Insight-Out:
A phenomenological exploration of the nature and appearance of learning

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Abstract

Learning has typically been conceptualized and operationalized, especially in formal schooling, in objective, psychologistic terms. Subjective qualities of learning have been marginalized or dismissed altogether. As a career educator and someone involved for many years in alternative schooling designs, I provide an exploration of *the nature of learning* – critiquing how learning is defined by generalizable characteristics and appearances and describing how learning can be immanently and uniquely felt.

I begin the study by considering manifestations of learning in my personal growth. This is followed by a literature review of learning frameworks considered in light of my professional educational experiences. The themes uncovered in this impressional account of learning are then interrogated in a study of other autobiographical accounts of learning and a qualitatively designed fieldwork project exploring the nature of learning for six youth engaged in both formal schooling and informal self-directed education.

Hermeneutic phenomenology yields essential characteristics of learning, with autobiographical and interview data attesting to six core themes. Learning is: idiosyncratic and personal/ized; aligned with generative, creative and imaginative acts; always about some way of being in the world; enacted methodically and strategically; relationally configured; and individually animating and life-enhancing.

I propose new ways for educators to see their students holistically by perceiving their learning arising in fields of subjective, interactive affectivity. Educators can personalize learning through cultivating pedagogical relations and creating environments that maximize individual sense-making. Research results provide critique as well as credence to present attempts to personalize learning in K-12 and post-secondary institutions.

Keywords: personalized/personalizing learning; holistic learning; subjectivity; pedagogy; phenomenology

Dedication

I dedicate this dissertation to educators and administrators who recognize their students as persons first and modify their pedagogical approaches and interactions so that their students might improve their personal learning success. Historically, this humane gesture has been challenging, requiring courage and conviction, sometimes to stand in the face of domineering forces that dismiss or discredit our very humanity. In this age, when neoliberalism, technocracy, indifference, and continued belief in objectivist empiricism and, more recently, artificial intelligence, threaten to subsume personhood, taking this stand is a vital, inspiring act.

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My wife Lisa and daughter Robin continually offered their enthusiastic support to me to pursue this even when the global Covid-19 pandemic kicked us in the shins. My supervisor, Dr. Stephen J. Smith, consistently sought to engage and inspire me to strive to a higher level of insight, and committee member, Dr. Milton McClaren, offered me his heartfelt support in completing this project. I also wish to thank the research participants who joined this project enthusiastically and were never less than fully present and thoughtful in all our interactions. My gratitude also extends to the members of the SFU Research Commons and Faculty of Education Research Hub who offered me untiring guidance and support. My gratitude to you all radiates from the bottom of my heart.

To the First Nations whose lands we occupy and share and beyond, in the spirit of reconciliation I offer my pledge to continue listening to you, so that I might better hear you and also learn from you about your epistemologies and how I might better live “in a good way.” I believe I have much to learn through this.

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Glossary of Key Terms

The terms below are currently found and applied in this thesis. The definitions provided here resulted from accessing ChatGPT (https://chat.openai.com/) and applying the search term: “Define ... “). In some cases they have been edited for brevity.

Autobiography - An autobiography is a written account of a person's life, written by that person themselves. It is a form of memoir that typically covers the author's experiences, thoughts, and feelings over the course of their life, from birth to the present or some other significant point in time.

Autobiographies can take many forms and styles, ranging from highly personal and introspective to more objective and factual. They may be chronological or thematic and may focus on a particular period or aspect of the author's life. Autobiographies may also include reflections on the author's upbringing, family, culture, and social context, as well as their personal and professional achievements, struggles, and relationships.

Autobiographies are often written by individuals who have achieved some degree of fame or notoriety, such as politicians, entertainers, and writers. However, autobiographies can also be written by anyone who wishes to document their life story and share their experiences with others.

The writing of an autobiography can be a deeply personal and reflective process, and can provide insights into the author's personality, values, and worldview. As a literary form, it is valued for its ability to provide a unique and intimate perspective on a person's life and experiences.

Empirical - The term "empirical" is used to describe information or knowledge that is based on observation, experience, or experiment rather than on theory or speculation. It refers to information that is gathered through the senses or through direct observation and measurement, rather than through reasoning or intuition. Empirical data is considered objective and verifiable, as it can be tested and verified by others through repetition of the same experiment or observation. In scientific research, empirical evidence is the cornerstone of the scientific method, and it is used to support or reject hypotheses or theories.

Gestalt - Gestalt is a German word that can be translated as "shape" or "form." It refers to a theory of psychology that emphasizes the importance of perceiving the whole rather than just the sum of its parts. According to the gestalt theory, perception involves the brain organizing sensory input into a coherent whole that is more than just the sum of its individual parts.

The gestalt theory suggests that the brain is constantly seeking to organize sensory information into meaningful patterns and structures, and that our perception is influenced by factors such as context, past experience, and cultural background. The gestalt theory has had a significant impact on fields such as psychology, art, design, and philosophy, and has contributed to our understanding of how the brain processes and interprets sensory information.

Hermeneutic phenomenology - is a qualitative research approach that aims to explore and understand human experiences from the perspective of the individual. This approach is based on the philosophy of phenomenology, which seeks to describe the essence of human experience through careful observation and reflection.

Hermeneutic phenomenology focuses on the interpretation of lived experiences, seeking to understand the meanings and interpretations that individuals attach to their experiences. It involves a process of reflection and dialogue between the researcher and the participant, with the researcher seeking to understand and clarify the participant's experience through a process of interpretation and analysis.

In this approach, the researcher aims to uncover the underlying structures of the experience, such as the fundamental attitudes, values, and beliefs that shape the individual's experience. The researcher seeks to understand the context of the experience, including the social, cultural, and historical factors that influence the individual's interpretation of their experience.

Overall, hermeneutic phenomenology is a research approach that emphasizes understanding the subjective experiences of individuals, while recognizing the importance of context and interpretation in shaping these experiences. It is often used in fields such as psychology, nursing, education, and social work to explore complex human experiences and inform practice.

Holistic - The term "holistic" refers to a philosophy or approach that emphasizes the interconnectedness and interdependence of all aspects of an entity or system. It is often used in the context of health and wellness, where a holistic approach takes into account not just the physical symptoms, but also the mental, emotional, and spiritual aspects of a person.

Holistic thinking acknowledges that everything is interconnected and that a change in one area can affect other areas. A holistic approach can be applied to various fields and disciplines, emphasizing a comprehensive and integrated view that takes into account all relevant factors to promote health, well-being, and balance.

Pedagogy – Pedagogy refers to the theory, practice, and methods of teaching and education. It encompasses the strategies, techniques, and approaches used by educators to facilitate learning and promote the intellectual, social, and emotional development of students. Pedagogy involves the design of instructional materials, the organization of learning environments, and the implementation of various teaching methods to engage students and enhance their understanding and mastery of a subject. It also involves assessing student progress and adjusting teaching methods accordingly. Pedagogy is influenced by educational theories, research findings, and the cultural and social contexts in which learning takes place.

Phenomenology – Phenomenology is a philosophical approach that seeks to describe and analyze subjective experiences or phenomena as they are consciously experienced by individuals. This approach was developed by the German philosopher Edmund Husserl in the early 20th century and has since been expanded and developed by many other philosophers.

At its core, phenomenology seeks to examine the structures of experience and the ways in which we perceive, interpret, and understand the world around us. It focuses on the first-person perspective and the way in which individuals experience the world, rather than on objective or external facts. Phenomenology also aims to uncover the essential features of different types of experience, such as perception, imagination, emotion, and consciousness.

Phenomenological analysis involves a rigorous method of reflection and description, which aims to reveal the underlying structures and meanings of subjective experiences. It often involves bracketing or setting aside preconceptions, assumptions, and external factors, to focus solely on the subjective experience itself. The ultimate goal of phenomenology is to gain a deeper understanding of human experience and consciousness, and to shed light on the fundamental nature of reality.

A **phenomenological attitude** involves adopting a specific stance or perspective to understand and describe human experience as it is directly given to consciousness. At its core, the phenomenological attitude emphasizes the study of subjective lived experiences, focusing on the first-person perspective rather than external observations or explanations. It involves setting aside preconceived notions, assumptions, and theoretical frameworks in order to approach phenomena with openness and curiosity.

Psychologism / Psychologistic – Psychologism is a philosophical doctrine or approach that attempts to reduce all concepts, principles, and knowledge to psychological facts or mental processes. This view holds that all human knowledge and understanding are ultimately rooted in psychological or mental activities of individuals, such as perception, sensation, memory, and reasoning. Psychologism is often associated with the works of philosophers such as Wilhelm Wundt, who argued that all higher cognitive functions, including logical reasoning and mathematical thinking, are ultimately based on elementary psychological processes. However, psychologism has been heavily criticized by many philosophers, who argue that it fails to account for the distinctiveness of different fields of knowledge, such as logic, mathematics, and ethics, and reduces them to mere psychological facts. Psychologistic refers to a characteristic based in psychologism.

Chapter 1. Introduction - The Appearance of Learning

From a time when I was very young, perhaps three years old, I recollect vague, hazy memories of *being-in-world* such as splashing in water, petting a dog, and reaching out to be-with and feel the embrace of my mother and father. These and other childhood memories seem rooted in a sensibility as strong as a need for food and safety, impelling me to engage with and explore the world and uncover its personal meaning. Two particular recollections exemplify this sensibility.

Pond/ering – A Childhood Learning Experience*:*

"It's getting dark, Michael, five more minutes and we have to go. Look at you, you're filthy. And put all the frogs you caught back in the pond. They're not coming home with us."

This pond, a swamp really, five to six kilometers from my home, is my prized 'go-to-place.' I am four or five years old, and I beg my mother to bring me here, after school, on weekends, anytime in spring, summer or fall. There, aided by a dip net and magnifying glass, I pull off my boots and jacket and commune with the life of the pond. As my feet sink into the mud and I dip my arm in water up to the elbow, my senses are engulfed as I observe, hear, smell and feel. I experience a pondering in which I am extended in all sensory ways. I have no preferential trajectory except that which calls me most strongly in-the-moment. There's a wriggling tadpole. There's a water beetle swimming upside down. There's a painted turtle! Uh-oh, there's another leech on my leg. Mom! Hour after hour, the pond enthralls me as I wade about, poking here and there in my quest to learn its secrets and make sense of it all. I feel so good, so buzzing with life that I don't notice time whizzing by, pangs of hunger or the mosquitos and deerflies using me as a pincushion.

Figure 1.1 Michael at a highly favoured pond he explored as a young boy

Pushing off from Shore – A Teen Learning Experience*:*

A feeling of destiny gripped me in the canoe, on the water, around the fire, and in my shelter. I was sixteen years old and alone in the north Ontario wilderness for several days of paddling and portaging through a chain of lakes, rivers and marshes. This was a time long before cell phones, with no one knowing very precisely where I was heading, including me. I was on my own for five days, hoping to complete a circuit of about 80 miles.

Pushing off from the shore of a remote base camp to begin my trip, I wondered what had I gotten myself into? 'What if' scenarios flipped through my mind like flash cards calling up images of cascading waterfalls, bears, fire, injury, flipping the canoe, or losing gear. Of failing and needing to be rescued when no rescue plans had been discussed.

The outpost camp from which I departed supported a few teens training in undertaking such wilderness 'survival trips each summer.' In my case, I had ambitiously said I would like my trip to extend to 4-5 days, which met with agreement from my mentors who were a rag-tag group of wilderness-experienced young adults in their 20s, provided I learned and practised a range of skills in advance.

While residing at the base camp my mentors discussed the flash card scenarios with me and guided me in developing or improving my canoeing and survival skills.

Sometimes I learned not from people but from whitewater rapids in which I trained to navigate, or the wet wood that I struggled to coax into flame. I studied the clouds to better forecast the weather. Sometimes, while encountering challenging situations during this training, I struggled to nurture a quality of resourcefulness rather than resignation in anticipation of the many challenges I would likely face on this trip.

Figure 1.2 Michael (in canoe bow) training for wilderness trip, 1972

The day of departure finally arrived. Pushing off from shore, I felt a sense of teen bravado in my eagerness to 'get going', coinciding with an intuition that I was reasonably prepared and ready for what I might find around 'the next bend in the river', and an inkling of how I could and would survive if I experienced serious problems. Still, my thumping heart reminded me I had never undertaken anything quite like this.

As the sound of waves slapping against the canoe played the opening notes of my wilderness concerto, my mentors shouted to me from shore, "you can do it!" Their many helpful gestures during my training resided in my memory, available in a moment's recall, and their supportive calls rang in my ears, soothing my nervousness and bolstering my confidence. That made this adventure utterly exhilarating from the outset.

Figure 1.3 Michael's camp on wilderness trip, 1972

To this day, I recollect with much fondness and in vivid detail my *Pond/ering* as a young boy and *Pushing off from Shore* at age sixteen. These experiences tested my resolve in countless ways, catalyzed cascading emotions and helped propel me in numerous ways into a lifelong love of the outdoors, swimming, hiking, camping and into an early career in geology. Both experiences exposed the core of my being to the raw plasma of *life*. In both cases, what I was learning engaged all aspects of my *living-being* – my perception of myself, imagination, intellect as well as my corporeal senses and sensibilities.

The narratives shared above are not the kind of simplified life stories I might recount around a campfire or over a cup of coffee. They are descriptions revealing much about deeply personal learning through emotional states of excitement and anxiety, of physically and psychologically engaging encounters, and of meaning ascribed to events as they unfold. Describing such life events is more than any simple recounting. These descriptions afford insight into the very character or nature of life-wide and lifelong learning as it *appeared* and arose for me.

Perhaps the experiences I related reside deeply in my memory because they primed strong emotions, as is confirmed by neuroscience (LeDoux, 2018). But they also persist, I'm quite certain, because I continue to have similar experiences and, from time to time, I reconfirm how they remain deeply meaningful to me. How I recollect and reflect on these lived experiences is best considered as a kind of refraction or *gestalten* of

learning and meaning arising within me in protean form. These forms do not exist as static, catalogued artifacts but as dynamic structures of consciousness that flex and infuse my manner of living with others of a human and more-than-human kind. I engage these dynamics as I continue to reconsider previous meanings in the face of new encounters. In this way, what is old is not so much “new again” as much as it is re-newed within an ever-arising, meaning-making existence. This, it seems to me, is the essence of the nature of learning and a fundamental insight I want to draw out in this dissertation.

1.1. The Complexity of Learning

The word “learn” is traced to Old English *leornian* “to get knowledge, be cultivated; study, read, think about,” and related to a Germanic word, *Gleis* or “track” (Online Etymology Dictionary, 2022b). Since the Enlightenment, scientists and philosophers have added many insights about learning to this etymological definition of the processes of gaining knowledge.

Today learning is recognized as an innate, shared trait among living organisms across many taxa yet distinguished uniquely in each species (Cobb, 1977; Thomas, 1978; Wilson, 2004). Human learning is commensurate with existence from birth or earlier and is said to be lifelong. With the help of bodily senses and tissues, our learning guides us into mobility, first crawling, then walking, and coming to embrace the surrounding world with animated determination. As perceiving and linguistic bodies, we touch and explore, listen and mimic, ponder and discover the character of the world and of our place within it through these manifold modes of engagement. The trajectory of this ‘learning journey’, within and without, extends to a horizon of being and knowing, that, itself, seems boundless in consciousness.

Cobb wrote (1977) that learning arises in childhood, first pre-reflectively, as poetic and creative experience, "lyrical, rhythmic, and formative in a generative sense" of fostering "sensory integration of self and environment, awaiting verbal expression" (p. 89). With the help of language, she continued, the child next “develops a continually wider ability to create ever greater complexity of gestalten in play, thought, and word" (p. 95) that help shape and deepen not only the child's perceptual world but also an emerging sense of self.

The word *gestalt* means ‘shape’ or ‘form.’ To philosopher-poet Jan Zwicky (2019), gestalt comprehension provides insight into the behaviour of complex entities through observing “how things hang together” (p. 5) as living, dynamic, interacting forms. Much depends on determining “how things hang together.” Zwicky distinguishes such gestalt comprehension of phenomena from a practice of empirical science (defined in Glossary) that infers the behaviour of whole entities from studying isolated components. Isolating living and non-living entities for study is common scientific practice, especially during experimental research, but such reductive practice often leads to misunderstandings about the behaviour of whole entities (Bortoft, 1996; Holdrege, 2013; Suzuki, 1999).

Education is a domain in which the manner of perceiving is likewise critical. This starts with whether each student is perceived either as a ‘whole person’ or as a component assembly of ‘parts’ categorized as behaviours, sensibilities, and perceived competencies. This is a critical distinction and one that guides the creation of learning activities and also educator determinations about student learning abilities and aptitudes.

For Cobb, learning “hangs together” not merely as an externalized act between a self and things, but as a seamless, convivial act between a self and an engulfing world, influencing and shaping the self’s growth and its trajectory. Learning fully implicates a self in experiencing the engulfing-gripping world. This is how I remember the events I described at the outset. I also easily recall many more events where my sense of self and sense of world became intertwined in ways that continue to shape how I perceive things hanging together. These experiences, some more potent or resonant than others, thrust upon me meanings and truths that have shaped my ongoing engagement in the world as well as my character and sense of identity. They have contributed both to my *world-making* and to a sense of *how the world has made me* in dynamic, multifaceted and idiosyncratic ways. The result is no assemblage of parts but a unique, dynamic and complex person, whole in sensibility (reflecting the Latin verb *sentire*, to feel) while engaged with the world and continuing to learn and evolve.

The word “engage” derives from Medieval usage combining the Latin prefix for “in” or “into” with proto-Germanic terminology connoting a “pledge” or “bind,” and also to involve or commit oneself (Online Etymology Dictionary, 2022a). Present word usage remains closely aligned with its root formation and strikes me as appropriate to describe the manner of my relating to and with the world in such learning acts as I have already

noted. Indeed, to “engage” the world reflects a manner of pledging or involving myself in an active commitment. My learning can also be seen as engaging actions, obviously relational in engaging ‘something’ and also reflecting my sensibilities, emotions, dispositions, bodily being and personal history.

My experiencing of learning in this way resonates with how French phenomenologist Michel Henry posits “modalities of life” as aspects of reality irrevocably linked to self and to one’s *being and becoming*. He writes (2003): “In every living being life comes to pass as a Self” (p. 105), adding that “every life is marked at its heart with a radical and insurmountable individuality” (p. 105). To Henry’s point, the experiences I recounted were mine and mine alone, fused to my ipseity (from the Latin, *ipse*, which means ‘self’ or ‘himself’). In seeking to extend Henry’s assertion that learning be considered a “modality of life” in which I consider myself engaged, I understand the learning events I described to be arising as immanent, affective aspects of *dynamic* and *vital* living.

They are dynamic in the sense of how sociologist Edith Cobb joined “the dynamic experience of self and world” to "the primordial perceptual experience that remains a living drive and permeates all the organs and cells of the body” (Cobb, 1977, p. 48). A dynamism arose more recognizably as a spectrum of motions or animated gestures within the mercurial shift of focus while *Pond/ering* to a sustained or rising excitement while training and then literally and metaphorically *Pushing off from Shore*.

Smith (2007) describes movement for children and adults as a “primary consciousness” (p. 49) that fundamentally animates behaviour, feeling and thought, and discloses “essential connectedness to one another and to the world in which we live.” A “rush of movement,” he continues, “appears pre-consciously” (p. 51) and may be all-engaging and evidenced by myriad gestures denoting an “upsurge of feeling” and, often for children, “unbridled enthusiasm” rooted in an essential vitality.

To the late psychiatrist and author, Daniel Stern, vitality is both a subjective experience and phenomenal reality, occurring as a whole, a "Gestalt that emerges from the theoretically separate experiences of movement, force, time, space, and intention" (Stern, 2010, pp. 4–5). Stern asserts that dynamic, relational forms of vitality significantly influence human learning, beginning in infancy, and continuing throughout one’s life.

Drawing on the works of Stern and phenomenologist Michel Henry, authors Smith and Lloyd (2020) have also written extensively on vitality and movement and how these forces rhythmically interact, inter- and intra-subjectively, as part of the auto-affectivity of life. The authors write:" "Life and its sensations, and the very sense of being fully alive, speak to an originary affectivity that resists objectification" (p. 2). At the most moving of times, they continue, life's affectivity "cannot be held within the bodily containers within which we mold and ordinarily hold our feelings and emotions" (p. 2). Life is apperceived as meaningful in dynamic and vital feelings of being alive.

This rendition of animated learning aligns with my recollections of *Pond/ering* and *Pushing off from Shore* in which I was physically and psychically engaged with an all-engulfing world where, say, the waters were molding to me and floating my canoe, the air buzzing with insects and birdsong, and the pulses of dynamic and vital living registered for me as having 'the time of my life' and which endured beyond those particular times in shaping my future self. In my *Pondering* and *Pushing off from shore* I experienced the very motions of learning as extending beyond my immediate self, linking me to the fauna of the pond and to a lifelong bond with animals, and my canoe trip extending this sensibility even farther, bolstering a confidence in tackling further learning adventures.

Such experiences resist objectification. Conversely, rendering my thinking and learning objectively, dis-assembling and re-assembling component parts in a rational manner in separation from other objects elides the very integrity of sensing, perceiving and engaging with the world. These latter processes of dynamic and vital living reveal subjective and personal truths about not just the *what* but the very manner of learning *how* to live and grow in the world most meaningfully.

This determination of personaiized learning girds the direction of this doctoral research, not just in terms of the arc of my overall life journey but also as a ligature to my thirty-plus year career as an educator. To this end, I have long considered how learning has infused my life and those around me, and how so much life energy (mine and others) has been consumed with schooling determinations of what should be learned and how best to achieve these ends. At various times, teachers determined me to be a fast learner, a slow learner, a gifted learner, and a precocious learner, all of which reflected school-based circumstances and piecemeal, instrumental evaluations I

generally disavowed. Certainly I have excelled at learning some things just as I felt challenged in other areas. As the *Pond/ering* and *Pushing off from Shore* examples reveal, my learning has "hung together" in an undeniable and sometimes near-ineffable complexity reflecting my interests, motivations, engagements in so many and varied contexts.

I observed much of the same with my siblings and friends for whom learning is also much broader in scope and more nuanced than is commonly framed by school-based constructions. This discrepancy is cogently illustrated by educator-author Peter Jarvis (1992) who asserted that learning is "wider than education" and that "all the social institutions cannot contain learning since it is fundamental to human being and to life itself" (p. 10). Quite obviously the social institution of schooling has its own agenda that routinely overrules the personal learning of students. This dismissal of individual interests, dispositions and experiences – or the erasure of subjectivity – is not accidental but reflective of a mindset dating back to the start of the Enlightenment when René Descartes judged thinking rooted in the intellect to be superior to processes tied evidently to motions, emotions and intuitions. Over time, Cartesian thinking led to processes of rationalized, objectivist thinking that primed the Scientific and Industrial Revolutions. These had significant implications for society and came to shape the practices of mass education in North America and Europe in the mid-1800s. Highly influential on mass education practices was the first strain of analytical, objectivist psychology reflecting learning theories rooted in the precepts of behaviorism (Gatto, 2000; F. Smith, 1998). These theories ignored or vanquished subjectivity and guided the development of standardized practices such as streaming, impersonal assessment and grading of student populations *en masse* (Brass & Lynch, 2020; Kaufman, 2013; National Academies of Sciences, Engineering, Medicine, 2018).

In a later chapter I will detail the evolution of humanistic psychology which evolved from analytic psychology to include and value subjectivity. This evolution, notwithstanding, definitions of learning rooted in analytic psychology have continued to be promoted and to influence determinations of learning which has led to so much confusion about the character of learning, especially as it has been framed in schooling contexts.

