathematics. Together, we will be designing a program called ***Math Warriors***.

#### **Time Commitments:**

This program will take place outside of school hours and will run:

Session I: January – February 2012 (6 weeks in total).

Key components of the program are aimed at smaller group instruction adding other student supports during the program day.

These supports will be focused on the following areas:

- Individualized assessments for mathematics
- Small group learning and high teacher-student ratios
- Nutrition components
- Wellness components, such as yoga and self-care
- Physical activity component

### **The Teacher:**

We are seeking for this position elementary teachers with a keen interest in math. The teacher would provide instructional leadership for the math, nutrition, and physical activity sections of the day. The program will also collaborate with a qualified yoga instructor that will facilitate one yoga class for each group. Time commitment would be full day, two session Saturdays for which the successful candidate would be paid a teacher's wage according to the Provincially Bargained salary grid.

### **The Supports:**

In addition, the instructors will work in collaboration with divisional and partnership supports that will provide assistance, support, and consultation as needed. If you are interested in this exciting opportunity, please respond by November 15<sup>th</sup>, 2011 to this email.

\*

I believe the program was named *Math Warriors* based upon Eber Hampton's quote: "Indian education is relentless in its battle for Indian children. We take pride in our warriors and our teachers are warriors for the life of our children. The war is not between Indian and white but between that which honors life and that which does not. It is fought within ourselves as well as in the world" (1993, p. 296). *Math Warriors* was a program meeting a need identified by Saskatoon's First Nations community. We will later appreciate that this factor is a determined criterion identified by Verna Kirkness as being a crucial element of authentic First Nations theory and philosophy of education.

The spirit of this step taken by the Tribal Council / GSCS partnership also directly addressed the concern articulated by Verna St. Denis (2011): *refusing* the "trivializing of issues... attempts to collapse Aboriginal rights into ethnic and minority issues, and forcing Aboriginal content into multicultural frameworks" (p. 315). In keeping with the need to avoid multiculturalism, the program was not inclusive of EAL, or any non-Native IS (Intensive Support) students with learning, cognitive, behavioural, or physical disabilities. It was provided

solely for First Nations children, involving First Nations Elders, content, culture, philosophy, ways of being and knowing, storytelling, handiwork, music, and art.

Matched with an elementary teacher from the Catholic School Board, we designed a pilot program we believed to be culturally sensitive and relevant to Aboriginal child learners. Our first crucial decision was to draw upon First Nations community resources, respected Elders, traditional patterns, and practices of learning from within Saskatoon, to become the students' segue ways into math, opening fresh and new emotional pathways to experience mathematics within a traditionally innovative language and perspective. We worked within the mandate assigned to us – introducing the *Four Steps* in problem solving (understand the problem, choose an appropriate strategy, solve the problem, evaluate the answer) and teaching three problem solving strategies (patterning, drawing, acting out using objects) – but we modified it to become culturally appropriate. As the *Math Warriors* teacher, I did not want to fall into the trap which Regnier (1995) describes: “Administrators and teachers might agree to implement First Nations based education programs without understanding their value and validity, and without being able to advance the full force of such education unless they consider their roots and meaning” (p. 385).

Together with the Elders' teachings, we imagined how the three strategies could be adapted to ways that were suitable for First Nations education. For example, we wondered if we could use group work in circles to collaborate in problem solving processes. If we requested the assistance of an Elder beader (for patterning), Elder drummer (for acting out using objects – the traditional drum), Elder artist (for drawing), and a yoga instructor (for centering and quieting one's spirit to prepare to listen) could we offer new empowering ways for students to identify, recognize, explore, employ, and experience artistic and musical patterning - beat, repetition, and syncopation, shape, geometry, and proportion? Could traditional storytelling become a creative, freeing context of the same mathematical realities they anxiously faced in an often sensory or cultural custom-deprived classroom? Our guests included a First Nations artist from La Ronge, SK and EA with GSCS who presents First Nations art to GSCS classrooms, First Nations drummer who facilitates Song & Drum Programs at many GSCS schools and as an afterschool program at Oskāyak School, a Cree traditional beadworker and craftswoman, and a professionally accredited yoga instructor.

Each Saturday class started with a calming and relaxing beginner yoga class in a library with low lights and silence in order to enhance emotional awareness and create a sense of safety and well-being. Our First Nations *Math Warriors* students would also bead bracelets, paint with watercolours, play drums, and sing traditional songs. Our guest Elders taught through traditional stories alongside their music, songs, artwork, and crafts. The children loved these Elders and respectfully bonded with each guest. Oral presentations truly seemed more natural, real, and human than written forms to these First Nations students (see Archibald, 2008, p. 132).