1.2. The Elusive Nature of Learning

Definitions of learning from analytic psychology reflect the language of prediction and measurement and emphasize cognitive schemata. The American Psychological Association defines learning as

> the acquisition of novel information, behaviors, or abilities after practice, observation, or other experiences, as evidenced by change in behavior, knowledge, or brain function. Learning involves consciously or nonconsciously attending to relevant aspects of incoming information, mentally organizing the information into a coherent cognitive representation, and integrating it with relevant existing knowledge activated from long-term memory. (American Psychological Association, 2022b)

This definition reflects a mindset rooted in objectivist psychologism (defined in Glossary), as a science of human behaviour emphasizing structural determinism. Here is one such definition by Furth (1970):

> (Learning is) – in the strict sense, acquisition of knowledge due to some particular information provided by the environment. Learning is inconceivable without a theoretically prior interior structure of equilibration which provides the capacity to learn and the structuring of the learning process. (p. 160)

Further to this, the “laws of learning” on which the APA definition is based and “statements describing the circumstances under which learning generally occurs” (American Psychological Association, 2022a) are, in fact, theoretical abstractions rooted in mathematical conceptualizations.

In obvious contrast, the personal experiences I shared at the outset of this study are not abstractions, but concrete revelations of how I experienced learning. I described the phenomenality of learning as embodied, animated, relational, generative and ‘life-infused.’ These characteristics are also ascribed to significant learning by other educator-researchers (e.g. Edwards et al.,1998; DeRobertis, 2017; Cajete, 1994). Philosopher Don Beith (2018) has recently cast learning as an immanently generative and transformative upwelling force. He writes:

> Learning is an experience where confusion, a furtive beckoning, or nonsense portentiously explodes into a new domain of sense, transforming the very field from which it emerges, taking up and recasting previous indeterminacy into new determinate meaningful dimensions (Beith, 2018, p. 9).

Beith perceives learning as a generative force that exceeds the determinations of analytic science. He writes further that through the accomplishment of new activities, our experiences confer “a power (*puissance*) that exceeds and grounds us, announcing itself to us, inviting us to assume and inhabit it, to take it on as one of our active capacities (*pouvoir*)” (p. 9).

I agree with this conceptualization insofar as it helps us understand learning as a complexly generative, dynamic yet elusively graspable phenomenon. Learning is the sense-making instituted in what we may well come to look back upon as decisive moments of our lives. Other phenomenological scholars have described significant learning in terms of ‘events’, ‘situations’, and experiences of pathic attunement. Learning might also be regarded as lacking in visible evidence yet be all the more telling for that apparent lack. As phenomenologist Jean-Luc Marion tells us,

> There are certain phenomena that can only phenomenalize themselves by remaining invisible and must manifest themselves by the feeling in which I experience them. These phenomena are manifested without being aimed at, hence without visibility, but by the affection of original feeling. (Marion, 2012, p. 28)

To Marion’s point, no one can hold learning in their grasp as a thing or object, or point to something and say, definitively, "there is learning, right there." It is invisible[1] and it *is* elusive. Yet through personal experiences and as an educator, I have gotten 'up close' *and experienced* learning on many occasions, perceiving it 'bursting forth' sometimes visually, at times auditorily or tactilely, but inevitably affectively, relationally, socially, as well as intellectually. The *Pond/ering* and *Pushing off from Shore* events I related at the outset are exemplary of how this fuller sense of learning has always been within and beyond my grasp.

I noted earlier how my experiences as a student posed irreconcilable differences between learning and schooling. These differences are rooted in modern schooling and may be observed through ever-renewing assumptions that standardized practices

[1] I make this claim despite the assertions and body of work known colloquially as ‘Visible Learning’ associated with Australian educator John Hattie. Through meta-analysis of 138 factors influencing classroom learning, Hattie points to the resulting statistical representations (histograms) as evidence of ‘visible’ learning) which he ranks from strong to weak (Hattie, 2008). Popular among educators, Visible Learning has nonetheless drawn significant criticism for procedural flaws from various scholars (Bergeron & Rivard, 2017; Rømer, 2019).

accurately correlate with student learning (Gatto, 2000, 2017; Holt, 1967, 1985). Such assumptions continue to influence conceptualizations of curricula, learning designs, and teaching practices.

My life as a student and career as an educator have been shaped significantly by the assumptions and conventions of mass schooling. As a teacher, I have often reacted to pronouncements about learning drawn from evaluations based on standardized testing which I view as questionable and occasionally harmful, especially when linked directly or tacitly to predictions about a student's learning potential. This has created a moral dilemma because I have always considered it an ethical duty to ensure my students are afforded every opportunity to succeed. In doing so I have sought to reconcile discrepancies between the institutional demands placed on teachers and my own insights about learning gleaned by observing and conversing with students to better know who they are and how they might better fare in their schooling. Yet reconciling such discrepancies is not straightforward because what is meant precisely by student *learning* remains vague and contested amongst teachers and educators at large. No matter how vigorously educators might debate what is worth knowing, school bureaucracies routinely stifle such debate by mandating guidelines for teachers to follow in assessing and evaluating learning. These guidelines inevitably default to technocratic procedures for the utilitarian rationalization of knowledge acquisition. Examples of this include lock-step adherence to standardized mass-testing templates, multiple-choice testing, and grading rubrics. Teachers have little leeway to object to, reject, or offer meaningful feedback about such impositions. There is a pernicious trade-off when the phenomenality of "life-infused" learning, as described above, is diminished or ignored in favour of instrumental schooling procedures in keeping with standardized curricula and learning assessments rendered as bar graphs and numerical determinations.

To better help educators foster the kind of student learning I ascribed to when I began my teaching career and to which I still aspire – to help individual students achieve the learning successes they desire to attain – it is critically important to re-cognize meaningful and significant learning and re-conceptualize its very *nature* as the dynamic and vital arising of meaning. This doctoral research is oriented to this goal.

1.3. Research Overview

I posited earlier that learning may be considered a “modality of life” (Henry, 2003), integrated and fused with our living. My *Pond/ering* and *Pushing off from Shore* examples and discussion of the phenomenality of learning helped reveal my learning arising in subjectively, sensibly-rendered fields of experience. These fields are distinguished through idiosyncracies of circumstance pertinent only to me, in some cases only grasped by me. Learning for others is also distinguished by uniquely subjective fields that compare and contrast with my own, and by extrapolation help to characterize essential qualities of learning, generally. This premise informs the purpose of this study which is to further investigate the *nature of learning* for others and especially for young students in their respective fields of subjective, interactive affectivity. Other reasons also come to mind and are detailed in the rationale that follows in the next chapter. Through this study I hope to come to a deeper understanding of the manner in which learning may be perceived and apperceived, especially in students, and how the meaning of learning may be determined from a first-person point of view. This will greatly assist re-cognizing and ac-knowledging learning in not just its appearances but in the very manner of its appearing.

To this end, I detail a qualitative, phenomenological exploration of learning experiences. This leads from the personal descriptions and reflections of *Pond/ering* and *Pushing off from Shore* I related at the outset to a broader consideration of the appearances of learning as revealed in excerpts drawn from a number of auto/biographies. I turn then to fieldwork descriptions of learning from a group of student research participants with whom I interacted over an eight-month period and reflect on the connectivity between the fieldwork research and philosophical consideration of fields of subjective, interactive affectivity. The procedures for conducting this phase of the doctoral study were approved by the Office of Research Ethics at Simon Fraser University (as detailed in Appendix B). In analysing the results, I derived various ontical and ontological themes characterizing the modes and manners of student learning with the goal of revealing fundamental qualities of significant and meaningful learning.

As Jacobs describes (2013) the process, in completing phenomenological research one awakens to a world of phenomena that is otherwise imperceptible. Through adopting a phenomenological attitude in this research, I am afforded deeper

understanding of how I and others perceive and apperceive the arising of learning amidst its appearances. In this way I gain deeper insights into learning experienced as life-infusing activity.

This inquiry coincides with a contemporary gesture to *personalize learning* in conventional schooling and higher education in many jurisdictions and institutions across North America. Personalized learning is said to reflect a convergence of factors influencing the transformation of education beyond traditional, standardized schooling (Kallick & Zmuda, 2017; Rickabaugh, 2016; Turner et al., 2017). Personalized learning derives from various pedagogical approaches that respond to the unique needs, dispositions, perceived learning competencies, and interests of individual students. As such, personalized learning shares characteristics with individualized learning which is historically associated in North American schools with offering support to students with Special Needs. While personalized learning is not grounded in a singular theoretical frame, it integrates theories grounded in education and branches of biological and social science, and shares similarities with forms of Indigenous education.

Throughout most of my 30-plus year career as a professional educator I have oriented my teaching to *personalizing* learning with students of many ages. In this, I have implemented a practice of eliciting some details from (individual) students about aspects of their learning lives and incorporating such information into my approach to nurturing individual student learning. Such information usually pertains to learning interests, strengths and challenges, and some biographical and educational history. In doing this, in mainstream as well as two alternative schools I co-founded in British Columbia, and a graduate-level program in which I am an instructor, I have perceived many instances where students responded positively to personalized approaches that I initiated or in which they participated. By this I mean I observed such approaches strengthening student learning achievements and enhancing their dispositions to additional learning and engaging in related experiences such as sharing information and mentoring other students. As a means of better supporting student learning I also created and used several survey instruments soliciting personal information from my students (Maser, 2021). The present study is intended to build upon this practice by inquiring into the nature of learning to better guide pedagogical practice and decision-making.

I conclude this study with suggestions on how the results can be of benefit to educators at large. In particular, I suggest how the results can contribute to the broader adoption of personalized learning approaches presently underway in many K-12 and post-secondary educational jurisdictions, including in British Columbia where I reside. I also suggest how personalized learning may help address widespread student achievement challenges linked to the Covid-19 pandemic that have been detailed by education and health-care authorities.

I am present throughout this dissertation in my (writing) voice and autobiographical positionality, and in contributing personal anecdotes, reflections and learning commentaries. Such voicing is an accepted feature of phenomenological research and reflexive inquiry premised on validating subjectivity as key to the research endeavour. My voicing and presencing reflect a deeply-felt subjective and critical relationality I have with the topic itself since learning is core to *my being* as well as a key focus of my praxis as an educator. My own sense of meaningful learning is intrinsic and essential to this research.

Author-educator Ellyn Lyle confirms the value of including auto/biography in such research, insisting that it is neither narcissistic nor egocentric but benefits both teachers and students (Lyle, in-press). Through such inquiry, she adds, educator-researchers are encouraged “to interrogate our assumptions and critically examine our claims to knowledge regardless of our ontological frameworks” (p. 11). She writes further that:

> In understanding ourselves as critical data sites, we shine a light on behaviours and actions that contribute to education as a profoundly human endeavour. Engaging reflexive consciousness is central to exploring our inner landscapes even as it supports learning as an ever-evolving understanding in the context of relationship with others. (p. 36)

My inner landscape is a ‘learnscape’ of protean potency, ever-alert and attuned to its own vast accumulation of experiences and emergent sensibilities. Rooted or radicalized in my ever-present and ever-evolving self (*ipseity),* it “hangs together” and engages with the engulfing world in rich, dynamic and vital ways. Mindful of this, I surmise that what is true for me and my learning proclivities can be taken up, in some manner, by others and reveal a nature of learning previously overlooked.

Exploring the nature or character of learning arising subjectively is the focus of this dissertation. In its *arising*, learning is dynamic, vital, generative, and grasped idiosyncratically. This chapter has helped introduce the dissertation topic, starting with autobiographical insights from childhood and youth. Reflection has confirmed the nature of this learning as dynamic and vital and manifesting through a personally potent engagement with the environments in which we find ourselves. The examples I shared of personal learning arising in natural environments reflected a potentiality of learning to arise in all kinds of situations and contexts. I have considered, as well, how personally meaningful learning is so often diminished or ignored in schooling contexts, noting the roots of learning in analytic psychology, and the controversy and confusion among educators that results. Additional components of this study build upon this foundational exploration of learning. The next chapter details the broader framing and focus of the research.

Chapter 2. Framing and Focus of the Research

2.1. Introduction

This chapter details the framing and focus of research informing this dissertation. It begins with an overview of the *nature* of learning, through which I establish a particular understanding of subjective experience and its educational relevance, and I discuss the phenomenality denoting the *arising* of learning. Next, I provide a study rationale in terms of misunderstandings about learning in schooling environments along with noted gaps in research. This leads to a framing of the questions guiding this research and an indication of the methodological orientation to this study. In closing this chapter, I will elaborate on the anticipated research outcomes.

2.2. Exploring the Nature of Learning

> Learning … is not a single process but a family of different processes that occur in the sequence of experiences we have in the course of our daily living – it is about our being and becoming in a lifetime of learning. (Jarvis, 2012, p. 23)

In exploring the nature of learning, I draw particularly on a concept of nature derived from the Latin *natus*, or 'born', which is oriented to notions elucidated several hundred years ago referring to bodily growth and character, essential qualities, and the acquisition of knowledge. My consideration of nature also draws on its interpretation by phenomenologist Edmund Husserl (1970) who assigned to it a "personalistic attitude" circumscribing the components of a person's life, what people do, how they behave and how they are personally affected and determined by their surrounding world. He detailed it in the following way.

> The structure of the personal surrounding world stands in essential relation to the structure of personal life (with personal habituality) which, as world-life, is a comporting of oneself toward objects appearing in the surrounding world and their properties belonging to the surrounding world. (p. 328)

The character of the surrounding world, he continued (1970), can be revealed thematically, "just as it is pregiven, just as it gives itself in actual and possible experiential perception and establishes itself as actually existing in the course of our experiential life" (p. 330).

This inquiry will reference considerations of nature in seeking to *unfold* vital aspects, foundational characteristics, and thematic, ontological frames of learning experiences. Ancillary, ontic experiential characteristics refracted and noted in this unfolding include personal development and growth, social and communication competencies in and through support from educators, mentors and parents, and interactive facility with material entities (e.g., technologies, the natural world) and non-material entities (e.g., self-ideation, intuition).

However it might be experienced, learning arises in the encounters shaped relationally by that which emerges within such encounters. Education professor and phenomenology researcher Stephen Smith describes relational awareness as that which is grounded in 'vital contact' and realized in practices of heightened carnal and affective attunement with children, adults, and animals, too. Smith (2014) writes, "Moments of vital contact with the world occur in bursts of energy, rushes of excitement, surges of feeling, swellings and risings of joy. There is contact in such moments with a primary impulse, a life force, which animates the places inhabited" (p. 233).

Smith’s description aptly characterizes how I've noted students express their most meaningful and significant learnings. At times, they may punch the air, give an enthusiastic shout, break into a broad smile, and also just give a shrug. Learning may also be entirely concealed and undisclosed, and one person's shout-out may well be her neighbour's “meh.” Nevertheless, learning experiences tend to be suffused with deep, subjective meaning holding much power to transform students' lives. What matters is the very manner in which meaning is intuited and articulated in the “bursting forth” that the momentary interaction affords.

The insights from Henry, Cobb, and Smith resonate with my felt sense of myriad personal as well as observed learnings predicated on animated, reciprocated exchanges within what the founder of phenomenology Edmund Husserl termed the “lifeworld.” Husserl writes (1970) of our encounters within the lifeworld that: “Pre-scientifically, in everyday sense-experience, the world is given in a subjectively relative way. Each of us has his own appearances: and for each of us they count as (*gelten als*) that which actually is” (p. 23). Despite the varied array of such appearances for each of us, a common thread can be discerned in terms of some coalescing sense of learning that was revealed to me initially in my *Pond/ering* and *Pushing off from Shore* experiences.

As an educator, I have come to know the most about the lifeworlds of students through *personalizing* my learning interactions with them. I have sought to relate with learners, either face to face or virtually, in a way that confirms and also enables each of us to better understand how learning 'hangs together', especially in the manner of its arising and appearing in myriad ways. John Dewey underscored the importance of personalizing learning, too, in *My Pedagogical Creed* (1929) where he advocated for education to "begin with psychological insight into the child's capacities, interests and habits" which "must be continually interpreted to know what they mean" (p. 18). I posit that Dewey sought to extend this inquiry beyond the "psychological" to better understand how capacities, interests and habits likewise influence student learning.

Personalizing learning requires attending to the phenomenality of learning, pedagogically, as it appears or is "given" to each person. This givenness is taken up in phenomenology, the branch of philosophy concerned with studying and describing the manner that phenomenal encounters manifest in reflective consciousness. Phenomenology is thus distinct from other branches of philosophy (e.g., empirical rationalism or naturalism). As initially described by Husserl at the outset of last century[2], phenomenology circumscribes an attitude, an approach and, more recently, a distinct research methodology seeking to understand the implicit meanings of phenomena as they appear or are *given* to participants and taken up within reflective consciousness. To writer-researcher David Seamon (2018), phenomenological research seeks to attend to the comprehensive nature of human experience and "to facilitate reflexive understandings that portray human experience as accurately and multivalently as possible" (p. 10). This research project utilises such a methodology.

To Martin Heidegger, a student of Husserl who made many significant contributions to phenomenology, the word *phenomenon* is rooted in the ancient Greek word, *phainómenon*, signifying an opportunity for revealing or appearing or, as he says, "that which shows itself in itself" (Heidegger, 1967, p. 296). Phenomena comprise "what goes to make up Being" (p. 310) and phenomenology comprises "the science of the

[2] Bortoft (1996) credits the German author and scientist Johann Wolfgang von Goethe (1749-1832) as being "a phenomenologist of nature" and developing a methodology for studying natural phenomena that is similar in many ways to the methodology of phenomenology elucidated by Edmund Husserl for studying the structures of human consciousness, 70 years after Goethe's death. Husserl does not mention or reference the work of Goethe.

Being of entities – ontology" (p. 310). To philosopher Henri Bortoft, phenomenology is not just concerned with the appearance of phenomenon, but especially with "what appears *in its appearing"* (Bortoft, 2012, p. 24). He writes (Bortoft, 2012) that "there is dynamic depth in the appearance which is the appear*ance*. Because it is the appear*ance*, it is the thing itself (not the thing in-itself) manifesting" (p. 26).

Dutch philosopher Dan Zahavi (2007) recognizes the importance of the living subject ascribed in phenomenology as differentiated from other notions emerging in analytical philosophy. Subjectivity, he writes, denotes a mode of experiencing in which what is undergone, what happens and what happens to us "precisely feel like something for somebody" (p. 67) and as "experiences I am undergoing or living through" (p. 67). Zahavi writes further that conscious mental states involve not only a first-person perspective but are extended to include a self-referential pathic sensibility rooted in feelings of "how things are for me" (pp. 67-68).

Smith (2006) extends this sensibility, seeing phenomenology as important in helping "evoke a sense of being at home in the world" (p. 20) and in feeling "those motions of earth, sea, air and fire that comfort, envelop, fold and enfold us" (p. 8) and that "animate us as moving, sensing, emoting flesh of the world" (p. 8). Phenomenology, he continues,

> describes incarnate being in the world as a memorial text, an analysis of the space and time of sensuously lived experiences, and as a remembrance that traces the flesh as an element of being connected to others and to an otherness that is beyond solitary existence. (p. 8)

The insights above indicate the nature of being as arising and appearing in human consciousness in multiple modalities and felt senses. They are given in and through engaging encounters within the lifeworld which tend to be self-engulfing. As an educator, I want to better understand this nature of learning, elusive though it may be, as the very manner of informing my life, my *living*, and how I am at home pedagogically in and through an ever-evolving pedagogical praxis. I also want to better understand this nature of learning as it arises and appears for students with whom I am responsible as their teacher, guide and learning mentor.

In seeking to achieve this, I also hope in some way to challenge the diminishment of the *subject* – the individual person – that I frequently encounter in

educational practice. This has long frustrated me and also sparked my desire to explore the subjective nature of learning.

In undertaking this research, comprised of my own and others' autobiographical substantiation of key characteristics of the nature of learning, and a fieldwork project elaborating upon these learning characteristics, I am aiming at a fundamental pedagogy that can be further taken up in personalized approaches to education for which research is in the early stages. In seeking to do this, I am especially wanting to learn more about students' first-hand experiences of learning since their sense of the nature of learning has received such scant attention in a long history linking teaching to learning and where conceptions of teaching have tended to overshadow what is most characteristic of meaningful and significant learning.

While I am not seeking to develop or test hypotheses in undertaking this thesis, my research will refer to several theoretical and subject-specific orientations which are pertinent to exploring the nature of learning as it is experienced, subjectively. These include the orientations and key references I have discovered through literature and on-line research, conferencing, and in discussions with practitioners.

2.3. Rationale

In this research I am seeking to better understand that sense of learning which I perceive as intersecting with educative frames, especially those that shape conventional schooling. This perception helps frame a broader justification of this study. Schooling, as mentioned, concerns itself with learning as an elemental context aligned to such purposes as knowledge advancement and skill development. But schooling has also adopted mechanisms emphasizing efficiency, management, discipline and evaluative processes oriented to standardized norms that have little or only symbolic relationship with learning (Brass & Lynch, 2020; Gatto, 2000; Palmer & Zajonc, 2010; Turner et al., 2017). Such instrumental approaches have been reinforced through schooling processes rooted in Skinnerian theory and emphasizing behavioral change and in Piagetian theory emphasizing rational-logical, developmental schemata (Furth, 1970).

Instrumentalist, behavioral and cognitivist orientations have had enduring influence on the design of curricula and approaches to guiding and interpreting learning.

These orientations have been criticized, however, as rooted in outmoded conventions and concepts about student learning potential rather than addressing emerging student learning needs in a changing society (Armstrong, 2018; Darling-Hammond et al., 2019; Jensen, 2008; Rickabaugh, 2016; F. Smith, 1998). Unfortunately, some educators reinforce dismissive attitudes about student learning potential because they are not deeply informed about student learning experiences. This is exemplified by the following pronouncement by a well-known education author-professor: “Today students remain, as it were, outside all the knowledge they learn; they learn too little about anything to feel on the ‘inside’ of it” (Egan, 2010, p. 211).

I believe there is sound basis for challenging educational mindsets and conventions reflecting conceptualizations about learning based on instrumentalist notions that fail to recognize saliently lived meanings when conceptualizing learning. As an educator, I have often encountered instrumentalist and rationalist approaches to education as an enduring and dominant mindset. I’ve worked to challenge this, including co-founding and helping lead two innovative (K-12) schools emphasizing holistic (whole-person) learning. In both schools, emergent, personalized learning processes were emphasized and valued over instrumental schooling processes. Formed from hundreds of encounters with students in these schools, these personalized processes have helped nurture student learning in profound ways[3].

Over the past forty years, especially, many important insights have come to light that have revealed the primacy of idiosyncratic learning sensibilities and dispositions. These have helped to challenge the dominant instrumentalist-rationalist mindset and have lent impetus to some educational change. An example of this is the emergence of Multiple Intelligences theory in the 1980s (Gardner, 2006), as well as important insights from neuroscience and developmental psychology (Armstrong, 2017; Kaufman, 2013; Sternberg & Kaufman, 2011). More recently, social changes influencing student

[3] Research data and insights on these programs may be found in the following unpublished theses: *Wondertree: A description of a unique model for wholistic natural learning* (Cameron, 1990); *Virtual High: Toward an ecology of being* (Maser, 1997); *SelfDesign: An inquiry into authentic learning and co-inspiration* (Cameron, 2010). The research girding these three theses confirmed that offering alternative, personalized approaches to nurturing student learning in both in-person and online learning programs helped students achieve learning goals that in many cases greatly exceeded other-authoritarian guidelines and positively influence student life-learning paths.

demographics have added impetus to the increasing acceptance of personalized and differentiated learning approaches (Gross et al., 2018; Tomlinson & Sousa, 2011).

The importance of focusing research attention on the experiences of students, as exemplified in personalized and differentiated approaches, is highlighted by Saevi (2011) who urges educational researchers "to be attentive to the experience of the child and to acknowledge the child's utter otherness as the basis and precondition of pedagogical relational practice" (p. 459). Likewise, the authors of *How People Learn* assert that, in moving beyond the idea of an "average" learner to embrace and explain learning variation among individuals, new research focusing on learning experiences is needed. They write,

> It will be valuable to have more interdisciplinary research that examines how individual variation and developmental and contextual factors, including social, emotional, environmental, institutional, and experiential factors, influence the lifelong learning process and learning outcomes. It would be valuable to have research that addresses diverse study populations, interest in learning, the role of identity in learning, motivation to learn, self-regulated learning, the influence of learning environments, learning across the life span, and learning disabilities. (National Academies of Sciences, Engineering, Medicine, 2018, p. 9)

Elsewhere, the authors of *How People Learn* state that:

> Additional study is needed of the factors that influence situational interest. These factors include the individual's prior experiences, the role of different learning structures and extrinsic incentives on sustaining interest, mindset orientation, and learning progress over time. Also needed is additional study of the factors and processes by which individuals allocate effort and time across competing and complementary life and educational goals over time. (p. 228)

In sum, reflecting my experiences and considering new insights about learning such as those mentioned above, there nevertheless still remains much to perceive and apperceive about learning, especially as it pertains to the affectivities of "arising" that configure the subjective, sensible field of interactive learning. It is crucially important for educators to see their students as constituted through a prism of such sensibilities and as a basis for guiding their interactions and re-considering how discrepancies between schooling and learning, noted above, may be redressed. This research is intended to forge a viable path forward.

2.4. Research orientation

I am seeking, in accordance with phenomenological researcher and author Max van Manen (1990), to “uncover and describe the internal meaning structures” of what I have been calling so far the nature of learning. I intend on doing so through further autobiographical data and in my conversations with students as we unfold "the experiential meanings we live as we live them" (p. 11). In this essentially inductive research, including my educator experiences and observations and other pivotal moments of learning arising in my life, I seek to provide insights into the vitally and dynamically unfolding nature of learning within and outside of formal schooling. In a literature review I explore where and how a *nature* of learning is conceptualized that links to vital and dynamic essences of learning as I have intuited. And, as an outcome, I am compelled to turn these insights outwards for the benefit of others including educators working with students, and students seeking deeper meaning in their learning. The specific questions guiding my research are listed in chapter four.

2.5. Frames of Research Reference

This dissertation foregrounds several frames of reference pertaining to the nature of learning which I draw from academic literature. These frames serve as guides for considering learning through fieldwork research, specifically referencing:

i. How learning is understood and situated in educative contexts, and the role of personalized/personalizing learning[4].

ii. Phenomenology that is appropriate to the first-person and second-person considerations of learning, including self, affectivity, subjectivity, inter-subjectivity, eventiality, embodiment, vitality, animation, and lifeworld relationality.

[4] Currently, personalized learning is being increasingly adopted in schools across North America, including British Columbia where the Ministry of Education prioritizes it as an approach in curriculum guidance to teachers (BC Ministry of Education, 2022). As mentioned, the author brings to this research a background in personalized/personalizing learning.

My research also outlines implications for educative learning, especially considering pedagogy (as defined in the Glossary), personalized learning, and conventional schooling praxis, emerging from the findings.

2.6. Research Methodology and Design Plan

This dissertation comprises a phenomenological inquiry exploring the nature of learning as it arises and appears for individuals as they reflect on and deepen their investment in their own self-education. It is comprised of a literature review, autobiographical and fieldwork research and analysis, and concluding reflections.

The literature review in the following chapter offers critical insights into the framing of learning spanning the rise of modern schooling in the late 1800s to the near-present. This review profiles several theories of learning based on empirical research (defined in Glossary) that emerged in the mid-1900s while also identifying some critical voices challenging the primacy of objectivity as a way to evaluate human learning. A recognition of subjective experience helps establish the importance of referencing phenomenology, which seeks to describe the nature of human experience as well as qualitative methodology which has, likewise, helped establish the value of first-person perspectives. Discussion of phenomenology and the human sciences in relation to learning theory provides a basis for further consideration of the nature of personalizing learning.

This investigation also includes a personal account drawing from my experiences as an educator and intertwining with theoretical suppositions about learning within various educational practices. These suppositions afford an even broader perspective from which to consider the historical and contemporary formulations of learning theories grounding this study. Consideration of learning infuses educational texts, conversations and thinking about education, and many educative gestures that have evolved over time. For example, last century, North American school administrators implemented mass practices of learning reinforcement through rewards (and punishments) and via streaming practices based on crude, standardized IQ (Intelligent Quotient) testing presented as a determinative of student learning potential. These practices have (largely) been relinquished as new theorizing questioned their premises (Palmer & Zajonc, 2010; F. Smith, 1998; Zhao, 2015).

The auto/biographical component of this research is drawn out further through a sampling of first-person texts reflecting various experiences chosen on the basis of their clear subjective learning applicability. Several of these, including a personal contribution, reflect pedagogical observations.

The fieldwork project comprising the latter part of the dissertation consisted of designing and completing a qualitative, phenomenological investigation of learning as experienced by six students ranging in age from thirteen to eighteen years. Three participants attended conventional high school and three followed alternative, home and community learning programs. Fieldwork data was mainly comprised of audio transcripts gathered from virtual and in-person interviews. This research was constrained by Covid-19 pandemic restrictions limiting in-person contact.

2.7. Benefits of Research

It is anticipated that this dissertation will offer important insights about the nature of learning for educators working in K-12 and post-secondary systems, as well as in adult education and human resources training. It will benefit, especially, educators orienting their teaching to more personalized approaches, and others such as counsellors or health-care workers for whom personal help is part and parcel of their professional praxes. I also foresee student research participants gaining valuable insights into their own learning processes and strengthening their educational capacities as a result.

I have first-hand experience co-founding and leading several innovative educational programs and working directly with students via a personalized orientation[5]. In doing so, I helped catalyze deep understanding and enhanced learning skills and dispositions among students. Even at this advanced stage of my educational career, I feel compelled to personalize learning for students, inspired, especially, by what I have perceived as a sense of agency motivating student learning and strengthening the foundations on which learning relationships are founded and can flourish.

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[5] My educator experiences in personalizing learning include working in *Wondertree* (1991-92), *Virtual High Learning Community* (1993-1997), *SelfDesign Learning Community* (2002-2017), *SelfDesign Graduate Institute* (2012-2017), *Cool School-Try-a-Trade* program (2016-2023), and *Antioch University Online* (2018-2023).

Investigating the research questions framed for this study will lead to deeper understanding of the nature of learning as it is being conceptualized, experienced, and reflected on by educators, administrators, counselors, students, parents, and other educational stakeholders. This exploration focusing biographically, qualitatively and phenomenologically on the lived significance of learning will help to illuminate approaches to supporting learning that have not been conventionally studied in educational research. I believe this research will also contribute helpful insights pertinent to educative gestures occurring in K-12 and higher education settings across North America to increase educational equity as related to neurodiversity and special education, differentiated instruction, DEI initiatives, and First Nations education. I provide details about how personalized learning pertains to these educational aspirations in subsequent sections of the dissertation. As a further outcome, this research will help improve planning, design and application of learning-related activities in the educative contexts mentioned above.

Lastly, I see this research contributing helpful insights in addressing issues related to the global Covid-19 pandemic, reported by specialists and administrators as ongoing, declining educational achievement among student populations and potentially widespread mental health issues (Krause et al., 2022; Leshner & Scherer, 2021; The Hope Center, 2021).

Chapter 3. Literature Review

3.1. Establishing the Academic Context

I began teaching in the late 1980s and from the outset of my career I was interested in knowing more about learning and why the practices of schooling seemed so discordant with what I felt were important learning experiences in my life, two of which I related at the outset. In my first teaching jobs, I noted the contracts I signed centered on curriculum delivery, professional conduct and student evaluation, but learning, *per se*, seemed a distant interest to administrators. Neither was it a subject of much conversation among colleagues who preferred discussing schooling routines and student behaviours. I committed to experimentation and research grounded in personalized learning after reading the *Year 2000* plan which launched in British Columbia in 1990[6]. The plan outlined a framework to transform BC schools to a more personalized approach to student learning and I was excited to read the reference materials. Soon after I co-founded and led an independent education project in Vancouver B.C., *Virtual High Learning Community,* for teens from 1993-1997. *Virtual High,* the subject of my MA in 1997[7], was grounded in the principles espoused in the *Year 2000* plan. In 2002, I helped adapt the same principles to an independent, online

[6] With the release in 1990 of *Year 2000: A framework for learning*, the British Columbia Ministry of Education initiated an ambitious blueprint for revising the K-12 curriculum of BC's public and independent school systems. Written in response to a 1988 Royal Commission on Education, the *Year 2000* plan lead with a "Mission Statement" identifying that the purpose of the education system was to "enable learners to develop their individual potential" (B.C. Ministry of Education, 1990, p. ii). Initially heralded as a progressive initiative, the Year 2000 was, however, repealed in 1994 following a change in government.

[7] My MA thesis, *Virtual High: Towards an ecology of being* (Simon Fraser University, 1997), comprised an ethnographic profile of Virtual High Learning Community, an innovative learning program for teens I co-founded in Vancouver British Columbia with fellow educator Brent Cameron and helped coordinate from 1993-1997. In Virtual High, students were enfranchised to create personal learning plans reflecting individual and collective interests. The educators supporting the program, including myself, did not impose and teach external curricula; rather, we prioritized helping students achieve their self-declared learning goals. In 2002, Cameron, I and several other educators initiated an online school, SelfDesign Learning Community, that mirrored many of the same processes of Virtual High. Unlike Virtual High, SelfDesign was certified by the BC Ministry of Education and grew from 100 students in our inaugural year to approximately 2,500 students in 2015, thereby establishing SelfDesign as one of the largest online schools in the province. In 2007, Cameron, myself and a fellow educator received the Prime Ministers Award and an award of merit from the BC Ministry of Education for our work in pioneering SelfDesign. I ceased working as an administrator and educator with SelfDesign in 2018.

school, *SelfDesign Learning Community* I co-founded and helped lead from 2002-1018, at which time I stepped aside and fully committed to this research project.

To this day, I continue to hold deep interest in better understanding learning and the history of how it has been taken up and nurtured by human societies. A history of learning, pre-Enlightenment, is fragmental at best; post-Enlightenment, the historical trajectory is clearer though the metanarrative is dominated by researchers and philosophers in positions of dominant power and privilege (Gatto, 2000, 2017).

In the full flush of the Industrial Revolution of the 1800s, debates on education and learning became subjects of significant public and academic interest. That is where I begin the framing of the academic context foregrounding this research project. In this chapter I will review the literature and developments I consider most germane to this project. I begin with elaborating the definitions of learning I referenced earlier. Subsequently, I offer insights into the debated notions of learning adopted into mass schooling, the roots of cognitive science and humanistic psychology, holistic learning, multiple intelligences theory, brain-based learning, social-emotional learning, and the rise and adoption of personalized learning as conceptualized in the 1990s and 2000s which has been girded, in many instances, by digital technologies. I also frame the distinctions between objective and subjective research and provide background on phenomenology and the qualitative research methodology most appropriate to exploring the subjective nature of learning.

Occasionally, I interweave some critical, personal commentary and reflection in this section as indicative of my experience *living-my-learning* as an educator. My educational career, now spanning more than 30 years, has coincided with a very lively and disruptive period of educational and technological innovation. Accordingly, I feel compelled to offer some critical, reflective commentary on certain developments and how I've experienced them as an educational practitioner.

3.2. Literature Review

3.2.1. Defining Learning

The nature of human learning is multi-faceted, arising from a dynamic *gestalten* of entangling factors reflecting our neurobiology, social and cultural circumstances, and

biographical characteristics (Gardner, 2000; Jarvis, 1992; Palmer & Zajonc, 2010). Learning shapes our *living* from birth (and perhaps earlier) to death and, conversely, our living shapes our learning.

Humans have reflected on learning and sought to better understand it for millennia. We've philosophized on it, designed institutions to nurture it, dedicated much research to it, and abstracted many component areas – e.g., cognition and psychology – to measure and assess learning in various ways and with an array of means (Kaufman, 2013; F. Smith, 1998). Likewise, we have linked learning not only to individual and group survival but to the unfolding tapestry of human achievement and knowledge accumulation. Accordingly, learning has been clasped by some of humanity's most robust academic enterprises. Foremost among these are the natural and social sciences.

What is generally understood as the psychologistic empirical sciences, and various social sciences, have sought to explain learning on micro and macro scales, and proliferated numerous theories and typologies of learning. A sampling includes behavioral learning, cognitive learning, holistic learning, machine learning, functional learning, haptic learning, somatic learning, and situated learning. Other types of learning taken up by educators influenced by social science in more popularized form include online learning, lifelong learning, active learning, and visible learning.

The word "learn" is traced to Old English *leornian* "to get knowledge, be cultivated; study, read, think about," and related to a Germanic word, *Gleis* or "track" (Online Etymology Dictionary, 2022b). A search to define "learning" reflects the above potpourri of learning classifications, with some overlapping definitions, and others quite disparate. Generally speaking, learning is conceptualized in the following ways (Hergenhahn, 1976; Jarvis, 1992; Kaufman, 2013):

A highly complex, neurobiological process exhibited by all humans, and observed in almost all organisms of the animal world.

A process that, in humans, leads to the acquisition of knowledge and skills.

A process that is generalizable across various human populations who share characteristics such as staged development and adaptability.

A process that also arises uniquely or idiosyncratically for each person, drawing from personal experiences, contexts, and unique neuro-anatomy.

Another perspective from which to consider learning is how it might be analogized. If I were to consider how learning is like something, I think that something might be fire. Obviously learning is not a materially destructive or explosive force but on observing a burning log I see dancing flames flaring up and dying down and exuding light which I think is similar to how I experience learning. I also experience fire as catalytic or transformative in that it alters an existing substance (e.g., wood) to become a new kind of entity. Learning definitely does this.

Fire has enduring cultural resonance through the myth of the Greek God, Prometheus, who stole fire from the Gods and brought it to people. In his book, *The Gift of Fire*, social critic and Classics professor Richard Mitchell proposes (1987) that Promethean fire gifted understanding and problem-solving to humanity. The light of problem-solving, Michell writes, is "like the light of the moon, a reflection of some greater light." He continues:

> As fire is given in the myth, fire is given again and again in each of us, as it must once have been given to creatures who by its power became human. (p. 85)

Fire sounds like an apt analogy to learning, and although not a perfect match, helps us conceptualize learning as fused to self-knowledge, an act of singular importance debated by philosophers for thousands of years. It helps situate learning among studies and philosophical treatises reflecting historical exceptionalism extended to the ‘human condition.’ This is perhaps unsurprising given how, dating back thousands of years, our survival as a species has intertwined with learning acts linked to hunting, gathering, farming, interpreting, and communicating. Perhaps the analogy of fire can be extended to pulses of learning that have emerged in societies across millennium, for example Hellenistic Greece, the Renaissance and the present era of digital technologization.

3.2.2. Foundations of Modern Education

With the advent of the Scientific Revolution, and the rise of knowledge associated with the natural sciences and metaphysics, higher education, in Europe especially, focused on the transmission of this knowledge. Eventually priming the

Industrial Revolution in the 1800s, this period marked a turbulent time in which philosophers debated conceptions of human identity, religion, economics and education. Rising industrialism and migration in North America led to the burgeoning growth of cities where children were mandated to attend the first public schools and older youth gained entry to vocational institutes for trades training or competed for places in new and growing universities (Gatto, 2000, 2017).

In the late 1800s and early 1900s, European and North American academic practices predominantly espoused scientific methodology that emphasized objective reasoning through rationalized analysis. Scientific practices prioritized empirical observation with the help of controlled experimentation which sought to isolate the elements under investigation (from each other) and evaluate experimentation for predictability paired with experimental circumstance (Bortoft, 1996). The *lingua franca* of scientific discourse was mathematics rooted in geometry, trigonometry, calculus, and algebra. In some cases, these practices had been instigated centuries before.

Scientific thinking was the handmaiden to the industrial age that spawned widespread, significant societal change throughout the 1800s and showed signs of increasing influence in the new century. The elements of industrialization which included standardization (to reduce or eliminate errors of reproduction), production, waste reduction, and the de-personalization of factory processes involving humans all contributed to the reification of operational efficiency which became the *de facto* goal of industrial operations.

To assist in the procurement of resources, transportation, and production of goods, industrialization was girded by a massive workforce of men, women, youth and children, all of whom were slotted into work routines and expected to meet minimum competency standards as required by a specific job or task. Increasingly, the leaders of industrial growth took interest in the education of younger workers. In the early 1900s, mainstream education in North America was pressured to adopt the practices of standardization as espoused by advocates like scientific engineer Frederick Taylor (Brass & Lynch, 2020). Through “Taylorism”, as it became known and adopted, educational practice emphasized efficiency and helped launch the creation of mass curricula focused on inculcating the “3 Rs” — reading, writing and ‘rithmetic — which were considered by industry leaders as the foundation of literacy and rational-logical

intelligence. Schooling, in turn, vanquished the individual in favour of a highly rationalized system defined by curriculum standardization, basic literacy and numeracy training, streaming and social behaviourism (Gardner, 2006; Gatto, 2000; Kaufman, 2013). Schools, public and private, were assigned the responsibility for assisting in the training of children and youth for the burgeoning world of industry and future jobs, and became the sites where students were sorted and streamed based on crude assessments of aptitude and reasoning characterized by abstract, quantifiable measurements (Gatto, 2017; Saevi, 2015a). These measurements formed the basis of the first determinations of “intelligence quotient”, or IQ, with testing centred on a proposition that human intelligence could be empirically defined as a singular quantity, ‘G’. Paired with standardized school curricula, IQ testing set the stage for a widespread educational regime serving and modeling principles of industry. A pronouncement by noted professor of curriculum development and author Franklin Bobbit (1918) summed up the attitude of educational leaders about the practicable nature of curricular training:

> Education is established upon the presumption that human activities exist upon different levels of quality or efficiency; that performance of low character is not good; that it can be eliminated through training; and that only the best or at least the best attainable is good enough. Whether in agriculture, building-trades, housekeeping, commerce, civic regulation, sanitation, or any other, education presumes that the best that is practicable is what ought to be. (Bobbit, 1918, p. 14)

A further comment by Bobbit indicates how he conceptualized learning and sought to remediate student “deficiencies” through training:

> Each deficiency found is a call for directed training; it points to an objective that is to be set up for the conscious training. …There is however no justification for scholastic training of any kind except as a gap exists between the training of general experience and the training that ought to be accomplished. (pp. 15-16)

The ”deficiencies” and “gaps” to which Bobbit referred were identified through IQ and aptitude testing administered to students of varying ages entering or attending schools. Testing focused on reading, writing, reasoning (problem solving), basic numeracy, and physical abilities geared to age and school grade. Test results were subject to the new mathematics of probabilistic analysis that distinguished statistical “norms” and helped determine a normative population of students vis-a-vis those whose test results fell outside normative values. This testing and analysis set the stage for widespread

comparison of “normal” students and non-normal students who were generally designated as “learning disabled” but also categorized as “retards”, “idiots”, “spastics” and other such derogatory identifiers of perceived deficiencies (Kaufman, 2013).

Bobbit (1918) and other educational leaders helped to usher in an era in which learning came to be defined almost solely through standardized, school-based IQ and subject-oriented test scores designated as the benchmarks of “academic achievement” and predictors of student potential. Educational practices of the time were also assisted by technologies conscripted to assist standardization. Early technological developments, such as Sidney Pressey’s “Teaching Machine for Intelligence Tests” in 1925, soon updated to his “Automatic Teacher”, were designed to help teach and assess students’ “mastery of standardized objectives and skills” (Brass & Lynch, 2020, p. 7) aligned with the rationalist, standardizing objectives of mass education (see Figure 3.1). Derivative machines and technologies deemed helpful by authorities have been in near-continuous use since their introduction.

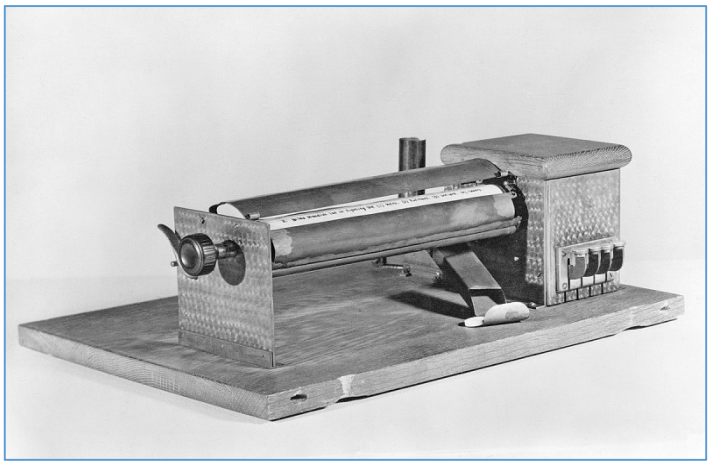

Figure 3.1 **Sidney Pressey Teaching Machine, ca. 1925. Students pressed levers to answer multiple choice questions displaying on a scroll; for a correct answer the machine scrolled to the next question and students were rewarded with a candy pellet dispensed by the machine**
Source: photo courtesy of Smithsonian Institution per Creative Commons Zero licensing agreement; https://www.si.edu/object/pressey-teaching-machine%3Anmah_1367149

Standardization of schooling faced opposition from some, including American educator-philosopher John Dewey. In the afore-mentioned essay of his, *My Pedagogic Creed* (1929), Dewey asserted that education should begin with learning about students’

lives in their homes and communities as well as in school, and include "psychological insight into the child's capacities, interests, and habits" (Dewey, 1929, p. 292). Student's interests and habits, he posited, were "signs and symptoms of growing power and "dawning capacities" (p. 294), something he insisted as being of "utmost importance for the educator" to keep in mind (p. 295).

Dewey's guidance was not dismissed outright but the rationalist model continued to dominate educational practice, driven by growth of new knowledge domains and technological-scientific goals established by political and educational leaders. This education model was grounded in a narrow cant that often marginalized students whose learning sensibilities fell outside the bounds of normalized models (Jarvis, 1992).

According to psychologist and author Scott Kaufman, who was himself identified as learning disabled as a child, testing practices from the early-mid 1900s were fraught with errors of judgement and overly narrow constraints on the part of test designers and interpreters. In his book, *Ungifted: Intelligence Redefined* (2013), which traces a history of the rise of educational-psychometric testing, Kaufman says human behaviour, on which determinations of intelligence are based and of which learning is a key component, is highly variable. Widespread judgment errors in testing, Kaufman asserts, can be attributed to measurement miscalculations, malfunctions in testing equipment, confusing instructions and common human errors linked to testing anxiety. Numerous schooling factors, he says, such as instructional quality, non-academic activities, peer pressure, intermittent attendance, and differences in developmental maturation also led to significant testing fluctuations that impacted and often distorted student test results. As a result, Kaufman contends, many determinations of student learning and future potential for learning were inaccurate and harmful.