Our six-week Saturday program ran as follows:

**St. Mary's Elementary School (10-1:30)**

[9 Children: arrive 9:30 via United Cabs]  
 10:00 - yoga (45 min) – library  
 10:45 - snack (15 min) – kitchen  
 11:00 - math lesson (60 min) – library  
 12:00 – cooking lunch (30 min) – kitchen  
 12:30 – physical activities (30 min) – gym  
 1:30 – children home; we pack up/switch schools

**Bishop Roborecki School (2-5:30)**

[16 Children]  
 2:00 - yoga (45 min) - library  
 2:45 - snack (15 min) - library  
 3:00 - math lesson (60 min) - library  
 4:00 – delivered hot meal (30 min) – library  
 4:30 - physical activities (30 min) - gym  
 5:30 – students home time

The St. Mary's students received cooking classes because there was a fully-functional kitchen on site. They used proportions, charts, diagrams, equipment, symbols, measurements, fractions, nutritional skills, shopping lists, and group collaboration to prepare hot nourishing meals. At Bishop Roborecki, the students employed group consensus to choose, budget, make organized lists, order, divide equitably, share, and clean up delivery of nutritious supper meals.

Grade 3 and 4 students for this enrichment program were invited by their classroom teachers because they met the following criteria: Aboriginal, anxious in math class, not progressing in mathematical performance as quickly as their peers, needing individualized assessments for mathematics with small group learning and high teacher-student ratios. Parent letters outlining the goals and approaches of *Math Warriors* and parent consent forms were needed to complete registration. Both pre- and post-attitudinal surveys were administered to the children; pre-program attitudes and performance in mathematics were compared with post-program attitudes and performance in mathematics by *Math Warrior* teachers, classroom teachers, and administrative personnel with the Greater Saskatoon Catholic School Board. The feedback we received at the time was encouragingly positive from parents, the students

themselves, and administration; then I tried to follow up with administrators regarding long-term results and up-to-date implementation of *Math Warriors* programming into the Catholic educational system. I have been met with silence. This may be because I am currently employed full-time with the Saskatoon Public Schools. All lessons, written assessments, children's work, and results were submitted to the Catholic School Board, observing student confidentiality.

*Math Warriors* is similar to the use of a theoretical framework known as *Mathematics in a Cultural Context (MCC)*, which has been successfully used by researchers to statistically and significantly improve math performance of Indigenous students for almost a decade in 20 Alaskan school districts and with the Sami people of Norway (Woodhouse, 2012, p. 12). I shall refer to this framework again below.

#### 4.4 *Math Warriors* Interpreted Through Aboriginal Thought

I am going to look at several different Aboriginal authors – Archibald (Stó:lö and Coast Salish), Kirkness (Cree), Hampton (Chickasaw), and Shawn Wilson (Cree). Archibald is a West Coast Aboriginal writer and she speaks to the theme of storywork, directly contextual to my storytelling thesis. Kirkness' work was notable, even though 40 years old, because it provided the pithiest and most succinct statements defining an explicitly Aboriginal perspective of education encountered in my numerous readings. Hampton's composition was recommended to me in my Interdisciplinary Educational Foundations Seminar (870) for completion of an annotated bibliography; he, in turn, led me to discover TeHennepe's fascinating anthropology article which appeared in the same journal. Wilson's piece was assigned reading, describing Indigenous research methodology, for my Educational Research Methods course (ERES 800) and I was challenged by his distinctive, authoritative insights as a Cree academic.

I relate what was happening in *Math Warriors* with respect to these authors' insights about the significance of storytelling within an Aboriginal educational philosophy. I was not aware at the time of how profoundly I was being taught, influenced, and changed throughout the *Math Warriors* experience by the Indigenous ways practiced through a storytelling-teaching relationship between Elders and learners. As I explain, *Math Warriors* modeled teaching that Archibald describes in *Indigenous Storywork* (2008): teaching that begins with prayer, centres and quiets one's spirit, nurtures a sense of feeling loved by the Elders, shares food and gifts

(symbols of reciprocity), creates an unhurried time, emotional connection, and long silences, offers an Elder-directed learning process in which the speaker talks without verbal interruption until s/he is finished, encourages watchful silence (“silence is respectful and can create good thinking”) of the listeners - as it is considered disrespectful to ask questions, nourishes the responsibility of the listener to make meaning from what the Elders say, and grants Elders the influence to ensure the correctness of the learning (pp. 4, 95, 93, 89, 49).