Kaufman contends the quest for an objective science of student learning and intelligence, beginning in the early 1900s, did not yield significantly reliable results about student learning or its potentiality. Silverman and Cassaza (2000) also criticize the use of narrowly defined standardized testing "for the better part of (last) century" to define intelligence and predict academic achievement. They assert that intelligence is "not one generalized factor underlying learning" (Silverman & Casazza, 2000, p. 139) but has multiple facets. Kaufman also believes that standardized IQ and learning disability testing in use today offers some increased reliability but still reflect some of the same

constraints and potentials for error found in early testing. “No test exists that is perfectly reliable” he writes (p. 51), and he questions continued reliance on quantitative, norm-referenced testing as a reliable indicator of student intelligence or learning potent. To Kaufman, a major flaw in such testing occurs when:

> It treats single IQ scores as the arbiter of truth, without looking at the person’s history and understanding the numbers in context. Responsible and intelligent use of IQ tests require us to consider the student’s overall pattern of strengths and weaknesses (not just on the IQ test but even more generally in terms of talents, and social and emotional functioning), life aspirations, developmental history, environmental circumstances, and opportunities to learn. (p. 56)

The section above helps to situate foundations of learning and educative processes that emerged in North America in the early 1900s. Its most important grounding was in rational-empirical science. Student competencies were evaluated via testing that distinguished normative-ranked students from non-normal or “learning disabled” students. Concurrent to this, interest in the study of human personality and behaviour grew out of psycho-analytic research pioneered by Austrian neurologist Sigmund Freud, which helped to fuel growth in empirical psychological research that led to many new branches of psychology and social science (Siegel, 2010). By the mid-1900s, the science and study of learning was taken up by the evolving and ever-growing science of empirical-objectivist psychiatry and psychology, from which grew the self-proclaimed “learning sciences” and various learning theories and concepts, some of which accepted and advocated for the singular, developmentally-cast human self, or subjectivity. These, in turn, were adopted in varying ways in education. The next section provides a summary of some of these developments.

3.2.3. Learning Theories Oriented to Subjectivity

Jean Piaget and constructivist learning: One of the most renowned scientists oriented to children’s learning, Swiss psychologist Jean Piaget, started his career in France in the 1920s working for the originator of intelligence testing, Alfred Binet. Piaget returned to Switzerland to develop a body of world renown work right up to his death in 1980. Piaget expanded foundations of psychologistic science in generating theories of cognition, behaviour, staged intellectual, moral and physical development, and “constructivist” learning positing that knowledge generation is self-constructed by each

individual learner. Piaget's numerous books and research publications had far-reaching influence on education in Europe and North America in the mid and latter 1900s (Furth, 1970). Henson (2003) described Piaget's influence in orienting teacher practice to recognition of self-constructed learning:

> By using Piaget's theory, educators focus on their students as learners. As a result of this focus, education is learner-centered and constructivist-based to an extent. Piaget's theory allows teachers to view students as individual learners who add new concepts to prior knowledge to construct, or build, understanding for themselves. (Henson, 2003, p. 9)

While achieving significant recognition, Piaget's work has subsequently been criticized for perceived flaws in his research methods, his emphasis on rigid schemata circumscribing human psychological development, and for a lack of recognition of the social contexts of his research populations (Babakr et al., 2019).

Jerome Bruner and cognitive science: American psychologist Jerome Bruner achieved similar recognition to Jean Piaget for his research and insights leading to deeper understanding about human cognition – the way the mind processes information. During his career, Bruner conducted many experiments on children, youth and adults testing perception, response, memory and internal (mental) representation of stimuli. In the 1960s Bruner studied children's learning and theorized new ways, such as "scaffolding", to explain how students layer and construct new knowledge. Bruner subsequently pioneered strategic instructional design for classroom use to optimize scaffolding processes and increase instructional efficiencies. Bruner's advocacy for scaffolding extended to curriculum planning, linguistic training and social interactions as pathways to stimulate learning. In one of his later books*, Acts of Meaning* (1990), Bruner criticized the trajectory of cognitive science, which he helped found in the 1960s, and its isolation and application of 'cognition-simulation' processes by the nascent computational science of Artificial Intelligence (AI). He urged, instead, a return to "human concerns" and especially the construction of narrative meaning in one's life. Bruner also extended his interest in self-narrative or autobiography to investigating its construction and importance as a cognitive act bound up in socio-cultural and linguistic processes (Bruner, 1995).

Cognitive science, rooted in Bruner's pioneering research, is considered a cornerstone of the 'learning sciences' that have come to influence psychology,

education, health care, social science domains such as pediatric care and gerontology, and computerized learning. In additional to scaffolding, contemporary educative concepts reflecting Bruner's work include knowledge retrieval, self-agency, meta-cognition, intrinsic motivation, as well as competency-based learning, differentiated learning, neurobiological learning, and social-emotional learning.

Humanistic psychology, theories of self and holistic learning: In the mid 1900s, various psychologists developed theories of (human) self, positing more complex subjectivity than previously considered, especially around notions of agency, motivation, determination, and other perceived aspects of development. Overall, the 'humanistic movement' of this time, as it came to be known, extended notions of human psychological capacity or potential beyond limited capabilities proscribed by rational empiricism. Humanistic psychologists disputed the reduction of human behaviour, including human learning, to rote or mechanistic responsiveness to instrumental stimuli. Instead, pioneering humanistic researchers like Abraham Maslow believed human consciousness involved deeply held psychologic needs, including needs for self-fulfillment, self-esteem and a need to "self-actualize" or "become everything that one is capable of becoming" (Maslow, 1971).

Another researcher credited as a founder of humanistic psychology, Carl Rogers, developed a theory of the self developing, not in stages but according to principles related to real and symbolic experiences and to sensory and visceral experiences calibrated to various social circumstances (C. R. Rogers, 1985). Rogers also achieved renown for pioneering 'person-centered therapy', a kind of deeply personal counselling practice reflecting his belief in people striving for self-fulfillment and self-actualization.

Through books and papers, Maslow and Rogers influenced many psychologists who acknowledged the worth and psychological strivings of the self, no matter the age or background. Important principles of humanistic psychology emerged around self-motivation, self-agency and self-consciousness, in complex, inter-acting ways (Kaufman, 2013). These principles also transferred into educational conversation and praxis, fueling some educators to question the basis of conventional schooling practices.

Through a series of books, starting with *How Children Fail*, published in 1964, career schoolteacher John Holt shared many autobiographical anecdotes and insights.

He often criticized common assumptions and educational methods which, he said, punished children and youth unnecessarily and impeded learning. In *Learning All the Time* (1985) he wrote:

> Organized education operates on the assumption that children learn only when and only what and only because we teach them. This is not true. It is very close to one hundred percent false. ... Learners make learning. Learners create learning. The reason that this has been forgotten is that the activity of learning has been made into a product called "education". (Holt, 1985, p. 160)

He added later:

> We can best help children learn, not by deciding what we think they should learn and thinking of ingenious ways to teach it to them, but by making the world, as far as we can, accessible to them, paying serious attention to what they do, answering their questions – if they have any – and helping them explore the things they are most interested in. (p. 162)

After leaving teaching, Holt went on to lead a secular *Unschooling* movement, encouraging parents to homeschool their children and take advantage of opportunities in libraries, programs in community centres and travel to nurture learning. He also published a popular magazine espousing his ideas, *Paths of Learning,* until his death in 1985.

Insights from humanistic psychology helped seed ‘whole-person’ or holistic education that challenged existing constraints on potential learning premised on the precepts of rational-empirical curricula. An advocate of holistic education whose insights complemented those emerging from humanistic psychology was Indian philosopher and author Jiddu Krishnamurti who urged the cultivation of 'right education' and 'right relationship', emphasizing holistic, whole-person knowledge, including self-knowledge, moral responsiveness and social tolerance and responsibility. In *Education and the Significance of Life* (1955), Krishnamurti wrote “the right kind of education consists in understanding the child as he is without imposing upon him an ideal of what we think he should be is the understanding of oneself” (p.16). The right kind of educator, he continued,

> helps each individual student to observe and understand his own self-projected values and impositions; he helps him to become aware of the conditioning influences about him, and of his own desires, both of which

> limit his mind and breed fear; he helps him, as he grows to manhood, to observe and understand himself in relation to all things. (p. 18)

Education in the true sense, Krishnamurti contended, “is the understanding of oneself, for it is within each one of us that the whole of existence is gathered” (p. 9). In his lifetime, Krishnamurti travelled and lectured widely and he established several schools in India, Britain and also in the United States where he settled and lived in later life.

A preschool and primary education program grounded in holistic learning originated in the *Reggio Emilia* region of Italy in the 1970s. The *Reggio* method, as it has come to be known, developed in the aftermath of World War II, conjoining theories of child development with theories grounded in constructivist learning attributed to individual volition. To Reggio’s founding pedagogue, Loris Malaguzzi, young children innately reference and express myriad “languages” of learning and development (Edwards et al., 1998) and they should be afforded rights of individual expression. The Reggio approach, which has been adopted by educators, social workers and parent-practitioners worldwide, including in Canada (Proctor, 2007), is grounded in the following principles:

- Children must have some control over the direction of their learning.
- Children must be able to learn through experiences of touching, moving, listening, and observing.
- Children have a relationship with other children and with material items in the world that they must be allowed to explore.
- Children must have endless ways and opportunities to express themselves. (Edwards et al., 1998).

Educational theory oriented to holistic learning has also been developed and applied by educators to all ages of learner. Career education professor John P. Miller has been prolific in this field, publishing and lecturing widely on the subject since writing *The Holistic Curriculum* in 1988. He attributes the vision of human wholeness to all ancient philosophies and religions. Miller (2019) contends that holistic education integrates the physical, intellectual, emotional, and spiritual dimensions of life, and fosters awareness in students of “the interconnected nature of experience and multidimensionality of human beings” (p. 8).

Miller holds that student learning is constrained in conventional education through curricula dominated by cognitive processing emphasizing memory recall and analysis. He describes these curricula as based on “transmissive” and “transactional”

learning processes whereas “transformational” learning, he says, is holistic in nature and strives to connect the learner and curriculum, socially and meaningfully. He writes (2019) “The student is not reduced to a set of learning competencies or thinking skills but is seen as a whole being” (p.14).

Many precepts of holistic, existential learning are recognized as integral to traditional indigenous education by First Nations authors and educators (First Nations Education Steering Committee, 2007). Writing in *Look to the Mountain: An Ecology of Indigenous Education* (1994), Tewa author and education professor Gregory Cajete writes that education ought to lead students to find the true nature of one’s spirit, part of what he calls "a journey for learning to be fully human” (p. 43). Indigenous education, he posits, continuously unfolds in myriad subjective experiences and observations of community, ceremony, sacred ecology and spirituality, forming “a profound context for learning through exploring the multidimensional relationships between humans and their inner and outer worlds” (Cajete, 1994, p. 20).

First Nations author and educator Leanne Betasamosake Simpson reinforces the primacy of holistic living and learning. She writes that it is through multidimensional experiences and educational practices engaging their minds, bodies and spirits that individuals “carry responsibility for generating meaning within their own lives” (Simpson, 2014, p. 11) leading to “an authentic and grounded power” (p. 11). In a collective, tribal context, she adds, such diverse powers “then become the foundation of generated collective meanings and a plurality of truths” (p. 11). She also stresses that “Intellectual knowledge is not enough on its own. Neither is spiritual knowledge or emotional knowledge. All kinds of knowledge are important and necessary in a communal and emergent balance” (p. 16).

Since its inception, holistic learning has expanded in influence in mainstream education in North America and is linked to a critical movement challenging a resurgence of standards-driven schooling. In 2005, long-time education reformer Elliot Eisner opined in an essay in *Educational Leadership* that education driven by standardized outcomes and testing is akin to factory processes for canning beans. He wrote (2005), “Children are not cans of beans. They differ in temperament, aptitude, intellect, social competence, and emotional vulnerability. Each child is a unique case” (Eisner, 2005). To care for the whole child, Eisner continued, educators must strive to

“recognize the distinctive talents that individual children possess and to create an environment that actualizes those potentialities.”

Howard Gardner and Multiple intelligences Theory: Howard Gardner is an American researcher whose original Theory of Multiple Intelligences has had far-reaching effects on education. In *Frames of Mind,* published in 1983, Gardner posited that human intelligence has much more variability than initially posed by earlier researchers, and it could be differentiated into seven different modalities or intelligences. Through continued research, Gardner (1993) later increased the number of intelligences to eight, comprising the following:

Linguistic intelligence involves sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish certain goals. This intelligence includes the ability to effectively use language to express oneself rhetorically or poetically and as a means to remember information. Writers, poets, lawyers, and speakers are among those who Gardner sees as having high linguistic intelligence.

Logical-mathematical intelligence consists of the capacity to analyze problems logically, carry out mathematical operations and investigate issues scientifically. In Gardner’s words, it entails the ability to detect patterns, reason deductively and think logically. This intelligence is most often associated with scientific and mathematical thinking.

Musical intelligence involves skill in the performance, composition, and appreciation of musical patterns. It encompasses the capacity to recognize and compose musical pitches, tones, and rhythms. According to Gardner, musical intelligence is similar to linguistic intelligence.

Bodily-kinesthetic intelligence entails the potential of using one’s whole body or parts of the body to solve problems. It is the ability to use mental abilities to coordinate bodily movements. Gardner sees mental and physical activity as related.

Spatial intelligence involves the potential to recognize and use the patterns of wide space and more confined areas and to anticipate how space influences human behaviours.

Interpersonal intelligence is concerned with the capacity to understand the intentions, motivations and desires of other people. It allows people to work effectively with others. Successful educators, salespeople, religious and political leaders, and counsellors reflect a well-developed interpersonal intelligence.

Intrapersonal intelligence entails the capacity to understand oneself and to appreciate one's feelings, fears and motivations. It involves having an effective working model of ourselves, and to be able to use such information to regulate our lives.

Naturalistic intelligence (added in 1995) enables human beings to recognize, categorize and draw upon certain features of the environment. It "combines a description of the core ability with a characterization of the role that many cultures value" (Gardner, 2000, p. 48).

Gardner further posited that individuals may possess all of the intelligences he described but that one intelligence might be revealed as dominant. He did not assign one intelligence as more important than another and he proposed that individuals could strengthen intelligences through focused activities, and that intelligences may weaken from under-use. Additional intelligences may yet be added to his list, Gardner says, including from other investigators, providing any proposed intelligences meet certain criteria.

Controversy emerged from the first release of *Frames of Mind*. Critics alleged that Gardner's theory was based on weak empirical evidence, to which he replied that an important concept like human intelligence should be based on broader criteria than that captured by psychometric testing. He was also criticized for using a different conception of intelligence than IQ and therefore he should be disqualified from using the term. Gardner rebutted this criticism by insisting that human intelligence should be more broadly defined and inclusive of human talents and abilities than traditional intelligence criteria. In *Multiple Intelligences* (2006) he wrote:

> If we can mobilize the spectrum of human abilities, not only will people feel better about themselves and more competent; it is even possible that they will also feel more engaged and better able to join the rest of the world community in working for the broader good. (Gardner, 2006, p. 24)

In education, Gardner's theory has been well received and seen as providing impetus to educators to validate student abilities and talents that extend beyond the traditional

'3Rs.' Since its inception, Gardner's theory has been adapted to classroom use by many educators and authors and also used as a basis for recognizing less obvious skills and aptitudes of non-normative, special education students more recently classified as "neurodiverse" (Armstrong, 2017).

Brain-based learning; Social-Emotional Learning: The insights from humanistic psychology and multiple intelligences helped to expand conceptions of learning beyond the limitations associated with empirical-rational models. Another significant development contributing to this expansion emerged in the latter half of the 20th century through advances in technology and neuroscience that attributed ever-more complexity to human neurology, neurological systems and their integration with psychological systems. These new insights were not lost on researchers attending to education and identifying important links between neuroscience and learning. In 1990 Caine and Caine proposed a theory of brain-based learning relating to education, integrating many insights about cognition, behaviour, affective-emotional processing, psychological stress and resilience, memory, neuroplasticity and meaning-generation, emphasizing that each person's neurology develops idiosyncratically (Caine & Caine, 1990). "The objective of brain-based learning is to move from memorizing information to meaningful learning" (p. 69) they stressed, underscoring wide-ranging implications and benefits for applying principles of brain-based learning in mainstream education:

> There is much more to this process than previously appreciated. Acknowledging how the brain learns from experiences will help us to understand meaningful learning more fully. (pp. 69-70)

Subsequent research has built on the original precepts and principles of brain-based learning and been refined in some areas, especially in consideration of the importance of emotional/affect processing. Dr. Judy Willis, a neurologist and educational consultant, has long-urged educators to apply research findings from neuroscience to help students achieve academic success (Willis, 2007, 2012). At a time when schooling environments throughout North America have been mandated to apply standardized tests, Willis contends that principles of brain-based learning can provide many strategies to help alleviate testing stress and anxiety that diminish testing success. She writes (2017),

> From a neurological perspective, high stress disrupts the brain's learning circuits and diminishes memory construction, storage, and retrieval. … Students (and their parents) often interpret suboptimal standardized test

> scores as a measure of the students' limitations in intelligence and potential. The consequence is a loss of confidence, further activating their brains' stress response, making it more difficult for them to employ their cognitive resources and knowledge during the tests themselves. (np)

Applying principles of brain-based learning to mainstream education has also led to the development of another domain of research and educator praxis: Social-emotional learning or SEL. First pioneered in the 1960s in the Yale School of Medicine to assist lower-income students, SEL is defined by the Consortium of Academic, Social and Emotional Learning (CASEL) as

> the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions. (CASEL, 2022; np)

CASEL defines the five main components of SEL (CASEL, 2022) thus:

> The skill of having knowledge of one's own emotions and developing a positive self-concept.
>
> Self-management: The ability to regulate one's own emotions and monitor one's own behaviors. This also pertains to intrinsic motivation and setting personal goals.
>
> Social awareness: The ability to have awareness of the emotions and social situations of other people.
>
> Relationship skills: The skill to foster relationships and communicate within them.
>
> Responsible decision-making: The ability to solve problems and hold oneself accountable.

University of British Columbia neuroscientist Dr. Adele Diamond has researched SEL for many years, especially focusing on the role of executive functioning in the brains of children and adolescents. She identifies three core executive functions (EFs) – inhibitory control, working memory and cognitive flexibility – as a "family of top-down neurological processes" critical to social, academic and employment success, lifelong. Diamond posits that arts and recreation-based activities help strengthen EFs in children and adolescents, and she decries educational programming that has reduced or eliminated these activities from curricula (2014b; 2016). In her research, Diamond also identifies poor nutrition, lack of opportunity [to exercise that is known to strengthen EFs], lack of

motivation, and excessive stress as impediments to executive functioning. High stress, she writes (2014b),

> impairs EFs and can cause someone to look as if he or she has an EF impairment, such as ADHD, when the person has no organic disorder but is simply stressed. Anyone will do better if the causes of his or her stress can be eased and/or if the person is helped to develop a healthier, calmer response to perceived stress. (p. 9)

Diamond later reinforced the attributes of strengthening EFs, asserting that "EFs are predictive of achievement, health, wealth, and quality of life throughout life, often more so than IQ or socioeconomic status" (Diamond & Ling, 2016, p. 35).

Diamond has also been a proponent of whole-child learning, asserting (2010) that school programs that selectively focus on academic achievement do not lead to this outcome. Rather, she says, it is "programs that address the whole child (cognitive, emotional, social, and physical needs) that are the most successful at improving any single aspect" (p. 780). She goes on to say that,

> Academic achievement, social–emotional competence, and physical and mental health are fundamentally and multiply interrelated. The best and most efficient way to foster any one of those (such as academic achievement) is to foster all of them. … We need to see the human being and human development as one whole. (p. 788)

Diamond also advocates for enabling students to focus on self-identified interests as a way of stimulating academic achievement. She says research confirms "you will be more creative and have more energy for the work if you are passionate about it" (Diamond, 2014b, p. 9). "Each student will do better if you engage that individual's passionate interests, energizing the child" (p. 9).

Researchers continue to contribute neurological insights about subjectivity. Joseph LeDoux, a career neuroscientist, recently hypothesized the existence of 'self-schemas' or nonconscious representational systems in our neurology and comprised of layers of memories and linked emotions.

> When you are aware of who you are, you are drawing from your self-schema, which is what underlies your self-concept. Your self-schema includes your skills and abilities; your foibles; your social roles; your psychological attributes; your self-worth; how you look; how you feel and act; how your body responds in certain situations; what you expect your future to hold; how you feel about your family, friends, enemies, colleagues,

> acquaintances, and even your possessions, and un-possessed but desired things of either the natural or man-made world. (LeDoux, 2019, pp. 298–299)

Emotional feelings, LeDoux continues, are highly personal autonoetic experiences that involve the self and engage one's self-schema. If a self is not involved in an experience, he says, "the experience is not an emotional experience" (p. 351). Self-schema developed from childhood experiences continue to assimilate new information through new experiences leading to evolution and increasing complexity of schema as one ages (p. 354). LeDoux's assertions about the cognitive and neurological basis of self-schema appear to corroborate the assertions by Caine and Caine and Diamond that the neurobiological basis of learning reflects idiosyncratic accretion of subjective experiences.

Personalized learning: The insights and theories mentioned above contribute to a holistic and science-informed conceptualization of the self. They have influenced the development of a conceptual basis of personalized/personalizing learning or personalized, competency-based learning[8]. A history of learning personalized to individual students in European and western education, however, reaches back even further and may be found situated in historical and moral applications.

The first references to a manner of education reflecting the personhood or subjectivity of the student may be found in Plato's *Republic* in which he mentioned the value of linking vocations to personal dispositions and social circumstance (Plato, 2017). The next significant reference noted is from the early Renaissance, when the humanist pedagogue Vitorrino da Feltre opened a school in northern Italy in which he went to pains to learn the individual characteristics of his students and modify lessons for them "according to their natural inclinations and abilities, utilizing the student's curiosity to arouse and sustain interest" (McCormick, 1906, p. 471).

The same ethos is found in educational approaches pioneered in Victorian England by homeschooling advocate Charlotte Mason and later echoed by education professor and author John Dewey (1929) in North America in contradistinction to the mainstreaming efforts of conventional education to standardize schooling and eschew students' personal characteristics. In the latter half of last century, this conflict continued

[8] For convenience I will use the term 'personalized learning' unless otherwise noted.

to play out, pitting education reformers advocating for more personalized approaches versus voices advocating for increased standardization and compulsory school attendance. In the face of few alternatives to conventional schooling, reformers like John Holt began advocating in the 1970s for families to pursue secular home schooling based on more holistic approaches to nurturing learning (Holt, 1985).

With respect to Indigenous Nations of North America who had inculcated personalized holistic education for millennia, many faced the challenges of forced residential schooling that, starting in the 1800s, effectively eliminated this kind of learning for them and their children (Ermine, 1995; Simpson, 2014).

Reflecting my history in education advancing personalized learning I would assert that such 'pulses' developed on the fringes of mainstream education until the early 2000s. At that time a vocal critique emerged in conventional, North American education asserting that, in the face of increasing social demographic complexities and rising rates of learning challenges noted in schools, mainstream schooling must do more to help all students overcome challenges and meet with educational success (Darling-Hammond et al., 2019; DeMink-Carthew et al., 2020; Diamond, 2010; Kallick & Zmuda, 2017; Karten, 2017; Prizant & Fields-Meyer, 2015; Spier et al., 2019). As a result of these converging paths, a renewed proposition emerged that schooling should be more personalized to better engage with and motivate any and all students in the classroom or assigned group.

In the last 20 years, many states and educational districts in the United States have shifted to support the adoption of personalized approaches to schooling in one or other forms. As mentioned earlier, this shift has also taken root in British Columbia schools, reflected in successive mandates issued by the Ministry of Education since around 2008. In the US, this shift has been aided by various education organizations and foundations including Knowledge Works, Education Reimagined, Students at the Center Hub, Edutopia, the Nellie Mae Education Foundation, each of which have developed resources and sponsored conferences and speakers urging wider implementation of personalized learning.