Kirkness, a member of the Fisher River Cree Nation, is a national leader in Canadian education whose vision and determination have established new initiatives contributing to excellence in Aboriginal education. Her 1976 booklet *How Indians View Education* proposes several tenets vital to understand a First Nations perspective of what education is and ought to be.

Firstly, education is to enhance and respect First Nations identity, permitting retention of meaningful, cultural aspects while teaching dominant societal culture so that First Nations students may understand and find their way in the modern world (Kirkness, 1976, p. 2). The needs of the entire community must be met: offering programs identified by the community must be provided to people of all ages (p. 4). This is exactly how the *Math Warriors* pilot program came into being: the Saskatoon First Nations community (Tribal Council and Central Urban Métis Federation Incorporated) identified a need of their own young members, students already within the elementary Catholic School system, for individualized attention and small group learning in mathematics within a cultural milieu of wellness, nutrition, self care, physical education, and the centering and quieting of oneself to prepare for listening and learning (yoga).

Elders from the community were involved in practical, hands-on components of culturally relevant applications of mathematics in *Math Warriors*. This aspect of incorporating community Elders reflected another Kirkness-identified trait marker of most effectual First Nations education involving the participation of the community, valuing its people, and utilizing cultural relevance (such as beading, drumming, and Aboriginal artistry) to further its academic ends of applied mathematical knowledge. Encompassing traditional patterns of learning that emphasized observation, discovery, and practicality (p. 3), *Math Warriors* thus echoed several philosophical pillars of First Nations extended family practices also identified by Kirkness such

as maintaining and enhancing communication between generations, connecting children and Elders, sharing and transmitting culture from generation to generation (pp. 4-5).

Communication and culture are inseparable. The relevancy of learning skills needs to be made through familiar contexts and the interweaving of disciplines, e.g. building a birch bark canoe, using snowshoes, and a trip to Batoche intertwined with selected grade-appropriate reading passages, oral group class presentations, and procedural writing assignments. Curriculum materials must reflect the child's world, culture, values, and experiences (p. 13). Kirkness sums up: the community *is* the First Nations classroom; schools must be viewed as meaningful, offered to all ages, community-centred, belonging to the community (not to teachers), and being naturally and meaningfully controlled by the community (p. 14).

Hampton, a Chickasaw, states that “white teachers would do less harm if they recognized their status as cultural enemies [brainwashers] of Indian [sic] students” rather than altruistic helpers (1993, p. 295). Identifying five different meanings of First Nations education, Hampton defines assimilation as “non-Native schools teaching non-Native content using non-Native methods and non-Native personnel with non-Native goals” (p. 269). While Hampton's critique may apply to *Math Warriors*, because many of the criteria he uses are relevant, nevertheless this program was making an attempt to overcome this problem of being a cultural enemy. Whether or not we were successful is another matter, but we did try.

Hampton and Wilson share a similar desire to take up the same issue of the necessity of First Nations to develop a *truly* First Nations educational philosophy of inclusiveness and diversity.<sup>4</sup> Wilson, a member of Opaskwayak Cree Nation, created an Indigenous Research Paradigm (2001) in which he identifies storytelling as a main characteristic central to Indigenous education. This Indigenous Paradigm is set in contrast to dominant forms of research such as Positivist, Post Positivist, and Critical Theory.

Wilson presents storytelling as a form of Indigenous research methodology from a First Nations perspective. Storytelling, he writes, encompasses a larger sphere that includes discussions, talking circles, personal narratives, intuitive learning, gathering, sharing, building ideas and relationship for yourself and for your community (p. 176). Wilson locates storytelling within an ontology (“a belief in the nature of reality”) in which knowledge is relational and

shared with all creation, and within an epistemology (“how you think about that reality”) in which the naming of ideas, concepts, people, and cosmos is made through relationship with them, and established, honoured relationships with Elders, Ancestors, and all creation are important.

Storytelling in this context of Wilson’s relationally-based Indigenous paradigm possesses a unique style of meaning making which threads through many First Nations storytelling practices. Archibald (2008) states concerning Stó:lō and Coast Salish meaning making, “Bringing heart and mind together for story listening was necessary if one was to make meaning from a story because often one was not explicitly told what the story’s meanings were” (p. 76). She illustrates with a particular example of Elders Roseline George, Shirley Leon, and Ann Lindley’s shared insights: “We have three ears to listen with, two on the sides of our head and one in our heart... The old way, you had to really think... you had to figure it out, they wouldn’t give you the answer, you had to figure it out... you had to listen otherwise you’d miss it” (p. 76). This creating of emotional connection and personal meaning by the individual with a living story has parallels within Whiteheadian thought: engaged emotion is key to learning in the Romance stage.

Cree *Math Warriors* students were able to make meaning of mathematical word problems concerning patterning with deeper understanding after having Elders teach them traditional beading designs and techniques. The Elders started with stories and emotionally bonded with the students. As the children learned distinctive colour patterns from the Elder beadworker, who brought samples and drew pictures, she would share stories of her own childhood attempts at beading. Next, the children were taught the gauge of needle, the type of threads to choose, the sizes of appropriate beads, traditional bead colours, and techniques for individually choosing beads and scooping them onto the needle, several at one time. Each design had a symbolic meaning, and each student chose their own design for a bracelet they beaded. They were not perfect, but the creators accepted the flaws, knowing next attempts would be better. The bracelet was crafted within living stories with caring Elders, and learning specific design patterns became the touchstone for later math problems involving patterning skills. Mathematical and geometrical concepts involved in weaving a ceremonial headdress by the Yup’ik people in Alaska (see Woodhouse, 2012, pp. 11-12), spatial concepts embedded in the Navajo language which give

Navajo speakers a considerable advantage in grasping difficult abstract concepts of “dynamic topology and fuzzy sets” (Hampton, 1993, p. 290), and tales such as Nanabush punishing raccoon by placing twice the black bands upon his tail as the pieces of meat he stole from the blind (see Beavon, 1971 and Snake, 1979) are marvelous stories to share about the need to create radically different ways to culturally think about, employ, and experience mathematics.

During *Math Warriors*, I was amazed at the intriguing connections that the Cree Elders wove between the math principle we two teachers had requested they present through their particular expertise, with the traditional story of family-history, place-name, or animal tale they chose to tell.<sup>5</sup> There always seemed to exist a deeper layer within the stories to powerfully and intuitively “educate the heart” and character, as well as principles of mathematics (Archibald, 2008, p. 84). *Math Warriors’* emphases upon Elder storytelling, Elder modeling of traditional cultural handwork, nutrition, self-care, physical activity, and yoga in teaching practical math principles revealed the truth to me of Archibald’s statement: “Storywork that educates the heart, mind, body, and spirit” is truly First Nations education (p. x). Experiencing the alchemy of how culture, song, drum, mathematics, community involvement, traditional wisdom, Elders, and storytelling interconnected during *Math Warriors* romanced me into deeply exploring this question of how to emotionally and intellectually employ storytelling as education. The journey was further fanned into flame by my discovery of Whitehead’s cycle of Romance, especially in his works on mathematics.

It may be significant here to mention that nowhere in my training or experience before *Math Warriors* had I been introduced to storytelling as a methodology, even though as teacher candidates we had been drilled with “The Nineteen Teaching Methodologies” – i.e. lecture, centres, demonstration, computer assisted instruction, learning packets, drill and practice, concept attainment, concept formation, field trips, inquiry, synectics, brainstorming, simulation, talking circles, co-operative learning, panel discussion, discussion, role play, and peer tutoring. I consider it a critical oversight that storytelling (one of the three “main school arts” along with questioning and studying, according to H.H. Horne in Bullough, 2010, p. 155) is not part of the teacher education curriculum; it should be. Rhythmic storytelling that places an emphasis on difference and repetition should introduce story as an invitation, not story as an illustration; to stir thought, not to set ends; to function dialogically, not didactically (Bullough, 2010, p. 156); to

begin a question, not end it. Rhythmic storytelling should offer imaginative, romantic invitations to consider and play with new meanings and possibilities.

#### 4.5 Christie's Story: Enhancing Science with Indigenous Knowledge

*If one were to try to give a metaphorical description of some of the features of First Nations thought, one might say that they go to school in dreams, write in iconographic imagery, travel in Trickster's vehicle, talk in metaphor, and always walk around (Akan, 1992, p. 213).*

During and after *Math Warriors*, I taught Grade 9/10 Life Skills Work Study (LSWS) for 11 male exceptional learners (nine of whom were of First Nations ancestry) assessed with cognitive, but not physical, challenges. I became part of a two-year, Saskatoon Public Schools-funded professional development project, culminating in the handbook *Enhancing School Science with Indigenous Knowledge: What We Know from Teachers and Research*. It was a process of engagement with Elders' and Traditional Knowledge Keepers' teachings, inspiring different thinking about Indigenous ways of knowing nature.