The successive adoptions of personalized learning which in many ways is a move away from conventional, standards-driven education has been aided by the rapid

rise and influence of information technologies on education (e.g., the internet, IT-based learning and communication platforms, and social media). At the same time this shift has gained momentum, it has also met resistance through calls for increased standardization and the introduction of compulsory, 'high-stakes' testing (Bingham et al., 2018; KnowledgeWorks, 2018; Rickabaugh, 2016).

In 2016, the U.S. Department of Education defined personalized learning as:

> instruction in which the pace of learning and the instructional approach are optimized for the needs of each learner. Learning objectives, instructional approaches, and instructional content (and its sequencing) all may vary based on learner needs. In addition, learning activities are meaningful and relevant to learners, driven by their interests, and often self-initiated." (U.S. Dept. of Education, 2016)

I perceive this definition has been widely adopted across education along with other slightly-modified variations. However, the uptake and implementation of personalized learning by educators reflects a varying range of practices orienting to student interests and needs in educational environments commensurate with educational methods designed to support one or more of these approaches (Cuban, 2018). Different approaches to personalized learning range from highly personalized, self-directed learning to differentiated, classroom-based approaches to individualized learning which, historically, has been oriented to supporting special education students.

In the case of differentiated instruction, educational guidance defines this orientation as serving pre-determined curriculum goals (Tomlinson & Moon, 2013; Tomlinson & Sousa, 2011); at other times, it is implied that through personalized learning students will have greater agency and more opportunities for self-directing their learning (Kallick & Zmuda, 2017; Rickabaugh, 2016).

Individualized learning, generally oriented to supporting special education students and as articulated and managed through an Individual Education Plan (IEP), shares characteristics with personalized learning (See Figure I, below). For my part, I have come to perceive personalized learning as based on more personal interactions with students and being of a slightly different character than individualized learning.

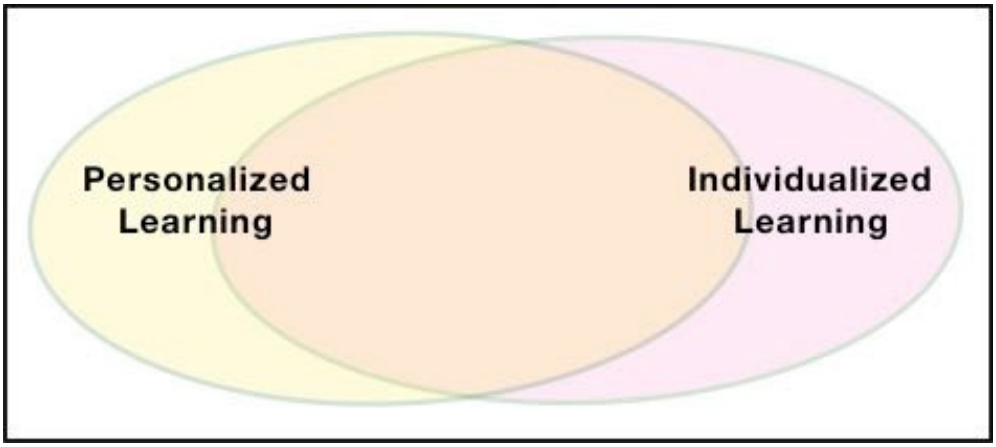

Figure 3.2 Intersectionalities between Personalized and Individualized Learning

In 2000, the U.S. Dept. of Education articulated Individualized learning approaches to help support special education and support services in this way:

> Each public school child who receives special education and related services must have an Individualized Education Program (IEP). Each IEP must be designed for one student and must be a truly *individualized* document. The IEP creates an opportunity for teachers, parents, school administrators, related services personnel, and students (when appropriate) to work together to improve educational results for children with disabilities. The IEP is the cornerstone of a quality education for each child with a disability.
>
> To create an effective IEP, parents, teachers, other school staff--and often the student--must come together to look closely at the student's unique needs. These individuals pool knowledge, experience and commitment to design an educational program that will help the student be involved in, and progress in, the general curriculum. The IEP guides the delivery of special education supports and services for the student with a disability. (U.S. Dept. of Education, 2000)

Per these distinctions which can be found across North American education, including in British Columbia, personalized learning is an approach that, to some degree, offers support in serving students' unique educational needs and personal interests. Individualized learning is an approach that, to some degree, provides educational and support options for special education students, as may be reflected in a student's Individual Education Plan (IEP).

Both personalized and individualized learning may include the use of technology, blended and flexible approaches leveraging the internet and social media, differentiated

approaches in support of curricular achievements, project-based learning (PBL) approaches, and self-directed approaches.

Three independent educational frames that have emerged to support personalized learning and integrate foundational insights of individualized learning are Universal Design for Learning (UDL), Differentiated Instruction (DI), and Response to Intervention (RTI). The BC Ministry of Education recommends these frames as supportive of a curriculum in which personalized learning is a prioritized goal (BC Ministry of Education, 2022). I perceive these frames as assisting educators in two ways. First of all, they help classroom-based educators serve students from varying backgrounds and competencies, and thus contribute to school inclusivity or equity goals which are of increasing interest in contemporary schooling (Duffy & Eddins, 2022; Moore, 2016). Second, these frames help educators personalize aspects of learning in the context of meeting overarching curriculum goals, which I would identify as school-based, instrumental approaches to personalizing learning.

Research on contemporary approaches to implementing personalized learning is in early stages, and some researchers and organizations supporting the implementation of personalized learning advocate additional research. In *A National Landscape Scan of Personalized Learning in K-12 Education in the United States* (Gross et al., 2018, pp. 25–26), the authors speak to how personalized learning, as noted in a national school survey (n = 908 teachers), is at an incipient stage of implementation, but faces resistance from a “risk of trying new strategies”, and a need for additional supports so schools can move “beyond tinkering”. In Spier et al. (2019) the authors likewise assert a need for more research on holistic education (Spier et al., 2019, pp. 289–291), with which personalized learning is closely linked. (*see Appendix A, i. and ii.).

A recent report, *From State Commitment to District Implementation* (2022), surveyed educators in four states about ongoing implementation of personalized learning. The report lists attributes reported by teachers as increased student engagement, greater student agency and greater student awareness of their own learning as well as challenges such as implementation differences across districts and differences in breadth and depth of teacher training (Duffy & Eddins, 2022). To better support implementation, teachers in all locations requested additional time for training, preparation and practical observation, as well as a “toolbox of instructional resources to

implement in classrooms." The report also related that personalized learning approaches and experiences helped schools and districts adapt quickly when restrictions related to the Covid-19 pandemic were imposed. Pandemic restrictions also primed a student-centered approach across different learning environments that primed a mindset shift in educators to "reconsider how to best serve students."

3.3. Personal Professional Experiences with Learning Theories

In my educator training (1987) I was mainly directed to follow instrumentalist pedagogical and curricular approaches, though my sensibilities were drawn to nascent multiple intelligences and holistic learning theories espoused by a professor who was an avowed humanist[9]. On my first professional teaching job at an Ontario high school, I was mandated to impose a musty, standardized English curriculum, but I rebelled and surreptitiously offered students opportunities to hone literacy and communication skills on projects of personal interest. In two subsequent years working in conventional schools in which I was likewise mandated to follow standardized curricula, I consistently noted a mismatch between these curricular impositions and 'where' students were at in their varied skills, dispositions and interests. I also noted that students often experienced broader achievements, in my professional judgement, when I personalized learning in some way and sought to engage them more meaningfully in the tasks at hand. I say "often" because it's also true that some students eschewed this approach, preferring the standardized instructional approaches with which they were more familiar.

My own transformation as an educator occurred when I chose to make a complete break with conventional education in the early 1990s and only serve personalized learning. This was a stressful decision and linked to some material hardships but I also felt much relief coming from being released from a practice I did not support in my heart. I knew I could walk away from education and seek a different career but I felt an intuitive calling and enthusiasm for persevering and pioneering a new kind of schooling. I had little experience in this, but it felt exciting to consider it, in much the same way I felt excited in preparing for my *Pushing off from Shore* adventure which I related earlier. Here, many years later, I was propelling myself from the shores of

[9] The late Mac Freeman (obituary: Kingston Whig-Standard; August 2020)

familiar schooling to new discoveries and the learning journey that unfolded for me was transforming, imbued with challenges, opportunities and insights I would never have had were I not to have *pushed off* from the shore to which I no longer felt bound. What followed was an exciting journey and, below, I share a few details that reflect this excitement I felt as the events unfolded and continue to do so. The descriptions reflect an animated application of the learning insights I profiled above.

Not long after I quit conventional school teaching I met Brent Cameron, an older though like-minded educator who had recently pioneered a novel, learner-centered education program for children, including his daughter, in Vancouver. We talked and then decided we would collaborate in offering a similar program for teens. In 1993, we launched *Virtual High* – an in-person learning program for teens in Vancouver oriented to supporting personalized learning for each youth. In Virtual High, students created individual learning plans that usually reflected a mix of personal interests and conventional courses, depending on specific student goals. Some attending students had been designated “special needs” or “learning disabled” and were clearly sensitive about this, to the point of being fearful of authoritarian intervention should they not meet some expectations. We told them we had no intentions of evaluating them according to school-based norms. The students, in turn, tended to take new responsibility for their learning and meet new challenges very adequately.

For the duration of Virtual High (1993-1997), I assimilated new learning theories reflecting brain-based learning and social-emotional learning theories, both of which strengthened the propositions of personalized (idiosyncratic) learning on which our practices were based. The mid-1990s was also a time when the internet and personal computerization was being pioneered and we experimented with various approaches to integrating emerging technologies into our programing and praxis. We offered technology leadership positions to students to which they responded enthusiastically and, often, they taught other students and Brent and me new technology tricks and insights. We invited other educators to visit Virtual High and, to no surprise, they viewed it through their own interpretive lenses. A few were critical that we eschewed conventional curricula and enfranchised students to self-determine their learning plans and even hire their own mentors. A majority of visitors, however, expressed enthusiasm that our praxis embodied many desirable goals of what was then considered progressive, “21st Century” education. One guest visitor, then-Minister of Education for

New Zealand, Dr. Lockwood Smith, commended us and wrote (1995, pers. corr.) “I am extremely impressed with what you are accomplishing. Virtual High is a revelation.” Such support did not extend, however, to the BC Ministry of Education which refused to provide funding we requested to continue Virtual High. In the summer of 1997 we shuttered our program with regrets, due to lack of funding.

In 2002, Brent and I invited several other educators to join with us in founding *SelfDesign Learning Community*, an online, government-certified (British Columbia), K-grade 10 distance learning school program after being invited to submit a program proposal. In SelfDesign we adapted the same principles of personalized learning from Virtual High to online (“distributed”) application with the help of emerging technologies. In subsequent years, SelfDesign grew in popularity and registered increasing numbers of learners, especially through adding grades 11-12 and a special education program that grew to register close to 900 learners in 2016, the same year we registered approximately 3,000 learners in total. The same learning frames we had previously applied in Virtual High, grounded in theories and approaches that recognized and nurtured idiosyncratic, personalized learning, were welcomed by our clientele. These learners and parents regularly offered testimony that our approach helped their child/dren accomplish many learning goals and overcome learning challenges they often faced in conventional schooling[10].

In 2012, I also began leading various Masters-level courses and independent studies in a US-based graduate program. In all my teaching, I grounded my approach in a personalized manner for students, to varying degrees, and I incorporated insights and principles from the theoretical foundations previously highlighted. As was true in Virtual High and SelfDesign, students reported these experiences as rich and satisfying. To this day I continue to orient my teaching in this program in this way[11].

Reflecting my experiences of personalizing learning in educational settings throughout my career, I can situate much of what I did, and still do, through the definition of personalized learning shared above. At the same time, I perceive important

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[10] Not long after initiating my PhD studies exploring the subject of learning more deeply, I terminated my contract with SelfDesign in late 2017 and have had no affiliation with the program since.

[11] I am presently contracted as an adjunct instructor, teaching ‘Neurobiology and Learning’, a course of my design, in the Individualized Masters (IMA) program of Antioch University – Online.

distinctions among differing approaches. Most obviously, curriculum-and-teacher-driven instruction, no matter the subject, generally relies on methodological approaches that give little or no credence to student interests and needs; rather, this approach borrows from techniques to deliver standardized curricula and evaluate students on the basis of meeting learning outcomes determined by external agents. This reflects the foundations of modern schooling previously described. I know these techniques well, having experienced them throughout my schooling and in early educator experiences.

Less obvious distinctions are rooted in the ways learning is conceived at the outset of any educational activity or relationship, and the way it unfolds for educators and students. The recent adoption of personalized learning in schooling environments reflects a slow and erratic, but steady grasp by educators and educational bureaucracies of the tenets on which personalized learning is founded. These include principles of holistic (whole person) learning as well as insights from neurological and cognitive science, psychology, pedagogy, and social learning. First Nations educational philosophy emphasizing the relative importance of individual development also aligns with the spirit of personalized learning.

I offer the foregoing autobiographical details to help contextualize my professional experiences and to show intersection with the learning domains I profiled above. In stepping away from the praxis of imposing standardized curricula and empirical-rational schooling practices, I opened myself up in new, important ways as an educator. My experiences and research lead me to these deeper considerations:

• the theories I profiled earlier, grounded in humanistic psychology, multiple intelligences, holistic learning, brain-based learning, social-emotional learning and personalized learning, all voice criticism of now-historical, standardized, empirical-rational approaches to education, especially the limitations with respect to human learning and potential that have come to define such education.

• the theories profiled earlier acknowledge and validate idiosyncratic characteristics of human learning and potential.

• excepting holistic learning, all the theories mentioned, while challenging the precepts of standardized approaches to education on the basis of criticism of limited recognition (of human learning and potential), base their conclusions on a limited

acknowledgement of subjectivity with respect to students' learning experiences. Further, the theories base conclusions on a limited acknowledgement of the subjectively determined nature of learning experiences noted by students or educators.

I believe this lack of recognition of students' perspectives on their learning and learning experiences is a significant omission in terms of better understanding the arising of learning in the field of interacting affectivities that denote the subjective *experience* of learning. To this end, I am impelled to turn to phenomenology for insight and research guidance. Phenomenology explores and elaborates subjective experiences and interpreted meanings arising in consciousness. Further, a phenomenological *attitude* implying a gesture and disposition of empathy, helps open one up to the experience of the Other. In opening myself to phenomenology I hope to explore and better understand the subjective experience and meaning of learning for myself and in pedagogical relation with others.

3.4. Phenomenology and the Nature of Learning

Insights into the subjective and personal nature of how it is that we experience the world are not commonly disclosed through conventional scientific research enterprises. Historically, science-based research has striven for objective, causative explanations of controlled events and experiments (Bogdan & Biklen, 1998; Bortoft, 1996; Cajete, 1994). Such science has produced a tremendous body of knowledge, but it has either omitted or had much difficulty accommodating individual and idiosyncratic experiences. Any experience is idiosyncratic by nature and thus eludes objective, causal explanation. Subjective experience, however, as that which is inherently meaningful as one's *lived experience* has been marginalized if not outright rejected by empirical-rational scientists as invalid (Bortoft, 2012).

While human behaviour may be subject to a measure of control and predictability, human experience is not. As an example, I learned to read and, obviously you, the reader of this document, did, too. But I imagine our *lived experiences* of learning to read have varied greatly. I recollect learning to read with the help of comics and graphic magazines, animal stories and descriptions of things of interest, like sports and wilderness adventures. I remember reading alone in my bed and also with both of my parents reading to me. I remember the dry smell of old books that always seemed to

possess a crinkly feel to the touch of my fingers, and I remember a thrumming excitement in my chest when I selected an armload of new books to read at a local library or in a comfortable environment. These characteristics all factor into my concrete experiences of learning to read but they do not directly correlate to causal, quantitative explanation. The subjective factors I relate have qualities of aliveness and sensuality among others. You may agree that in learning to read you, too, recollect qualities of aliveness and sensuality but, assuredly, your experiences were uniquely yours and so your descriptions would differ from mine.

The act of describing versus explaining offers a fundamental distinction between subjective, descriptive interpretation and objective, explanatory analysis. Whereas the latter aggregates individual learning factors, the former considers what is possibly essential across a wide range of lived experiences of learning to read. Even before learning is theorized as a generic process aligned with neurobiological development, cognitive functions, expressed as multiple intelligences, and aided by technologies of instructional design, we can consider more basically and fundamentally how it is that we come to make sense of lived experiences and discern some incipient meaning. Phenomenology, in the first instance, helps generate an attitude or inclination to delve further into the nature of learning as it is experienced first-hand.

Phenomenology is a domain of philosophy that considers and prioritizes the *nature* of subjective (human) experience in encountering, in the most inclusive sense, the things of the world. Also referred to as the “science of human experience” (van Manen, 1990), it seeks not to explain phenomena in causative, determinative ways but, rather, to describe the experience of *experiencing* how it is that we act in the world. Phenomena are held up not so much as the circumscribed circumstances of everyday living, but posited descriptively, explicatively and constitutively as ways or manners of being in the world. Phenomenology emerged in contrast with the philosophies of the Scientific Revolution and the subsequent (European) Age of Enlightenment starting in the 1600s as a concern for the ways in which one learns to be at home in the world. A phenomenological *attitude* served as a corrective to an attitude forged in the positivistic sciences that ignored and dismissed the circumstances of everyday life.

René Descartes (1596-1650) was one of the most important philosophers credited with leading the Scientific Revolution and formulating objectivist science and the

accompanying attitude of dismissal. Descartes judged the world of the human mind, *res cogitans,* arising through thinking and assisted by God, to be superior to the world external to the body, *res extensa*, including subjective experience. In his famous *Meditations on First Philosophy*, first published in 1641, Descartes wrote:

> Thus I see plainly that the certainty and truth of all knowledge depends uniquely on my awareness of the true God, to such an extent that I was incapable of perfect knowledge about anything else until I became aware of him. And now it is possible for me to a achieve full and certain knowledge of countless matters, both concerning God himself and other things whose nature is intellectual, and also concerning the whole of that corporeal nature which is the subject-matter of pure mathematics. (Cottingham et al., 1988, p. 110)

In reaching this judgement, preferencing man's intellect as guided by a perfect god, Descartes initiated a "dualism" between human mind and body or natural world existing beyond the body. And from this distinction, analytical-intellectual thinking, based upon mathematics, came to be prioritized over subjective experience, which eluded analytical-mathematical determination.

Empirical-rational science, as derived from Cartesianism, renders phenomena mathematically and/or reduces it to a system of interacting objects, leading to an abstracted form of knowledge that does not include the perspective of the scientist, the observer of phenomena (Bortoft, 1996, 2012). Such was the guise of scientific 'objectivity', and numerous other philosophers and investigators of natural phenomena soon followed Descartes, contributing mathematical theorems and hypotheses, and philosophies circumscribing a physico-mechanical universe that was testable, controllable and rationalizable according to mathematical laws and principles. This philosophy was embraced as an enlightened way beyond the superstitious strictures of medieval alchemy. Its simplicity and observable results proved appealing and enduring, setting the stage for the Industrial Revolution initiated in the mid-late 1700s and, subsequently, the age of computerization, based in binary and engineering mathematics.

The "modern, western world" based in Enlightenment thinking drastically changed the character of human commerce and economic development, social stratification and education (Bortoft, 1996, 2012; Gatto, 2000; Wright, 2004). But many scholars have questioned an abstract view of the world that discounts human experience

as insignificant and likewise any natural phenomena that can't be rendered mathematically (Bortoft, 1996; Holdrege, 2013; Kimmerer, 2013; McGilchrist, 2012).

At the start of the twentieth century, Europe and North America were riding the wave of the Industrial Revolution, founded on empirical-rational thinking. Modern academia and much social discourse was characterized by discussion that pitted modernism against tradition, empire versus social democracy, religion and spirituality against Enlightenment-based scientism (Bortoft 1996, 2012). In a challenge to objectivist science and scientists, German mathematician-turned-philosopher Edmund Husserl (1859-1938) proposed that human subjectivity was of higher perceptual priority than any faculties rendered objectively; that perceiving the world objectively, a first principle of empirical-rational science, was necessarily a subset of subjective human consciousness. This formed a critical epistemological basis on which Husserl developed his notions of phenomenology and as a term that had originated in eighteenth century philosophy (Kocklemans, 1967; Moran, 2000).

Through writings and lectures in the early 1900s, Husserl posited many characteristics of phenomenology, including an intricate terminology. He also developed a research methodology aspiring to a rigorous science of subjective experience focusing on, and explicating phenomena immediately present to consciousness. Husserl's many writings and lectures helped establish it as an important twentieth-century philosophy.

Early phenomenology was particularly popular in continental Europe where it remains a robust domain of philosophy and research. It has also grown in academic popularity worldwide (Moran, 2000). Below, I mention some of Husserl's philosophical propositions that relate to and are integrated into this research project. I address phenomenological methodology in the next chapter.

In prioritizing subjective experience over objective experience, Husserl was not adopting an anti-science stance. Rather, according to Moran (2000), he posited that viewing the world scientifically was one perspectival manner among others, including the world of the "natural attitude", which is a world of various pre-conceptions and theories about which most individuals showed little awareness or consciousness.

Phenomenology and phenomenologists, Husserl said, strove to better understand "essences" or foundational characteristics of consciousness through acts of

"intuition" or "pure seeing" that suspended or "bracketed" the emergence of the natural attitude which influenced and distorted a pure consciousness of experience. "To the things themselves" Husserl advised (Husserl, 2012), guidance which Moran (2012) asserts Husserl followed "to gain insight into the nature of the conscious processes themselves" (Moran, 2000, p. 12). French psychologist Maurice Merleau-Ponty, who is credited as one of the most important phenomenological philosophers of the twentieth century, acknowledged the significance of the bracketing gesture in his best-known text, *Phenomenology of Perception* (2005):

> To return to things themselves is to return to that world which precedes knowledge, of which knowledge always speaks, and in relation to which every scientific schematization is an abstract and derivative sign-language, as is geography in relation to the country-side in which we have learnt beforehand what a forest, a prairie or a river is. (p. ix)

Related to the act of bracketing preconceptions is deepening one's awareness of noting the object and character of one's consciousness. Husserl described this as an act of "intentionality". Moran (2000) writes that Husserl presented intentionality as the

> basic thesis that all conscious experiences (*Erlebnisse*) are characterized by 'aboutness'. Every act of loving is loving *of* something, every act of seeing is seeing *of* something. … This allowed Husserl to explore a whole new domain – the domain of the meaning-correlates of conscious acts and their binding laws before one had to face ontological questions concerning actual existence, and so on. Phenomenology was to be true *first philosophy.* (p. 16)

Husserl (1970) proposed that through focusing on what is encountered "intuitively" in experience, i.e., after bracketing or suspending a *natural* attitude grounded in theoretical abstractions and beliefs and its ancillary judgements, a person would encounter a "pre-given" domain he termed the *life-world* (*Lebenswelt*). He described (1970) the life-world thus:

> Prescientifically, in everyday sense-experience, the world is given in a subjectively relative way. Each of us has his own appearances: and for each of us they count as (*gelten als*) that which actually is (p. 23).

This uniquely constituted world, he added (Moran, 2012), is "always already there" and "concretely intuited". He elaborated further,

> The particular world which is valid for the persons, the appearing to them with the particular properties it has in appearing to them: the question is

> how they, as persons, comport themselves in action and passion – how they are motivated to their specifically personal acts of perception, of remembering, of thinking, of valuing, of making plans of being frightened and automatically starting, of defending themselves, or attacking, etc. (p. 317)

Moran (2012) adds,

> Life-world is an all-embracing term that includes the 'surrounding world' (*Umwelt*), both that of nature and culture, including humans and their societies ('the world of culture'), things, animals, our overall environment. (Moran & Cohen, 2012, p. 243)

Husserl advises understanding the lifeworld "as a correlate of the natural experience of the person" (Brudzinska, 2014), leading to identifying how subjective experience itself generates the ground of meaning and interpretation. Husserl described this in his text, *Ideas Pertaining to a Pure Phenomenology and Phenomenological Philosophy* published in Germany (1913), writing (Husserl, 2012) "we should enter vitally into these activities, and through direct analyses determine their immanent meaning" (p. 45). He added later,

> We must always bear in mind that what things are (the things about which alone we ever speak, and concerning whose being or non-being, so being or not so being, we can alone contend and reach rational decisions), they are as things of experience. Experience alone prescribes their meaning. (p. 91)

Husserl was critical of the then-dominant psychology for omitting human subjectivity and experiential consciousness from conceptions of personhood and a person's individuating nature and relying, instead, on scientific 'facts' as the sole determinant of psychologically-cast personhood. In *Ideas* he wrote (2012),

> As over against this psychological "phenomenology", *pure or transcendental phenomenology will be established not as a science of facts, but as a science of essential Being* (as "*eidetic*" Science); a science which aims exclusively at establishing "knowledge of essences" (*Wesenserkenntnisse*) and *absolutely no* "*facts.*" (p. 4)

An additional shortcoming of psychology, Husserl opined, was its failure, through its insistence on objectivity, to "attain the proper essence of the spirit" (Husserl, 2012, p. 296). He wrote (2012):

> the spirit (the soul, concrete personal being) is there in space-time where his living body is; and from there he lives into and acts upon the world, the universe of what exists in space-time. He is spirit, person, ego *of* his

> surrounding world thus of a world [as such] in having consciousness of it; the possibility of his acting [on the world] is based on the fact that, in a definite, ordered way, he has experience of the world, or can be with the world in an experiencing way ... he constantly has a privileged experiential consciousness of "his" living body, ... this is a fact for humanistic science. (p. 323)

From this perspective Husserl elaborated a subjective nature of personhood and a manner of living, including experiencing the lifeworld, that was very distinct from existing scientific and philosophical conceptualizations. He posited that a subject of the lifeworld experienced a concrete structure of subjectivity through which intentional aims were realized in temporal, kinesthetic and emotive ways (Brudzinska, 2014).

The aspects of Husserlian phenomenology that I have referenced above, namely, essential Being constituted on the basis of intentionality, emerging sense-of-selfhood, experience of the lifeworld as the basis of subjective meaning, a manner of living characterized by temporality, embodiment, spirituality, relationality, and inter-subjectivity, comprise various characteristics Husserl circumscribed as a “new science of eidetics” or essences. These aspects have been elaborated by many other phenomenological philosophers who followed Husserl, some developing related yet distinctive forms of inquiry such as existentialism and onto-theology. Today, many philosophers and researchers continue to contribute to broad discussion of phenomenology and its relation to many fields of practice and reflection. Contemporary phenomenology informs discussion in humanistic psychology, sociology, healthcare, spirituality and education. In education, phenomenology has been taken up most significantly by European philosophers and educational practitioners discussing pedagogy and pedagogical relationality, including many contributions by Dutch-Canadian author-educator Max van Manen (Saevi, 2015b; van Manen, 1991, 2015). Learning, *per se*, has not been widely considered through a phenomenological lens except in a few scattered texts.

3.5. Phenomenology as a Way of Acknowledging what is Essential to Learning

Since Husserl first elaborated his eidetic science, phenomenologists have applied these insights fruitfully to many areas of investigation, especially exploring themes linked to subjectivity. Healthcare, social sciences and education have each

benefitted from phenomenological research. In this section I reference key characteristics arising in the appearance and nature of learning described in chapter one and posit how these characteristics have been taken up by various phenomenological researchers. I further consider how these characteristics might be further explicated phenomenologically.

Learning is fused with a sense of emerging selfhood, arising idiosyncratically and often linked to deep, vital interests and personal meaning, in questing to create meaning.

The theme of individual subjectivity linked to emerging selfhood grounded in meaningful individuation or psychological unfoldment predates Husserl. But, as previously referenced, Husserl prioritized human subjectivity and, especially, the perspectival manner by which each person encounters the lifeworld in which they are engulfed. He wrote (Husserl, 1970) that there is an essential relation between person and the surrounding world, engulfing and shaping individual character, and motivating all perceiving and acts through the adopting of a “personalistic attitude”. The psychological container for the individual self, for Husserl, is the ego, and he writes,

> It is only my being — as ego, as holding sway, that I actually experience as itself, in its own essence; and each person experiences only his own. (p. 104)

After Husserl, many philosophers and researchers focused on this theme, including those mentioned below whose insights trace important reflections on learning through a phenomenological lens.

Husserl’s student, Martin Heidegger, considered by many to be the second-most significant contributor to phenomenology, focused much of his attention on the issue of *Being* as linked to notions of selfhood. "Self and world are not two beings, like subject and object, or like I and thought," Heidegger wrote in his famous text, *Being and Time* (cited in Anton, 2001, p. 50). Explicating his notion of 'Dasein' or 'being-in-the-world, Heidegger wrote that "Self and world are the basic determination of the Dasein itself in the unity of the structure of being-in-the-world" (p. 50). Later, in *Being and Time*, Heidegger (1962) asserted: "In everyday terms, we understand ourselves and our existence by way of the activities we pursue and the things we take care of" (cited in

Anton, 2001, p. 23). Such ‘gripping’ of self and world yields a mooded understanding of the world and one’s place in it.

Edith Cobb was a sociologist but her research into childhood reflected precepts of Husserlian phenomenology including characteristics of consciousness, imagination, and idiosyncratic development. Cobb noted childhood experiences and linked them to emerging sensibilities:

> The joy expressed (by the child in experiencing natural sensations) is the joy of recognition, a delighted awareness that knowing and being are in some way coincident and continuous within a larger process and that this kind knowing is in itself an achievement of psychological balance. (Cobb, 1977, p. 32)

Selfhood is also a theme of French phenomenological philosopher Michel Henry who posits the existence of “radical singularity” given to each of us borne through our own existential recognition:

> There is no life without a living being, like this Self that all life carries in it in so far as it is this experience of self of which we are speaking. But equally there is no Self without this Life in which every Self is given in itself, in such a way that outside of life no Self is possible. (Henry, 2008, p. 104)

Henry adds, “every life, every transcendental phenomenological life, is marked at its heart with a radical and insurmountable individuality” (p 105) and “in every living being life comes to pass as a Self which belongs to every life and to every determination of life” (p 105).

Selves and selfhood thus come into being through learning as an irrepressible act. Extrapolating from Heidegger, philosopher-author Corey Anton writes (2001), “we, as bodies, are beings at a distance from the world, and yet, we are able to experience the world because we are ontologically indigenous inhabitants: my body is of it and is as indigenous to it as it is to itself” (Anton, 2001, p. 20).

Constructing meaning which is to say, learning, is an innate act of striving to understand and interpret things we encounter in a fundamental manner of our *being-in-the-world*. As such we cannot not interpret or seek to understand the things of our engulfing lifeworld. For some actions, such as interpreting threatening gestures, meanings are pre-consciously given and prime instinctual responses. For many other things, we ponder and probe circumstances in acts of determining what ‘appears in the

appearing' and how it appears to us. Understanding, says philosopher Henri Bortoft, "is always an adventure in meaning" (2012, p. 126), shifting between its personal historicity and potentially shared present and future. In this way, he continues, an experience "cannot be *separated* from its interpretations" (p. 126). As much as experiences may disclose shared meanings, and especially with the help of language or other cultural gesturing, Bortoft says experiences also disclose differences in interpretation.

Said another way, meaning is revealed idiosyncratically. From this perspective of subjectivity, learning can be seen to arise in concert with an emerging sense of selfhood and connected to existential understanding and meaning-making. In describing the phenomenology of learning, German philosopher Wendelin Kuepers says "learning can be interpreted phenomenologically as a way of being and becoming" (Kuepers, 2012, p. 2612).

Likewise, social critic and Classics professor Richard Mitchell extends his analogy of Promethean fire to a light of self-understanding:

> Every one of us must awaken out of sleep and come into the light of self-mindedness. … I must discover thoughtfulness for and in myself and come to understand for the first time what I have never understood before and what no one else can understand for me, any more than he might nourish me by his eating or refresh me by his sleep. (Mitchell, 1987, pp. 85–86)

This sentiment is also reflected by phenomenological psychologist Eugene DeRobertis, who writes in *Phenomenology and Learning* (2017), that learning is a direct function of personal history and so "implicates the agency and the personhood of the learner" (p. 24). He asserts, further, that the deeper the personal meaning of learning, the deeper a person manifests a notable response:

> Even when learning is markedly intellectual and the body appears initially inconspicuous, the more meaningful the learning, the more it will incite a physiognomic reattunement fit with sensations, feelings, moods, and intuitive discernment. (p. 26)

Learning arising as an animated and dynamic act of the sensing (affective) and life-infused body.

Animation, dynamic movement and corporeal sensibility as features of living were perceived as a foundational characteristics of subjectivity by Husserl. Merleau-

Ponty and various phenomenological philosophers have subsequently focused much of their work on these themes.

American philosopher Maxine Sheets-Johnstone has written extensively on the subject. She consistently claims that “the qualitative dynamics of movement, whether felt or perceived, are at the heart of the foundational animation of lived bodies” (Sheets-Johnstone, 2020, p. 6), and describes the groundedness of the lived body arising

> in an affectively and kinetically alive hereness, a body that is a felt bodily presence that both constitutes and flows forth in directly experienced tactile-kinesthetic-affective patterns of movement. (p. 8)

With deference to Husserl’s notion of presencing through the body’s “zero point of orientation” that he described in *Ideas*, Sheets-Johnstone connects pre-reflective experiencing to

> a direct and immediate bodily felt presence, a hereness, not a thereness. It is not like anything but is a specific reality that can thus be elucidated phenomenologically. (p. 18)

She adds later,

> the felt ongoing presence that constitutes the lived body’s experienced hereness is not simply a spatial presence but a spatio-temporal presence foundationally grounded in the tactile-kinesthetic body. (p. 23)

Researcher and writer Stephen J. Smith affirms this sentiment in his considerations about “life phenomenology”:

> Life and its sensations, and the very sense of being fully alive, speak to an originary affectivity that resists objectification. This felt sense of life’s immanence inheres in the very condition of self-awareness and sensitivity to other selves. (Smith & Lloyd, 2020, p. 1)

Later he considers how to reconcile outer and inner sensing as a phenomenological challenge, particularly

> in trying to grasp the sensations of our senses, which are not those of the so-called external senses that allow us to perceive a visible, aural, tactile world laid out before us, but of the inner senses that enable us to feel moved and seemingly affected by the world. (p. 2)

Smith defers to Michel Henry whom he says “directs attention away from the essentially inert materiality of worldly appearances and toward the immanently flowing force of life”

(p. 2). Smith is further inspired by Henry to re-cognize an “invisible world” comprised not of material things but “affectivities, resonances, synergies, synchronies, and attunements” that merge into “relational flows” (p. 2).

Henry (2003) insists that such conceptualizations are grounded in new ways of viewing the world, particularly through embracing the experience of “life” which brings forth itself and through which we are enabled to see ourselves as living beings

> in the sense of a life which experiences itself, and not just a complex set of material processes which know nothing of themselves. Living beings which are themselves also living Selves. (Henry, 2008, p. 104)

We must perceive this life, Henry continues, “no longer in that place where it seems to us that it experiences itself in a sort of psychological facticity always incapable of recognizing itself” (p. 107) but through a “mode of appearing” in two senses: “a body that shows itself to us in the world, taking its phenomenological properties from the phenomenological properties of the world, and first and foremost its very exteriority” (p. 107) and a second body, presupposed by the first:

> a transcendental body which feels it, which sees it, which touches it, which hears it, etc., thanks to the powers of its different senses. In the phenomenology of the twentieth century these powers are understood as so many intentionalities, in such a way that the transcendental body which constitutes the universe is an intentional body. It is in this second sense that our body is a body of the world, in this sense that it opens us to this world itself. (p. 107)

Other researchers have described how embodiment enables us to open to the world, live in the world, and experience it holistically and autopoetically, or self-generatively. Our bodies resonate with multifaceted experiences of living, as emphasized by German philosopher and psychiatrist Thomas Fuchs who writes (2017a),

> The basic feeling of being alive is thus ultimately rooted in the circular homeodynamic interactions of brain and body, and, in a sense, manifests the current state of the entire organism. In this way, the living, physical body becomes the lived and experienced body. Hence, it is not the brain alone, but the organism as a whole whose autopoietic processes are constitutive for the feeling of being alive as the basis of consciousness. This feeling turns out to be a most important evidence of the embodiment and enlivenment of subjectivity. (p. 305)

American psychiatrist Daniel Stern reached similar conclusions in researching “vitality affects” which he describes (2010) as a subjective Gestalten emerging from felt

experiences of force associated with movement, temporal contours, and a “sense of aliveness”. The Gestalten of vitality affects, he adds, “has its own flow pattern (accelerating, exploding and fading). It constitutes a separate kind of experience” (Stern, 2010, p. 9).

Sociologist Edith Cobb (1977) also described an integrative, pre-verbal force or “world-making” experience that she, too, identified as a dynamic structuring of consciousness for a growing child.

> In childhood the cognitive process is essentially poetic because it is lyrical, rhythmic, and formative in a generative sense; it is a sensory integration of self and environment, awaiting verbal expression. The child "knows" or re-cognizes in these moments that he makes his own world and that his body is a unique instrument, where the powers of nature and human nature meet. (p. 89)

The references mentioned above reflect an amalgam of phenomenological characteristics associated with animated, affective subjectivity. It isn’t always the case, however, that phenomenological researchers grasp the animation and dynamism of learning arising in lived experiences. This may be seen in Kuepers (2012) who writes that:

> embodied learning means being grounded in everyday, mundane experience and integrally connected to the environment, including the very presence of the learner, but also a social community and infrastructural embeddings in an ongoing interrelation. The incarnate status of the bodily subject and collective embodiment opens the way to a specific phenomenological description of the learner and his, her or their learning. (p. 2614)

In this case, the researcher hasn’t suspended theories and interpretations of learning nor adopted a phenomenological attitude to perceive it arising more fully in lived experiences.

Learning arising through aspects of relationality (intersubjectivity, empathy, and pedagogy) and in some fusion with the surrounding environment (the ‘lifeworld’) which includes non-human living things.

The life of a person is infused with relations and the experience of relationality. Infants begin their lives following birth relying on caregivers – mothers, mainly – to nurture and sustain a secure attachment. Coincident with this bonding, an infant’s

consciousness synchronizes her growth to an ever-enlarging perception of the engulfing world that she senses to be relational. Subjectivity arising through relationality is a very rich phenomenological theme which I now address with some insights pertaining to intersubjectivity, interactivity, empathy, and pedagogy.

Husserl (1970) wrote of intersubjectivity as the arising and synthesis of shared consciousness with respect to the lifeworld given to us in all its varied, cultural forms, including especially language. He wrote:

> For the life-world — the “world for us all” — is identical with the world that can be commonly talked about. Every new apperception leads essentially, through apperceptive transference, to a new typification of the surrounding world and in social intercourse to a naming which immediately flows into the common language. Thus, the world is always such that it can be empirically, generally (intersubjectively) explicated and, at the same time, linguistically explicated. (p. 99)

Intersubjectivity, or the disposition toward shared consciousness, emerges naturally in children as parents and others offer guidance towards shared meanings and understandings. Negru (2013) posits that

> we are in a world to which we are intimately connected. This means that we constitute the world we live in and we are also affected by what happens therein. In other words, the world is inseparable from the body, which means that the relationship between them is not cognitive, representational, but it is a dynamic one given by the skillful body. (Negru, 2013, p. 435)

According to Merleau-Ponty (2005), we constitute a shared world through his notion of “the flesh:” a substance [that] is neither matter, mind nor substance, but elemental like water, air, earth, and fire, “in the sense of a *general thing*, midway between the spatio-temporal individual and the idea, a sort of incarnate principle that brings a style of being wherever there is a fragment of being. The flesh is in this sense an "element" of Being. (p. 139)

Smith (2007) attests that through such *fleshly* incarnate and embodied being we connect with and are implicated intersubjectively in the “texture of the world” (p. 60), primordially preceding subjectivity. From this our individual bodily existence unfolds as a developmental urging, or

> a felt imperative, which has been called the mimetic impulse, to this fleshy, fluidity, airiness, earthiness and fieriness of the world wherein movement arises not in the body, but in the nexus and intertwining of bodily engagement with the world. (p. 60)

This description by Smith of how we engage and interconnect with the world, incarnately yet pre-consciously, is also reflected in how neuroscientists now posit our neurology evolved and developed over many millions of years. In the 1990s, researchers confirmed the discovery of mirror neurons embedded in the neurological structures of humans and other mammals and have speculated that these neurons play important roles in understanding the actions of other people and in learning new skills by imitation (Siegel, 2010).

Mirror neurons may not comprise the only neurological system through which humans relate to and engage the lifeworld. Our emotional-affective systems may also prime our responsiveness and engagement with the surrounding world and the circumstances it affords or brings to us. Thomas Fuchs (Fuchs, 2017b) writes,

> bodily feelings and action tendencies should not be conceived as a mere by-product or add-on, distinct from the emotion as such, but as the very medium of affective intentionality. (p. 196)

In this way, Fuchs says, the body constitutes an “embodied affectivity and interaffectivity” as a kind of resonance with intersubjective experience. This constitution may be perceived as having universal qualities, but Fuchs also asserts such emotional interaction is largely shaped by one’s individual biography as well as by one’s cultural background. Fuchs describes how a further aspect of our neurology, specifically our “intercorporeal memory” (p. 202), enables us to remember how to interact with others or relate according to previously-experienced circumstances.

Beyond or in addition to self-experiencing lies experiencing and relating to ‘the other’ as grasped phenomenologically in pathic or feeling terms. Michel Henry (2008) asserts that in seeking to know more about ‘the other’ we must extend our quest beyond intentionality which only frames “the other in thought” (p. 102) and seek to learn “what the experience of the other is” (p. 103) such as we experience it within ourselves (p. 103). He says this helps reveal “the concrete modalities of our life as a life with the other, as a pathos-with, and as a sympathy underlying all its forms” (p. 104).

De Jaegher (2015) frames Henry's insights about "pathos-with" and "inter-affectivity" as gestures of deep communion grounded in the upsurge, uprising forces of life,

> For Henry, we share something rudimentary, namely life, which he characterizes as self-affection or pathos. Life manifests itself in each living being, and partaking in life, in self-affection, connects us with others primordially. If life is self-affection (pathos), and we share life, then affection and self-affection are basic to intersubjectivity, in the form of being an a priori community with others, a pathos-with. (p. 116)

Henry says further (2008),

> In life, the relation between living beings can only be understood on the basis of the essence of life, which is their essence. That is to say that this relation must be understood outside of the as-structure of the world, intentionality, and sense. We are conceiving this essence of life in terms of auto-affection. Auto-affection, we have shown, causes this life each time to be a life. … On their description, for such an experience to be the experience of the other, the other must be perceived as other, as other than myself, as the alter of my ego. As an ego, I am thus jointly implicated in this experience as myself, and I am in a certain way jointly perceived in this experience as being myself. (Henry, 2008, p. 127)

Henry's assertion helps to establish a new and deeper understanding of communal life, or living, emerging through shared affectivity or "pathos-with" as he terms this. In this way, he frames a basis for *living* as pathic responsiveness to the other through empathy and sympathy.

Smith (2022) extends Henry's notion of "communal life" to include other-than-human life, writing that "pathic resonance reverberates in these very lines and creases and folds of interspecies life" (p. 4). In his interactions with horses, Smith frames a "*critter*cal somaticity" as the "breathing inspiration for connecting with others, the motional means of meeting them on common ground" (p. 4), and a "critterly attunement" cultivated in practices of playing with horses.

Especially germane to this research is that relating with other humans is the subject of *pedagogy*, signifying "the science of teaching" and also a responsiveness in relation to children, as derived from the medieval French *pedagoge* (Online Etymology Dictionary, 2022c). Educators relate to students (often, but not always children and youth) in various ways, however at the root of these ways are intersubjective and interaffective resonances.

Educator-author Max van Manen has written extensively about pedagogical relationality. He frames the disposition of “tact” as critical for developing sensitivity in all manner of pedagogical situations. He writes (1991),

> a tactful person has the sensitive ability to interpret inner thoughts, understandings, feelings, and desires from indirect clues such as gestures, demeanour, expression, and body language. Tact involves the ability to immediately see through motives or cause and effect relations. A tactful person is able as it were to read the inner life of the other person. (p. 125)

Tact, he adds, is the “practice of otherness” (p. 139). Later (2012) he writes,

> Pedagogy is not just an objective social science construct. It is a phenomenon that issues a complex imperative in the manner that we see, feel, sense, reflect, and respond to the call of the child before us. (van Manen, 2012, p. 10)

Stephen Smith (2014) extends this notion in referencing an ‘agogic accent’ which he says “gives license to attend to the rhythms, accents, beats and stresses” of working with various human groups, animals and other entities (p. 240). Transposed to education, Smith identifies a need to be attuned to the moment of feeling the vibe with others, whether they be children, youth, adults or other animal beings, and where they is felt to be a “pedagogic accent” realized through “a discipline of attentiveness brought to rest in particular moments of contact with children and youth” (p. 241).

Smith frames pedagogy as “essentially and sensuously the accent on a moment of vital contact with another,” “less a way of being unto oneself, and more a sense of becoming otherwise, attuned to others’ motions and correlative emotions” (p. 243). Pedagogical relationality, he affirms, “should always be premised on responsiveness to the ‘uniqueness’ of places and people. The particular child’s “otherness, mystery and face” (van Manen, 2012) always need to be seen” (p. 241).

Educator-philosopher Tone Saevi also references ethicality and selfhood in considering pedagogical relationality, asserting the personal and ethical relation between adult and child is “intended to guide and support each child’s way towards humanity and selfhood” (Saevi, 2011, p. 460).

These perspectives reflect an intersubjectivie and pedagogical attunement that is achievable here and now, as Smith (2014) advises, “before that moment is framed within the regulatory spaces of schooling and instruction” (p. 243). In psychological terms, such

coming-into-being may also be seen as arising through continuous acts of *individuating*, in which a self comes into being as a unique self and not another self. The concept of *individuation*, extrapolated by Carl Jung in his pioneering of analytical psychology, posits that in individuating the contents of one's psyche mature through life experiences to form the basis of a well-functioning, whole person. This concept was extended by French philosopher Gilbert Simondon who asserted that "a living being exists as only always a becoming *between* individuations," (Scott, 2014, p. 33) and that "one *knows the individual through individuation and individuation through the individual"* (p. 34, original emphasis).

In considering how learning arises and is influenced in and through relationality as described above and excluding the psychologic reference to individuation, it is important to determine *how* one perceives a student, It is important to ask oneself: *Who am I seeing here? What attributes and flaws am I seeing in this student? Why am I seeing this student in this particular way? How might I open myself to seeing this person differently?* This kind of self-questioning helps define a manner of relating to the student. Relationality is predicated on how one perceives a student and the gestures of support that one might offer. An important perceptual shift happens when an educator extends their perceiving of the person before them as more than a mere ‘student' to see a ‘whole’ person coming into *being* through *becoming* more of her or his better self. This kind of confirmation is recognized in modern psychotherapy as ‘unconditional positive regard’ (Rogers, 1980) and has also been adapted to educational discourse by educational philosopher Nel Noddings who, in her book on *Caring*, underscores it.