I began introducing Indigenous Knowledge (IK) content into science instruction using stories shared by the Elders, after asking and receiving the Elders' permission. I prefaced any story shared in class by stating to the students whose story it was, who gave permission to tell this story, which First Nations culture this story originated from, and from where I received the story. I used Indigenously-prepared curricula<sup>6</sup> (*Practicing the Law of Circular Interaction*), because I recognize that I do not have the cultural authority to share stories on my own initiative. Such stories included the Lakota Creation story (*Otokahehagapi*) retold by a Lakota Elder, the Dené Flood story retold by a Dené Elder, the Cree Mother Earth story (*Kikawinaw*) retold by a Cree Elder, and the Lakota /Dakota /Nakota stories *Why the Baby Deer Wears Spots* (Stoney et al., no date; no page; Principle I, Lesson 3), *Prairie Chicken Dances* (Principle II, Lesson 3), *The Pet Rabbit* (Principle II, Lesson 6), *The Blizzard* (Principle III, Lesson 1), *Crazy Crane* (Principle III, Lesson 2), and *Hungry Coyote* (Principle III, Lesson 3). These stories are contained in the resource entitled *Practicing the Law of Circular Interaction* in which the specific content may be located by knowing the principle number (there are six principles)<sup>7</sup> and the lesson number, as there is no pagination.

My students were listening, engaged, and curious about scientific principles introduced through Indigenous stories in ways I had never observed before. I recognized that emotional connections to Indigenous perspectives preceded any intellectual interest or engagement of my First Nations learners. We went outside as much as possible, and learned on the land. Students asked me the very kind of questions that Kirkness (1976, pp. 4-5) wrote of as being hallmarks of a truly First Nations education: questions that emphasized historical contributions of First Nations peoples to Canadian society, and those that introduced First Nations perspectives of past events with present situations. The questions included the following: What are the origins of maple syrup and beef jerky? How do Traditional/ Grass/ Fancy dances reflect scientific observation? How is honour and respect for animals scientific? Is the owning of an animal ethical? How does a food web need balance, especially with economic profit at stake? How are human and animal rights connected, and relevant to treaty? How can observation of nature predict weather change? Do First Nations peoples believe in sin? In Trickster Tales, how is justice served when no one is punished? How do the triangle of hierarchy (European worldview) and the circle of balanced equality (First Nations worldview) mesh? Was there a worldwide flood?

Native myth has “not seriously been studied as a transmitter of encoded ecological knowledge” (Posey in Knudtson & Suzuki, 2006, p. 55), even though “words themselves are considered [by First Nations] spiritually potent, generative, and somehow engaged in the continuum of the cosmos... the vocabulary of Native knowledge is inherently gentle and accommodating toward nature” (p. 15). Although storytelling is an important tool to express First Nations perspectives and to examine relationships, beliefs, and laws to live by, and examining these relationships is relevant to science, health and wellness, social studies, art and language arts, storytelling has not been explored as a primary pedagogical tool within our current education system (Eashappie, 2014)<sup>8</sup>. First Nations “rich narrative heritage could provide, ready-made, the myths and parables missing from abstract articulations of biosocial environmental ethics” (Knudtson & Suzuki, 2006, p. 186).

#### 4.6 Whitehead and Storywork: Commonalities and Contrasts

At first blush, one might not appreciate the powerful convergences that Whitehead’s ideals hold in harmony with First Nations education: the lifelong process of learning as organic,

living, and cyclical - not linear; interconnectedness and integration of head and heart, body, mind, and spirit; the use of stories; Romance and the presence of emotion, wonder, curiosity, and joy in learning; the importance of wisdom (as an integration of experience, value, and knowledge) in education; environmental sensitivity and receptiveness to beauty in nature and the art of life (the realization of one's potential); direct relationship to our world through our bodies and bodily feelings; a flowing view of the universe expressed in the metaphor of a stream; rhythm; balance; community involvement, and generational interrelationships with schools (see Whitehead, 1929/1967, pp. 17, 40, 39, 3; 1947/1967, pp. 169, 138; and, Cobb, 1998, p. 106).