> Confirmation, the loveliest of human functions, depends upon and interacts with dialogue and practice. I cannot confirm a child unless I talk with him and engage in cooperative practice with him. It is not confirmation to pronounce someone better than he is at something if he has no inclination toward that something or cannot achieve the goals we expect of him. Simply to have high expectations for our students in general is not confirmation. It is just another form of product control. To confirm, I must see and receive the other. (Noddings, 1984, p. 196)

Other educational researchers write similarly about a critical need to perceive and receive learners with sensitivity, empathy and adaptability, unconditionally and without pre-determination. Research related to this point includes national (US) field studies in the 1960s and 1970s focused on teacher effectiveness by the National Consortium on Humanizing Education. As reported in Rogers et al. (2014), implementation trials of

improving “person-centered teaching” methods through, for instance, heightening teacher empathy towards students, demonstrated positive correlations to heightened student achievement, behaviour, attendance, and self-confidence, according to participating teachers. Similar research, also reported in Rogers et al. (2014), was completed in Germany in the 1970s, 1990s and early 2000s and had similar results. Significantly, the German studies included survey results from both teacher, student and parent populations (Rogers et al., 2014, pp. 134–146).

Such research notwithstanding, much literature referencing how relationality influences learning is oriented to explaining the impacts of factors such as motivation or emotional affects on learning. Relationality is *implied* in such explanations but rarely, in the opinion of this researcher, are relational dynamics front and center. Even phenomenological discourse about educational relationality focuses on pedagogy from an educator’s perspective (Friesen, 2017; Saevi, 2014, 2015b).

How might educational discourse on or about learning *per se* open itself further to phenomenological explication of the experiences of relationality? Pedagogy, says Saevi, “always is and must be more than what can be seen and told in research” (Saevi & Foran, 2013, p. 2). She continues poses an important question:

> how might we as teachers and adults see, sense and speak so that we might address the subjective child, and practice a “border-line education”? Pedagogical acts perform at the border between the self of the adult, the demands of society and the self of the child. (p. 7)

Author-educator Ellyn Lyle advocates a form of pedagogical relationality she refers to as “join-up” in a reference to a manner of horsemanship oriented to mutual trust between horse and rider. Pedagogical join-up, she writes (Lyle, in-press, p. 150), is enhanced through various relational gestures, including educators regularly hearing and responding to student feedback to build trust and enable students to venture more deeply into their learning. Lyle also recommends collaborating and co-constructing educational practices (p.150) through which teacher and students “share ownership in the learning process and participate in pedagogical enactment” (p 150).

Another important aspect of enacting pedagogical join-up, Lyle says, is found in a manner of communication that helps teachers and students critique axiological and

ontological claims while seeking a “shared social conscience” (p. 152). Critical consciousness, she writes, further,

> requires that we deconstruct both explicit positions and implicit interests that form the intersectionality we bring to teaching and learning relationships. Only when we look for these undercurrents of power and privilege can we hope to cultivate the social conscience that supports more equitable and just educative experiences. (p. 153)

Lyle’s insights help reveal a broader, critical perspective of relationality that can help educators situate student learning extending beyond schooling or institutional experiences. In this way they might also perceive learning and meaning-making arising beyond human-human interactions to human-object interactions as, for example, in reading an engaging book, or feeling compelled to practice a sports technique, or a dance step. Traumatic and fearful situations open people up, too, to different kinds of relational learning, easily grasped and long-practised according to psychiatrist and author Daniel Siegel (Siegel, 2007).

An additional aspect of learning and relationality arises poignantly through considering Indigenous ways of being and how some Indigenous scholars link learning and epistemology to ecological/environmental communing. Pueblo educator and author Gregory Cajete writes (2015) that Indigenous education is a process of coming to know, honor, and apply essential principles of ecological relationship in its broadest terms, and that learning is a growth and life process grounded in “finding our face, heart and foundation” “as a conscious part of a greater whole” (Cajete, 2015, p. 11).

Cajete is critical of modern education and its basis in reductionist processes that seek to objectify knowledge and isolate learning from context.

> The current system of education has confused thinking with information processing, it has become narrow and misinformed. It has excluded the innate human sensibilities for what lies deeper and is inexpressible for envisioning a relational purpose for people and the whole earth. (Cajete, 2015, p. 17)

Potawatomi citizen and educator Robin Wall Kimmerer shares with Cajete many of the precepts about Indigenous ontological relationality as being connected integrally with the surrounding world. In her book, *Braiding Sweetgrass* (2013), Kimmerer points out the important ways in which her native language inscribes relationality and a “grammar of animacy” that informs learning. She writes,

> To whom does our language extend the grammar of animacy? Naturally, plants and animals are animate, but as I learn, I am discovering that the Potawatomi understanding of what it means to be animate diverges from the list of attributes of living beings we all learned in Biology 101. In Potawatomi 101, rocks are animate, as are mountains and water and fire and places. Beings that are imbued with spirit, our sacred medicines, our songs, drums, and even stories, are all animate. … The language reminds us, in every sentence, of our kinship with all of the animate world. (p. 17)

Kimmerer says further that through such spiritual orienting and honouring of relational animacy, one is "naturalized" to a place that inspires *living*

> as if this is the land that feeds you, as if these are the streams from which you drink, that build your body and fill your spirit. … to know that your ancestors lie in this ground. Here you will give your gifts and meet your responsibilities. To become naturalized is to live as if your children's future matters, to take care of the land as if our lives and the lives of all our relatives depend on it. (p. 32)

To sum, relational characteristics of learning encompass the ways in which we engage and participate with the world we experience and encounter in our living. Such engagement with all the things we encounter – persons, situations, material objects – evoke a responsiveness in us that enable us to deepen our relationality and encounter it pathically.

Learning arising as an event, encounter or circumstance of some sustained duration and temporality.

A human life is shaped by the temporal events of birth and death and rich with details about how we experience or perceive time and reflect on our encounters. To reflect subjectively on an experience or to find oneself immersed in an unfolding experience is to engage with temporality. The nature of temporality – a sense of time as experienced psychically – and its subjective meaning has long been a major focus of phenomenological consideration. Husserl wrote "We regard sensing as the original consciousness of time" (Hua X 107/112; cited in Henry 2008, p. 37) to which Michel Henry (2008) added,

> Every experience is first and foremost its own coming into experience, an initial indication to which everything that shows itself owes its nature, its laws, and ultimately what it is. (p. 21)

Sociologist Edith Cobb (1970) posits all children have an “innate need to extend the self in time and space” (p. 38) as a manner of their being. For a child, she continues, “time and growth are organically and perceptually equated, for growth is a sensed experience of movement in time” (p. 43). This need or drive, she says, is reflected in a child’s grasping of language, as

> part of a basic human need to move forward from unstructured form into a theory of the universe, to create meaning, and so to discover himself in time and space. (p. 51)

This developmental urge, she continues, helps form the basis of a personal narrative to better "’know’ both continuity and discontinuity, arrest and movement in spatiotemporal structure and pattern” (p. 51).

Cobb’s propositions are given more definition by French phenomenological philosopher Claude Romano who has focused much attention on what he terms *evential hermeneutics,* the interpreting of (temporal) events emerging in the course of human experience. Drawing on the notions of the word *event* – the etymology of which implies happening or occurrence or befalling – Romano (2009) says,

> It is always within a world, embedded in a causal framework, that an event is able to appear with its own meaning, interpreted and understood in light of other events that determine its specific meaning. (p. 34)

The world to which Romano refers is a horizon of interpretational possibilities through which “an inner-worldly fact can appear, become a phenomenon, and which thus furnishes this fact with the measure of its phenomenality” (p. 37). Delay (2019), interpreting Romano, asserts Romano implies that events make for themselves their own horizon of meaning, “They do not appear on the basis of a horizon of already foreseen possibilities; they make possible new possibility” (p. 157).

Experience, Romano confers,

> in the primary sense, is what profoundly modifies us by putting us in play ourselves, so that after having passed through, endured, and traversed, we will no longer be the same: to undergo illness, bereavement, or joy; to love, journey, write a book, or paint: these are “experiences” in this primary phenomenological sense, very simple, but not trivial. (p. 161)

Referencing Romano, Delay writes:

> We are what we become owing to the decisions we make in the face of what assails us, in the trials that call us to respond, even if, or precisely because, they do not originate with us. I do not give myself my possibilities from an evential sense; I nevertheless must face them, if only for the sole fact that being the one I am means that I must— I am always already open to the event as something that can come upon me. That capacity can be embraced or suppressed, welcomed or despised, enlarged or constricted, but it can never be entirely avoided. (p. 167)

The self, then, arises in constantly adjusting, improvising, striving, avoiding, and facing, and unescapably being bound to its own evential existence, borne through past experience that endures as existential memory in the lived body. This is described by Fuchs (2017) as

> a specific form of memory that results from the continual embodiment of existence: it consists of all the affinities, capacities and experiences, which the person has acquired throughout his life. Thus, it also provides a qualitative continuity of self that must not be actively produced through remembering, but rather integrates the person's entire past in his present being and potentiality. (p. 312)

Temporality, of course, can also be condensed and recognized as fleeting, ephemeral, momentous. In "momentous" we capture a moment that, in itself, presents a poignancy of phenomenological character: When we write "just at that moment" or "the moment arrived" we anticipate a sensual description that seeks to encapsulate a feeling, a memory, an idiosyncratic pose that fixes a scene like a finished, painted canvas. We take in such a moment, just as that moment takes us in.

Smith (2014) elaborates on the experience of a moment:

> The moment of duration, the eternal moment, pure duration, is a moment of contemporaneity, non-duality, just a moment of being at home in the world. Such a moment can be psychologized as flow, philosophized as ekstasis or presencing, or phenomenologized as a carnal gestural reciprocity. But these reductions do not yield necessarily to the purity of the duration and that accent which makes it feel that way. (p. 242)

Extending this consideration to pedagogical relationality, Smith posits the arising of "pedagogic moments of full vitality" (p. 243):

> In the moment is felt a contact, not an admonition or imperative to be responsive to another in any transcendental or transpersonal sense, but an animation by motions of another place, another time, another person and people, and as bodily summons to connect with the one or ones before me. (p. 243)

To consider the nature of learning as it arises phenomenologically in subjective temporal embrace is to consider not just the kinds of experiences that constitute one's evential horizon but also how one interprets these events. *Which events are meaningful, and why, and how?* In this way the evential horizon of learning, consonant with the horizon of one's existence, spanning birth to death, is replete with possibilities to interpret time passing Kaironically, that is, cyclically, imaginatively, opportunistically[12]. In other words, playing out, as DeRobertis writes (2017) "from within the temporal unfolding of one's becoming" p. (27).

Related to this is a need to recognize and support a *personal journeying* quality to living and learning. While some myths endure in global literature about the importance of journeying or questing as 'becoming' though the events that befall one (Campbell, 1968), personal journeying is not necessarily taken up substantively in modern education. This is peculiar because journeying and questing are layered with myriad motions of listening, seeing, touching, challenging, reflecting, acknowledging, grasping, all of which imply learning.

Some cultures, First Nations chief among them, have long valued the journeying myth as archetypal for individual growth and transformation, and integrated lifelong as an ever-renewing call to develop one's self through the various stages of life. Tewa educator Gregory Cajete describes this journeying as a universal foundation of "teaching and learning that unfold[s] through time, space and place forming a path through life." This path, he continues, is "basic to human nature, yet elegantly complicated in its expression" (Cajete, 1994, p. 68). Cajete asserts, also, that this journeying occurs in countless ways, unique to each individual and reflecting outward and inward movement that might be arise through dancing, storytelling, or raising children. Many First Nations communities celebrate such emergence through their customs and rituals.

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[12] Philosophers have proposed varying notions of temporality or time, especially through references to Chronic versus Kaironic time. Chronic time is associated with the deity *Chronos*, from Greek mythology, designated as the god of linear time, and in modernity consonant with the quantitative time of physical science, "plannable, measurable, reproducible, and predictable. (van Manen, 2017). On the other hand, Kaironic time, named after the deity Kairos, is associated with qualitative time, potentiality and opportunity, "pregnant time" (van Manen, 2017) and "important for our understanding of the instant of the now as the source for phenomenological insights" (van Manen, 2017; p. 821).

It is also worth recognizing the psychic nature of temporal phenomena as incredibly variable and idiosyncratic. That is, each person may experience and subsequently recall or rearrange temporal events in differing ways, with differing characteristics, e.g., they may be recalled as evanescent or enduring, triggered by the senses, or both (Sacks, 1995, 1999). Temporality is part and parcel of day-to-day, moment-to-moment existence from and through which personal narratives are shaped (Siegel, 2007). This characteristic was duly noted by the French author Marcel Proust in his renowned novel, *In Search of Lost Time: Swann's Way* (1913):

> The places we have known do not belong solely to the world of space in which we situate them for our greater convenience. They were only a thin slice among contiguous impressions which formed our life at that time; the memory of a certain image is but regret for a certain moment; and houses, roads, avenues are as fleeting, alas, as the years. (Proust, 2003, n.p.)

These insights add much to considerations of the complexity of learning. Through the lens of phenomenology we can cast the essential characteristics of learning as having to do with utter subjectivity or ipseity, dynamism, animism, givenness through relationality, and eventiality. These characteristics indicate the nature of learning that is not so much defined and explained as it is discovered and experienced.

3.6. Summary

This literature review chapter has covered a wide range of academic literature and historical insights germane to framing the nature of learning. I have included background information that helped in my understanding of learning as I began my career as a professional educator. I described what frustrated me in following conventional schooling norms and how and why I began personalizing learning for students, which I found more satisfying for them and for me.

My initial learning insights and teaching experiences helped me foreground research exploring the subjective nature of learning amidst much theory and research which instrumentalizes it. The lens of phenomenology and research practices ascribed to it, first described by Edmund Husserl in the early twentieth century, offered a way of approaching learning in a far more holistically meaningful manner. Here, in attending closely to how we are embodied, sensate, relational beings moving in lifeworlds of inherent meaning-making, it is possible to better appreciate how learning arises as

existential, phenomenal meaning-making. A phenomenological attitude to learning reveals, in other words, what is phenomenally crucial to that which has come to be called personalized learning.

In the next chapter I will turn my attention more directly to phenomenology as a research methodology for further articulating these essential characteristics of the nature of learning.

Chapter 4. Methodology

In the previous chapter I traced a history of frames of learning, and I circumscribed an academic context considering different experiences of learning. I also described some personal and professional intersections with these frames primed by my career-long interest in researching the subject. Lastly I linked characteristics of learning emerging through personal experiences and reflections with insights from phenomenology. These insights have helped illuminate the subjectively complex nature of learning. The present chapter will provide a detailed account of how I further explore the nature of learning by drawing attention to other autobiographical accounts and via a fieldwork research project.

The autobiographical accounts are a sampling of first and third-person reflections and observations that point to the character of learning. This study foregrounds a fieldwork research project based in phenomenology which explores the nature of learning as experienced by a group of (teenage) student participants. As part of this research I will describe the experiential characteristics of learning as guided by the research methodology detailed below. Together, the biography-based study and fieldwork research provide added insight into the experience of personalized learning.

The characteristics of my fieldwork research are described in the methodology section below. Van Manen (1990) says methodology refers to the philosophic framework, the fundamental assumptions and characteristics of a human science perspective (pp 27-28) pertaining to research. In other words, methodology circumscribes the theory behind the method, including the study of what method one should follow and why.

Specifically, the fieldwork research exploring the *meaning* of learning will be guided by the following question:

- *What is the nature of learning as it arises for student research participants,*

and the following subsidiary questions:

- *How does learning arise and become personalized for students?*

- In what ways are students' learning experiences influenced?

- In what ways does personal identity coalesce in and through learning experiences?

- What invested meanings form for students in and through their learning?

4.1. Methodological Rationale

Experiences comprise the forge of our existence and the myriad ways we find ourselves engaged with others in the world. These ways may be ephemeral or of extended duration, they may induce heightened emotions of joy or fear, and they may propel us in one way or another. Our experiences reflect the character of an unfolding dynamic and vital *gestalt* – an unseen yet emergent form whose attributes can't be measured but can be sensed, described, interpreted and shared, and through which we may discover our experiences to be unique or overlapping the experiences of others.

As detailed in the previous chapter, learning arises as the meaning we make of our experiences, shaping, compelling, and affording our human *being* and *becoming*. But as also noted, starting in the late 1800s scientists and educators instrumentalized learning, positing its nature in psychologistic frames from which the learning sciences emerged (Kaufman, 2013; Logan, 1970). These comprise various branches of neurology and analytical psychology, including focused attention in the cognitive and behavioural sciences. These sciences conventionally posit human learning in objectivist, abstract theoretical terms while sensing, describing, and interpreting the subjectively concrete experiences from which personal meanings are made are less studied.

The philosophy most concerned with providing an account of subjective meaning-making, and thus of how it is that what we call learning arises, is phenomenology. Founded in the early 1900s by Edmund Husserl, this philosophy contests the privileging of objective science. Husserl (1970) wrote: "no objective science can do justice to the [very] subjectivity which accomplishes science" (p. 295). He elaborated a detailed methodology through which to establish phenomenology as a "rigorous science" of human experience. Husserl believed that his methodology could empirically reveal an "essential" form of soul and spirit ascribable to each person (p. 327).

In his lifetime and following Husserl's death in 1939, philosophers as well as researchers followed his guidance in investigating phenomena in various domains of human existence. Starting in the early-mid 1900s, phenomenological researchers from Europe concerned themselves with learning and education and, particularly, the relations between adults and children, and between teachers and students, that are said to be pedagogical relations. Dutch-Canadian philosopher Max van Manen has written extensively about pedagogical relationality, ascribing particular value to taking up pedagogy as a "phenomenon that issues a complex imperative in the manner that we see, feel, sense, reflect, and respond to the call of the child before us" (van Manen, 2012, p. 10). Educators, he writes further, should consider adopting "a pedagogical imperative to learn as much as possible about the nature of a student – their learning dispositions and sensibilities" (p. 12). He frames this imperative as a set of wondering questions. "How really are these students experiencing the situations? What, if anything, is this student 'learning' in this moment? What about that student? What events may have lasting consequences for the student?" (p. 15).

Van Manen's sentiment is echoed by Norwegian researcher Tone Saevi who writes (2013),

> Being a human being, child or adult, student or teacher, is a way of knowing the world from the particular personal perspective of this person. In spite of the inaccessibility of the personal experience a teacher constantly has to strive to encounter every student personally in ways that address their self-understanding and intend to support their subjective being. (Saevi & Foran, 2013, p. 59)

Van Manen (2012) also recognises a gap in reporting pertaining to pedagogical and learning encounters.

> Educators rarely reflect on the fact that meaningful learning is always infected with the relational and situational particulars of the moment in which the learning takes place. Whatever we learn is always affected by the contextual details of the living situation and relation in which the learning occurs. From a pedagogical point of view, learning is not like storing information on a digital storage device, learning means that whatever is learned becomes part of the personal being of the student. It is important to reflect on the nature and kinds of contact that we are able to establish with the students we teach. (p. 30-31)

Greenberg et al. (2019), in *The Phenomenological Heart of Teaching and Learning*, assert much that same thing, writing that the "lived experiences of students and teachers are frequently ignored by researchers focused on pedagogy" (p. 2).

I conducted a search of several databases in the interest of exploring phenomenology of learning as a subjective experience. This search revealed only a few results for indirect research or consideration of the subject in the domains of pedagogy and psychology. I find such a gap surprising considering the focused attention paid by phenomenological researchers to pedagogy and pedagogical interactions. Relationality, as researched in the context of classroom interaction, has been shown to be influential on learning (Biesta, 2017; Friesen, 2020; Henriksson, 2012; van Manen, 1991, 2012) but such a generalization does not comprise a phenomenology of learning.

Psychology has to some considerable extent adopted phenomenological methods in service of pursuing human science. The results of my search of research literature on the subjectivity of learning yielded insights from phenomenological philosopher Maurice Merleau-Ponty (2005), along with a body of work developed by pioneering phenomenological-psychologist Amedeo Giorgi, one brief encyclopedic entry (Kuepers, 2012), and two recent books by phenomenological psychologists, including *The Phenomenology of Learning and Becoming* by Eugene DeRobertis (2017) and the book mentioned above by Greenberg et al. (2019).

Merleau-Ponty (2005) offers many thoughtful insights into the phenomenology of perception and how one might understand consciousness and consider intersubjective, interactive meaning-making. "The phenomenological world is not pure being", he writes (p. xxii), but "the sense which is revealed where the paths of my various experiences intersect, and also where my own and other people's intersect and engage each other like gears." Meaning-making, which is to say, learning, is thus "inseparable from subjectivity and intersubjectivity." Merleau-Ponty is also well-known for illuminating the role of the body and all its attendant sensibilities enabling worldly presencing. This embodiment emphasis is evidenced in the following passage:

> when I reflect on the essence of subjectivity, I find it bound up with that of the body and that of the world, this is because my existence as subjectivity is merely one with my existence as a body and with the existence of the world, and because the subject that I am, when taken concretely, is inseparable from this body and this world. (p. 475)

The presencing of body-self-in-world extends to embodied learning as was detailed in the previous chapter of this dissertation.

Giorgi (1999), who has pioneered a descriptive phenomenological research method in psychology, contends that research which seeks the essences of phenomena "make[s] deeper sense out of a multiple and varied concrete experiences" (p. 80). Learning, he says, is a kind of lived experience that can be discriminated phenomenologically to reveal its essential characteristics and help answer questions such as, "when does learning, as opposed to some other phenomenon, occur? What are the conditions under which it happens? What are facilitators or obstacles to the learning process?" (p. 81). Giorgi offers many generalizations about learning oriented to psychological criteria such as behaviour, skill development and cognitive performance. He also urges the facilitation of self-agentic learning such that:

> the more that persons come up with their own intuitions and insights on the basis of their own active search, the better the learning. The implication for the learning facilitator in this case is that he or she should try to create space for the learner to gain or develop his or her own intuitions. (p. 85)

DeRobertis (2017), also a psychologist, posits a more classical phenomenological understanding of learning than Giorgi, framing learning as "embedded within the world of human relationships" (p. 1) and deriving "from the essential human quality of world-openness … to the very field within which learning takes place (i.e., the meaning-laden lifeworld)" (p. 8). DeRobertis emphasizes that phenomenological research "can shed light on learning as a direct function of daily lifeworld existing" (p. 20), by which the researcher "circumvents the tendency to impose abstract meanings invented by the purportedly objective scientist onto the phenomenon of learning" (p. 20). Such lifeworld research can only be accessed by researchers in trying "to insightfully access the world of the learner using intuitive seeing" (p. 20). This research will "allow the phenomenon of learning to show itself on its own terms, producing results that speak directly to the existential unfolding of human becoming" (p. 20).

Like Giorgi, DeRobertis (2017) offers many broad generalizations about learning drawn from humanistic and cognitive psychology such that the qualities of learning are rendered in psychological terminology and treated in isolation. This diminishes their potency to reveal something foundational about lifeworld learning experiences. An example typical of this is the following statement:

> Learning, as a disclosure of original meaning that makes for an encounter with newness, perpetually operates against the spatiotemporal horizons of evolving self-development. Where the possibility of an encounter with newness bears some discernable meaning with respect to those horizons, the potential learning in question can thereby be taken up as a legitimate pathway for the developing person to travel during his or her journey through the lifespan (p. 138).