Peppered generously throughout his *Introduction to Mathematics* (1911/1948), are captivating Whiteheadian moments of storytelling, his sharing of fascinating mathematician sagas that humanize and contextualize mathematics. Among the many stories he tells about the history of mathematicians are the following - Archimedes' *Eureka!* moment upon discovering bathtub water displacement for testing the authenticity of gold in Hiero's crown (pp. 23-24), Galileo throwing differently weighted objects off the Tower of Pisa (p. 27), and the young boy Alexander the Great grilling his Platonic-trained tutor Menaechmus on shortening proofs (p. 93).<sup>9</sup> The BBC series, *The Story of Maths*, contains a myriad of fascinating historical moments of discovery, supplementary to these stories shared by Whitehead, of mathematical advances discovered in Ancient Greece, Babylon, Greece, India, and China.<sup>10</sup>

Through telling stories, we can avoid a "reductionism at odds with...believing that they [scientists] can capture the whole of reality instead of just part of it" (Woodhouse, 2012, p. 6). Mathematical stories, the study of pattern, shared as pieces of art can "turn the abstract into the concrete and the concrete into the abstract" (Whitehead, 1941/1947, p. 205), can totalize patterns that emphasize "the relativity of existence, namely, how things are connected... [and produce] feeling which embraces the enjoyment of that pattern" (p. 111). These stories can encourage students to creatively and practically apply mathematical ideas to their own everyday lives. These were the ultimate goals of the *Math Warriors* pilot program.

Whitehead, although an important figure in mathematics, logic, philosophy, mathematical physics, and educational theory, is generally overlooked because he held challenging ideas far ahead of his time that threatened the educational *status quo* of his day, and indeed ours. His approach to mathematics and his educational philosophy are linked in that he believed

mathematics needed to be integrated with science and humanities in headwork and handwork; the history of mathematics needed to be understood in the context of living ideals and stories, and the alternating rhythms of repetition and difference parallels nature and the periodicity of life (Woodhouse, 2012, pp. 3, 1).

How do First Nations educational philosophy and Whiteheadian educational thought resonate with one another? In light of the authors I have cited, I would propose the following ways. Romance as aesthetic appreciation of the value of the interrelatedness of the natural world is a significant dovetail. Another is an emphasis on internal harmony among body, mind, and spirit coupled with an external reciprocal harmony with others, both human and non-human. Fluid boundaries between school and community find symmetry, as do beliefs about student cooperative relationships in teaching one another in shared projects. Balance between increasing an individual's inner emotional strength with the soul as the creative unification of the body is a concept common to Whitehead's concept of bodily feelings as the primordial way that we relate to the world and First Nations belief in holistic, cyclical, experiential understanding (see Bopp, 1992). Regnier (1995) describes the attainment of balance as an awareness "of movement toward harmony in the interconnectedness and interdependence of all entities and to express that harmony in one's relations with them. Education for balance is the process of coming to participate more fully in the harmony of this interconnectedness" (p. 387). Flowing from this is Archibald's explanation of the concept of centring and quieting one's spirit to fully prepare oneself to listen and connect to Elders' stories in order to make individual meaning for oneself (see 4.4). Rhythmic cyclical learning that integrates thinking and activity in practical applications to life finds equilibrium between both philosophies.

#### 4.7 "The Wood between the Worlds:" A Whiteheadian Interpretation

This story I have told you in the final chapter of my thesis is drawing to a close. The cycle of storytelling began earlier with an appreciation of "The Wood between the Worlds," and it will culminate with a brief tale of how The Wood is romantic in Whitehead's sense, embodying several of the characteristics that enable children to learn in the cycle of Romance.

"The Wood between the Worlds" as chronicled by Lewis is romantic, invitational storytelling that engages wonder and evocation of energetic interest from within the listeners

themselves (1929/1967, p. 39). This magical wood embraces the soaring imagination so cherished by Whitehead within his Romance cycle of learning, that exciting time of “vividness of novelty... [and] unexplored connexions” (p. 17). Stepping into that green, leafy wood invites a sensual experience, a “browsing” (p.33), a joyful immersion into pools of possibility – a pool every few yards as far as one’s eyes could reach. How a child emerges from this enchanted wood, or great Romantic adventure, is how her subsequent life may “be moulded by ideals and coloured by imagination” (p. 21) of subjunctive living, that is, living by envisioning what *could* be.

The living pools of water of the Wood remind me of Whitehead’s organic flowing view of the universe, the metaphor of the stream of water which is “that stream of events which pours through his life ... compounded of sense perceptions, feelings, hopes, desires, and of mental ideas” (pp. 2, 3). From the very beginning of entering that unhurried, timeless, “rich as plum-cake” (Lewis, 1955, p.32) “Wood between the Worlds,” facets of “freedom” (Whitehead, 1929/1967, p. 33) and of “the joy of discovery” (p. 2) made on the children’s own initiative to see and act for themselves are both at play. In a new environment, the children find themselves in the rhythm of “natural cravings of human intelligence... [A]mid a welter of ideas and experience [the children go through] a process of discovery, a process of becoming used to curious thoughts, of shaping questions, of seeking for answers, of devising new experiences, of noticing what happens as the result of new ventures” (p. 32). The children experience a sense of awe for the present as embodying the possibilities for their own future as they travel through time: their adventure between worlds and within the still, primordial Wood “takes the various forms of wonder, of curiosity, of reverence, or worship, of tumultuous desire for merging personality with something beyond itself” by the lure of leaping into another pool (p. 40).

Receptiveness to beauty and environmental sensitivity to nature’s ancient forest deeply impress both Digory and Polly in the story *and* the children in my classroom as they can “almost feel the trees drinking the water up with their roots” (Lewis, 1955, p. 31). The pulsating rhythms of the Wood, its ageless life, its dreamy atmosphere, its reflective waters of possibilities, and its exquisite sacred beauty (Whitehead, 1938/1966, p. 164) all depict quintessential Whiteheadian qualities characteristic of the cycle of Romance. “The Wood between the Worlds,” that isolated primeval glade of storytelling, that in-between place of pool portals, with a world to discover at the bottom of every pool, well, you can get from that place into jolly well Anywhere!

## NOTES

1. Shingwauk “Little Pine” (1773-1854) was Chief of the Garden River Ojibwe at Ketegaune-sebe. A prominent and respected leader, he fought alongside Isaac Brock and Chief Tecumseh in the 1812-1814 war. Through fasting and visions, Shingwauk envisaged English education for his people to augment traditional skills, not to replace major aspects of the Anishinaabe way of life. Shingwauk hoped that before he died he would “see a big teaching wigwam built at Garden River, where children from the Great Chippeway Lake would be received and clothed, and fed, and taught how to read and how to write; and also how to farm and build houses, and make clothing; so that by and bye [sic] they might go back and teach their own people” (see J.R. Miller, *Shingwauk's vision: A history of Native residential schools*. Toronto: University of Toronto Press, 1996, p. 6). The boy-priest of 21, William McMurray, sent to Chief Shingwauk by Lieutenant Governor Colborne in 1832, was my relation; he married one of Shingwauk's own nation, Shingwauk's cousin, Ogenebugokwa, the “Wild Rose.” Shingwauk's dream to prepare the Anishinaabe nation for the future by establishing a teaching wigwam to provide education that maintains Anishinaabe language, culture and lifeways and also incorporates European skills and knowledge is thriving today in the creation of Shingwauk Kinoomaage Gamig. See the university webpages at <http://www.shingwauku.ca/about-us/school/winhec-accreditation>.
2. From *Black Elk Speaks*, as told through John G. Neihardt, University of Nebraska Press, Lincoln, 1961. See also Bopp, 1992, p. 6. Nicholas Black Elk (1863 – 1950) fought at the Battle of Little Big Horn with his relation Crazy Horse, performed as a dancer in Buffalo Bill's Wild West Show, and afterwards returned to his tribe at Pine Ridge. He was a respected medicine man, leader, and healer practicing traditional Lakota rituals, reenacting scenes of Lakota life at Mount Rushmore, and working with John Neihardt, son Benjamin, and Standing Bear to share his life and visions to be written down in a book for generations to come. His visionary book is today considered a famous First Nations classic studied in universities and colleges across North America, and his voice has become a major influence in First Nations activism, environmentalism, psychology, anthropology, politics, and history. Traditional Lakota life was legalized in 1978 by the Freedom of Religion Act, and Harney Peak in the Black Hills is designated as Black Elk Wilderness. See also Krull, 1999, pp. 67-73, 107.
3. P. G. Downes' passion for the North drew him each year between 1936-1940 to traverse by canoe with his Cree partner Solomon Merasty (who later became chief of the Pelican Narrows band) from Reindeer Lake to Nueltin Lake without any use of maps, depending solely upon the words of the local Cree. He authored the memoir *Sleeping Island* (1943) about his adventures of challenging canoe travel and his recollections of shared Native friendships, age-old beliefs, traditional stories, spirituality, ceremonies, and immemorial ways of life.

4. First Nations “must develop our own structures, our own methods, truly Indian... our own research, [and] our own philosophies of education – inclusiveness, diversity...” (Hampton, 1993, p. 271). Hampton states that the very structure of American schools is hostile to Native cultures, as its context is culturally based upon Greek and Roman standardization through Empire expansion and perpetuation of Western civilization: age-segregated classrooms, Natives employed as janitors and educational assistants, role authority-based rather than kin and personal authority-based, learning by telling and questioning rather than by observation and example, clock time instead of personal, social, natural time, rules exalted above people and feelings, monolingual teachers, alien standards, educated ignorance of cultural meanings and nonverbal messages, individual rather than group tasks, convergent thinking, and the structural assumption that there is only one way things should be (p. 302). Culturally, First Nations and white “sense of time, space, energy, and humanity are all different. Truth, beauty, justice are all marked and evaluated differently. Epistemology, ontology, and cosmology are all different...” (p. 305).
5. I cannot share these stories here in written form as I did not request permission of these Elders at that time to share their stories in a future, written form.
6. *Practicing the Law of Circular Interaction: First Nations Environment and Conservation Principles* (Stoney et al., no date, no pagination) was a project supported by the Saskatchewan Indian Cultural Centre. It was written as a supplemental resource to the Saskatoon Public School Board’s science curriculum (Project Wild) organized around six Fundamental Principles representative of the perspective of Saskatchewan First Nations, by, and from the perspective of, Dené, Woodland Cree, Swampy Cree, Plains Cree, Nakawē (Saulteaux), Dakota, Nakota, and Lakota Elders.
7. The six Fundamental Principles are: Principle I: Mother Earth is a Living and Viable Entity; Principle II: Indian Values and Nature; Principle III: All Life Forms are Interrelated; Principle IV: Care of Mother Earth; Principle V: Cultural and Social Interaction with Plant and Animal Life; and, Principle VI: The Future of Mother Earth and Mankind.
8. Tim Eashappie Sr. (named Hoksina Mani Pi by his grandfather) is a Nakota Elder from Carry the Kettle First Nation. He is the newest Traditional Knowledge Keeper (Sioux) joining the Saskatoon Public School Board to liaise with schools through the First Nations, Inuit, and Métis Education Unit based out of Central Office. He received his BEd from University of Saskatchewan and works as consultant to develop effective ways to supplement the curriculum with First Nations content unique to Canada.

9. Although much of Whitehead's thinking was ahead of his times, he still lived in a particular epoch, was bound by the framework of his times and upbringing, and was influenced by the colonialist expansionism of his era. For example, he dismissed First Nations' culture and thought as follows: “[T]he North American Indians accepted their environment, with the result that a scanty population barely succeeded in maintaining themselves over the whole continent” (1925/1967, p. 205). In other words, he accepted the dominant, Eurocentric view that there were few First Nations peoples in North America because they were living at a subsistence level. This ignores the fact that trade among these peoples prospered for centuries and that it was the arrival of Europeans that decimated the Indigenous population (see Daschuk, J. (2013). *Clearing the Plains*. Regina. University of Regina Press). Furthermore, Whitehead had nothing to say about contributions to mathematics and science made by the Indigenous peoples of the Americas (Woodhouse, 2012, p.11). The examples of the Mayan *Popul Vuh* from highland Guatemala, the *Chilam Balam* in the Yucutan Peninsula in Mexico, and ancient Mayan calendars forming sacred circular patterns come to mind (Knudtson & Suzuki, 2006, p. 197). Some of these were already known in the early 20th century. All of this is in stark contrast to Whitehead's recognition of the many contributions to mathematics made by “men [sic] of so many epochs, so many nations, and so many races. Indians, Egyptians, Assyrians, Greeks, Arabs, Italians, Frenchmen, Germans, Englishmen, and Russians...” (1911/1948, p. 164).
  
10. *The Story of Maths* is a 2009 BBC DVD series exploring the beauty and mystery of the history of mathematics. Oxford professor Marcus du Sautoy hosts a crisscross journey of times and places to introduce individuals who made major breakthroughs and discoveries in mathematical thought that still drive technology, science, astronomy, architecture, and philosophy today.

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