Further examples can be drawn from *The Phenomenological Heart of Teaching and Learning*, by Greenberg et al. (2019), which is based on a case study of the interactions and reflections of a teacher and students in a classroom-based, graduate-level course. While the researchers considered phenomenological notions of embodiment, intentionality and the lifeworld (of the classroom), the research methodology – constrained as it was by classroom interactions – limited the access to deeper insights about the participants' learning experiences.

The application of phenomenological research methodology to subjective experiences of learning in the fields of psychology and pedagogy, as illustrated above, provides some insights into this *arising* phenomenon. But these insights are not particularly adequate in addressing or illuminating characteristics of the nature of learning that I noted at the outset of my research and in the previous chapter. Furthermore, I perceive pedagogical relationality arising in and through learning experiences in rich and complex ways. The paucity of pedagogical-oriented research focusing on the subjective nature of learning provides justification for further exploration and consideration of my research questions.

4.2. Fieldwork Research Frame

My fieldwork research comprises an investigation of the lived experiences of the arising and appearing of learning through the prism of phenomenological inquiry, the main features of which are elaborated below. Phenomenology has been sustained as both a philosophy and as a research methodology for describing and understanding human experiences of which we are consciousness. Since Husserl's initial framing, phenomenological research has evolved to demarcate several recognized forms of human science research. Cohen and Ornery (1994) identified three such forms: (1) eidetic or descriptive, guided by the work of Husserl, (2) hermeneutics, also referred to as interpretive or existential phenomenology, guided by the work of Heidegger, and (3)

the Dutch (Utrecht) school of phenomenology, which combines descriptive and interpretive phenomenology and draws on the writings of van Manen and others (Dowling & Cooney, 2012).

Writing about phenomenological research in a general sense, Moustakas (1994, 2011) says:

> Phenomenology focuses on the appearance of things, a return to things just as they are given, removed from everyday routines and biases, from what we are told is true in nature and in the natural world of everyday living.
>
> Phenomenology is concerned with wholeness, with examining entities from many sides, angles, and perspectives until a unified vision of the essences of a phenomenon or experience is achieved (p. 13)

Additionally, phenomenological research seeks understanding of the meaning and significance of a particular phenomenon as it appears (Moustakas, 1994, 2011; Bortoft, 2012) and as it is lived (van Manen, 1990). Researchers such as Giorgi (1985) and van Manen (1990) have applied these ideas to pedagogy and other fields of practice such as health care. Phenomenological writing is a critical component of this research, aiming to draw a reader into the phenomenon through which lived experiences become sensible, near and recognizable. The researcher is charged with using words to draw the reader (and the writer himself or herself) closer and into the experience itself (van Manen, 2006).

Phenomenological philosopher Don Ihde (2012) contends that phenomenological research first examines experience, dealing with and limited by “whatever falls within the correlation of experienced-experiencing” (Ihde, 2012, p. 34). It proceeds in a prescribed order, he adds, starting from what appears as it appears, and questioning retrogressively to the how of experience and ultimately back to the who of experience. Phenomenology is thus an inherently personal process of meaning-making through various descriptive and interpretive steps.

4.3. General Principles and Procedural Steps of Phenomenological Research

Phenomenological research draws on the same principles and elements of its philosophical counterpart but, as Ihde points out, phenomenological research conforms to certain characteristics. These are elaborated below.

An initial step guiding phenomenological research, as is especially the case with the guiding phenomenological philosophy, is to invoke a phenomenological *attitude.* In engaging this attitude, the researcher strives to be open to the Other and to attempt to see the world in a new or different way. Finlay (2008) describes this purposeful engagement as “disciplined naïveté, bridled dwelling, disinterested attentiveness, and/or the process of retaining an empathic wonderment in the face of the world” (Finlay, 2009, p. 12).

Engaging such an attitude of openness to the Other links to the defining aspect of phenomenology which is to better understand the range and scope of human consciousness. To van Manen (1990), humans have access to the world through consciousness or simply by “being conscious”. To be conscious, he writes, “is to be aware, in some sense, of some aspect of the world” (p. 9). Phenomenological research, he adds, “is the explication of phenomena as they present themselves to consciousness” (p. 9).

The components (physical, psychological, emotional, etc.) that comprise a consciously lived experience are, not surprisingly, nearly innumerable. Given this vast array of potential elements that represent the “experienced truth” (Giorgi, 2009) of a phenomenon, individuals attend to selected portions of an entire experience and use language to communicate the experience to the researcher. It is meaningful for the researcher to realize that, from an infinite number of possible narratives with which the participant could communicate their experience, they chose a particular interpretation as being representative of their “experienced truth” (Giorgi, 2009). Adopting the phenomenological attitude is thus indispensable to ensure the researcher remains open to accepting participants’ proffered comments, responses, anecdotes and stories without trying to change or at least wilfully adulterating them.

Phenomenological research thus explores consciousness as it emerges and contributes to individually-meaningfully lived experiences. As explicated by Husserl, consciousness itself, in myriad forms, emerges through “intentionality”, which is a word coined in phenomenology as synonymous with consciousness itself. Intentionality does not refer to the more common usage of the term “intentional” to describe purposeful or volitional behaviour. As a phenomenological concept, intentionality is about having an inseparable connection with the world (van Manen, 1990), and it thus serves as a key concept in understanding potentially any experienced event.

To phenomenological researcher Clark Moustakas, individuals are always intentionally conscious of something and our consciousness guides us to that something as an act fused to making meaning. This is what it means to perceive, which Moustakas says (1994, 2011) in phenomenology, is “the primary source of knowledge, the source that cannot be doubted” (n.p.). As we delve into experience, he continues, “we focus our seeing, our listening, our touching, our thinking on what that experience is in its essences. We examine how it is that that experience is what it is, under what conditions it appears, from what frames of reference, and what its possible meanings are” (n.p.).

Phenomenological research also recognizes and validates individual context, situatedness, and the lifeworld. Pollio and colleagues (1997), speaking about the interplay between context, individuals, and consciousness, claimed that: “What seems to be the case is that we learn and relearn who we are on the basis of our encounters with objects, ideas, and people ... what we are aware of in a situation reveals something about who we are” (p. 8). The phenomenological researcher understands this valuing of personal meaning-making and listens to the participants’ interview responses attempting to understand the narratives that are being offered as also being about the persons “behind” the narratives and their respective experiences of the phenomena being investigated.

This means recognizing the “situatedness of the human experience.” Pollio and colleagues (1997) wrote that this situatedness “requires us to emphasize not only that there is a situation but that situation is significant only in the unique way it is experienced by the person” (p. 15). The phenomenological researcher is interested in the person and the meaning embedded in his/her context. Personal existence is thus recognized in

phenomenological research as a grounded perceptual/conceptual yet embodied event rooted in the everyday realities that each of us live.

Phenomenological researchers also attend to aspects of relatedness arising through intentionality and reflecting lifeworld experiences of individuals as well as collectivities. This latter emphasis admits the notion of intersubjectivity first described by Husserl who said the lifeworld may be initially understood subjectively as the structure of one's beliefs shaping a world-horizon guiding encounters and the "natural attitude" regarding our relations with others. He posited that while we are subjectively situated within our own lifeworlds, we also encounter inter-subjectivity from our first-person points of view when we engage in acts of empathy. De Jaegher (2015) frames intersubjectivity as "the meaningful engagement between subjects, or how we make sense of each other and of the world together" (p. 113). In other words, intersubjectivity implies a co-constitution of the world. Intersubjectivity is of interest in research because of the implied connectivity to all lived experience.

Following adoption of a phenomenological attitude in beginning research, a correlative step is enacted by the researcher in considering the phenomenon as initially posited. This is the *epoché* or reduction introduced by Husserl (2012) and referring to setting aside or suspending previous knowledge, beliefs or hearsay about the phenomenon at hand. The phenomenological reduction is an attempt to "bracket" existing inferences held by the researcher so that, through the phenomenological epoché, new and insightful meanings may arise for the researcher and co-participants. What may have been previously thought by the researcher as a theory or an understanding "about" a phenomenon is given over to realizing something new about it. This may happen as a challenging act of self-discipline because bracketing or "setting aside" one's assumptions is not easy. We often arrive at comfortable, conditioned acceptance of assumptions we hold in the "natural attitude", and to intuit something in a new way can call into question those very assumptions that may have guided our thinking to date.

Giorgi (2009) describes this process of adopting a phenomenological attitude and not being unduly influenced by past knowledge whilst doing so. He suggests "keeping a tension between the past and the present in order to discern their respective roles" (p.

93). According to him, knowledge in the human sciences always involves some self-knowledge.

> This openness always includes our situating the other meaning in relation to the whole of our own meanings or ourselves in relation to it ... This kind of sensitivity involves neither “neutrality” with respect to content nor the extinction of one’s self, but the foregrounding and appropriation of one’s own fore-meanings and prejudices. The important thing is to be aware of one’s own bias, so that the text can present itself in all its otherness and thus assert its own truth against one’s own fore-meanings. (Gadamer, 1975, pp. 268-269; cited in Finlay 2009; pp. 12-13)

A phenomenological description of an experience is formed in concert with the inceptual insights of apperceiving and/or apprehending a phenomenon through the epoché. A description is intended to reveal details of the phenomenon as they emerge in conscious experience. A description, presented and grasped through language, is neither theoretical in nature nor filtered according to some formula but presented as a “phenomenological example”. It “provides access to the phenomenon in its singularity. It makes the ‘singular’ knowable and understandable” (van Manen, 2017, p. 814).

In my case, exploring the subjective experience of learning, I am striving to be wholly attentive to new ways that learning manifests in consciousness in keeping with how this manifesting is described by my research participants, and for me, too, when considering my own lived experiences. This step reflects a maxim emphasized by Husserl (2012) of “to the things themselves”, which was his admonition to focus and describe concretely the “things” of which we can be conscious. This step thus forms a distinguishing feature of phenomenological research in contrast to empirical science research that seeks to explain phenomena, abstractly, and bound by theories and hypotheses. To researcher Dermot Moran (2000), “in genuine phenomenological viewing, we are not permitted any scientific or philosophical hypotheses. We should attend only to the phenomena in the manner of their being given to us, in their modes of givenness” (p. 11).

Once phenomenological descriptions are gathered, typically though interviews and other such empirical means, but also though literature reviews and autobiographical and other narrative sources, the researcher turns to examining this data and seeking to ascertain its essential or invariant characteristics. This step in the phenomenological method is about identifying the characteristics of a phenomenon without which it would

cease to exist. Essential characteristics reveal the foundational character of subjective experience. To Ihde (2012), this eidetic or essentializing process presents an overlap of empirical science and phenomenology which, he says, “looks for the structures of things that appear in the way in which they appear” (p. 22).

Data analysis in phenomenological research reflects the steps above and synthesizes cumulative insights about subjective experience(s) and associated meanings conferred on phenomena as described by research participants. Inquiring into the meaning of an experience is a key aspect of phenomenological research. To this point, hermeneutics comes into play as the art and science of interpretation and refracting meaning. Writing about hermeneutic phenomenology (defined in Glossary), Friesen and Henriksson (2012) say that interpreted meaning “is not a thing that is final and stable, but something that is continuously open to new insight and interpretation” (p. 1). In conducting such research, the analysis of lived experience yields meaningful insights about the nature of our being. Heidegger framed this as revealing our ontology or “how we find ourselves or simply “are” in the world” (p. 2). As experience is explored and opened through language, whether conversing, writing, or reflecting, the aim is not to explain or elaborate hypotheses but to provide rich descriptions which will yield their own characteristic grains of meaning.

Descriptive phenomenological reports, following from fieldwork research and typically presented as transcriptions of interviews and other personal documents, are the basis for initially ascertaining the meanings that can be discerned in the text. To Giorgi (2012), this step requires an “holistic” approach to help provide the researcher in gaining a broad understanding of what the data indicates. Research data may be further gathered, organized and synthesized according to thematic analysis and/or individualized research participant profiles. Portraits are created from these depictions that include participant biographical background and are often presented as a composite account of the entire group of participants, or co-researchers. Based on this study of depictions and portraits and personal knowledge of the experience(s), the primary researcher develops a creative synthesis. According to Moustakas (1994, 2011), the life experiences of the researcher and the research participants do not comprise a text to be read or interpreted, but “a comprehensive story that is portrayed in vivid, alive, accurate, and meaningful language ... The depiction is complete in itself” (p. 16).

The research steps explicated above are all used to help construct a coherent narrative that is shaped by the researcher through dedicated writing, re-writing, and reflecting. These steps will be further explicated below.

4.4. Research Approach

My fieldwork research approach is comprised of methodological principles of descriptive and hermeneutic phenomenology. Both approaches evolved from original phenomenological research steps circumscribed by Edmund Husserl and later phenomenologists to illuminate the essentially (foundational) subjective nature of phenomena as lived-through by persons in their respective lifeworlds. In choosing this approach I carefully considered my research questions, elaborated above, and which approaches, among several variants, would best serve in exploring them. Finlay (2009) reports that conducting phenomenological research with overlapping methodologies is not uncommon in education. To elicit descriptions of experiences and engage in hermeneutic phenomenological research requires implementing the methodical steps described above.

Descriptive phenomenology is based on a methodology pioneered by psychologist Amedeo Giorgi (1989). In descriptive phenomenology, Giorgi combines the philosophy of Husserl with the methodical, systematic and critical criteria of science to produce a methodology that assists the researcher in identifying and understanding the psychological essences, patterns, and general structure of an experience. Giorgi (2012) states that: “Phenomenology does not dictate to phenomena but rather it wants to understand how phenomena present themselves to consciousness and the elucidation of this process is a descriptive task” (p. 6). Giorgi’s approach uses language to describe and “articulate the intentional objects of experience” (p. 6).

In carrying out phenomenological research, Giorgi (1997) posits that description lays a foundation for researchers to thematize phenomena of consciousness revealed through “the totality of lived experiences that belong to a single person” (p. 2). Following thematization, eidetic or essential meanings may be discovered through careful reflective practice. Giorgi (2012) writes, “while experiencing provides interpretations regarding our world, they are lived, and it takes an act of reflection to describe the role of such acts” (p. 7).

Hermeneutic phenomenology conjoins two considerations of philosophy according to author-philosopher Max van Manen (1990): hermeneutics, describing how one interprets the "texts" of life, and phenomenology, describing how one orients to lived experience (p. 4). Hermeneutic phenomenological research is a way of doing human science research, he says, in which the researcher's aim is to understand the lived structures or meanings that are presented through the lifeworld experiences of an individual. This lifeworld is "the world of the natural attitude of everyday life which Husserl described as the original, pre-reflective, pre-theoretical attitude" (p. 7). Phenomenological research is the systematic attempt to uncover, describe and explicate the internal meaning structures of lifeworld experiences as they present themselves to consciousness (p. 10).

Van Manen says this approach to conducting human science strives to create detail-rich descriptions that help explore, via textual interpretation and reflection, the fundamental character of the notion being considered. Hermeneutic phenomenological human science is interested in "the human world as we find it in all its variegated aspects" (p. 18). This also presents itself as a daunting challenge because "lived life is always more complex than any explication of meaning can reveal" (p. 18). This, then, is the goal of the researcher-writer: to reflectively "bring into nearness that which tends to be obscure, that which tends to evade the intelligibility of our natural attitude of everyday life" (p. 32). Elsewhere van Manen writes (2017) that "phenomenological inquiry proceeds through an inceptual process of reflective wondering, deep questioning, attentive reminiscing, and sensitively interpreting the primal meanings of human experiences" (p. 819).

4.4.1. Self as Researcher – Researcher Subjectivity

> Phenomenologists all accept that researcher subjectivity is inevitably implicated in research—indeed, some would say it is precisely the realization of the intersubjective interconnectedness between researcher and researched that characterizes phenomenology. (Finlay, 2009, p. 11)

I feel I have a special 'entanglement' with learning, the subject of my research. For starters, I consider learning to be an innate characteristic of being and becoming even more human and, as previously related, I am a learner and have many formative learning experiences to reflect upon. These experiences have shaped who I am,

contributed to my sense of selfhood, my *ipseity*, intimacy with and through the things of my life, and how I think about all of these. In a deeper way, these experiences influence how I think and act the way I do in all manners of my being, whether I am acting in self-interest, as a parent, a partner, a learner, an educator, or in any other way. I am implicated as a co-participant in this present research project, contributing my insights about experiences of learning in an educative context. To Finlay's point above, heuristic phenomenological inquiry, pioneered by psychologist Clark Moustakas (1990, purposively includes researcher subjectivity as part of its methodology. Of central interest to this study are the personally lived experiences of learning as they arise and appear meaningful to research participants, including me. This subjectivity fixation reflects Sultan's assertion (2019) that heuristic phenomenological inquiry be guided by

> self- and other-exploration toward shared understanding of the essential nature of the core phenomenon, how it is sensed and experienced, and its significance to oneself, to others, and to the world. (p. 9)

4.5. Method

4.5.1. Fieldwork Research Approval

Approval of the research proposal to complete this inquiry was guided and granted by the Department of Research Ethics, Simon Fraser University in summer 2021. A copy of the research certification is provided in Appendix B. No significant amendments were made to the certified research proposal during the time research was conducted and it was completed per the study plan and guidance provided by the research ethics authority.

This research project was influenced by the global Covid-19 pandemic which led to many restrictions and protocols mandated and observed in educational and wider public settings. Most significantly, health authority restrictions precluded the researcher from entering school facilities to observe and interact with research participants.

4.5.2. Participants

This phenomenological study focused on data obtained from a purposeful sample of youth actively engaged in learning pursuits. My aspirations at the outset were to recruit 4-8 participants reflecting varied backgrounds and situational dynamics and who also presented themselves as having the capabilities of thoughtfully and competently reflecting on the learning experiences I was pursuing through sustained interviewing. Following recruitment, the research participant group comprised six teenagers ranging from 13-17 years of age with the following characteristics: four of six were female, four of six were white, two self-identified as culturally mixed; all were fully-abled; and two self-identified with psychological learning issues. Three of the participants were full-time students at a local high school nearby the researcher's home. The other three participants were home-based learners who were mainly pursuing non-academic learning activities. Of the home-based learners, one lived close to the researcher, another lived several hours away south of Vancouver, and one lived in a remote region of British Columbia. I personally knew two of the participants and their families prior to starting this research project through their participating in educational programing I helped to lead in SelfDesign Learning Community and a local drop-in trades program in which I am a volunteer mentor. All participants completed the full series of interviews carried out approximately every six weeks from September 2012 through May 2022.

As stipulated by the research ethics department, the identity of each participant under sixteen years of age in this study is anonymized. With that consideration in mind, and in the interest of research cohesion, I anonymized all research participants and each one supported this arrangement.

4.5.3. Recruitment

Before recruiting participants to this project I first obtained approval from the Department of Research Ethics, Simon Fraser University and then proceeded in the following manner. In August 2021 I created marketing materials and distributed these through online networks associated with learning, schooling and home-learning. I also personally contacted several parents I knew from my professional educational experiences to inquire about the potential participation of their (teenage) children. I was

contacted by approximately ten parents and/or youth expressing interest and via email or telephone exchanges. In reply, I shared more detailed information about the research project. Following this, I completed interviews with six candidates, after which we mutually agreed the project was a good fit for them and for me. I got participation confirmation from each recruit and parent, per the research ethics guidelines I was obliged to follow.

4.5.4. Data Collection

Research data consisted of interview transcripts and audio recordings and a few email exchanges collected, as previously stated, from late August 2021 through early June of 2022. This study mainly employed data collection through interviewing done in two ways: (i) online via *Zoom* video-conferencing technology, and (ii) in-person in designated locations including a classroom at a commercial learning centre and also the personal residence of one of the participants, at his request, for three sessions. I traveled on two occasions to observe a student participate in learning activities (horsemanship and calf-training) at two separate farm sites in the rural Vancouver region. Each of these visits lasted from 1.5-2 hours duration and included informal conversation with the participant and a parent. Observing the three participants attending the local high school in-person was not feasible because of Covid-19 pandemic health restrictions enforced by the local public school district. Research interviews with these participants were completed in the two ways mentioned above.

All interviews were recorded, with each participant's knowledge and approval. Audio files from cellphone or Zoom recording sessions were subsequently transferred to an *Otter* online transcription platform which provided transcribed audio files and generated a transcription file (Word document) for downloading and review. The Otter service also retained a convenient index where each interview file was available for replay and checking.

Interview transcription data and audio recordings comprised the majority of data collected. I also recorded on-screen photos when participants held up certain artifacts to share with me, such as books they were reading or had written, media products such as flyers they had completed, and photos pertaining to our conversation, such as travel experiences.

4.5.5. Interviews

Interviews can reveal a great deal about an individual's experience, including their emotions, feelings, and motivations (Trainor & Bundon, 2021). Accordingly, it is an underlying assumption of this research that interviews help develop a concrete understanding of the personal meanings individuals attach to their experiences of learning.

Each research interview was preceded by email exchange verifying time and place, where applicable, and sharing Zoom meeting details. In this correspondence I typically wrote that I looked forward to conversing with them about new learning experiences. Sometimes I requested that they consider an additional question I framed for them, such as what they perceived as a significant influence on their learning experiences and how these influences came about for them and made them feel. Only one participant responded to my questions in writing and emailed her responses to me on two occasions. The others all indicated they preferred to limit their exchanges to conversing online or in-person.

The interview protocol that I followed was semi-structured questioning and follow-up conversing. Trainor and Bundon (2021) state that this method of data collection helps provide opportunities to explore detailed accounts of participants' experiences which aligned with my goal of drawing attention to the subjective meanings and specific details pertinent to each participant's experience. The flexibility of the interview structure also enabled opportunities to explore nuanced dimensions of learning that weren't necessarily obtained until informal questioning helped to reveal them.

In all cases, the participants were comfortable conversing in-person or online and our exchanges were consistently amicable. Typically, I began an interview recapping the tenor of our previous discussion several weeks before and used that as an opportunity to open up new conversation. There were also some newsworthy items I inquired about as 'conversation-starters' pertinent to participants' living situations. These included wildfires, flooding, holidays, and the war that developed in Ukraine[13] in February 2022.

[13] Two research participants were immigrants in 2020, with family members, from Ukraine to Canada. These participants are, in fact, sisters and living nearby to the researcher in Gibsons, BC, Canada. Russia invaded Ukraine in February 2022, an event that significantly impacted this entire

Interview questions served as a guide rather than a fixed protocol. At times I used follow-up questions to clarify or expand upon participants' responses in keeping with the phenomenological approach used in this study. To J.A. Smith (2017), any phenomenological interview should be structured enough to focus the conversation on the study participant's experience with the phenomenon of interest, but also open enough to allow flexibility to expand or contract conversation freely in quest of all elements perceived to be relevant to the research. Each interview spanned 45 – 75 minutes, with duration reflecting conversation tempo and also participant scheduling issues and a need to attend to other activities.

Data gathered in the course of phenomenological research reflect the participant's perspective on his/her experiences; this perspective emerges in the context of an interview in which "the dialogue is grounded in participant experiences of both the interview and the phenomenon" (Pollio et al., 1997, p. 35). A goal of phenomenological research is to go deep into the experience of participants. Phenomenological research aligns with 'thick' qualitative research which, historically, has often relied on the semi-structured interview. To many research authorities, the techniques of the interview are well suited to phenomenological research since they focus on the individual and on eliciting details of personal relevance, creativity, value and perspective (Pollio et al., 1997; Sohn et al., 2017; Vagle, 2014). Interview questions were designed to flesh out feelings, emotions, and perspectives of participants to illuminate the meanings and any significant features of their learning.

I bring much relevant experience to interviewing gained through working as a journalist and also as an educational administrator. In these capacities I learned the value of holding a quality of openness, acceptance and patience in nurturing conversation with others. I believe this leads to rich and candid sharing and more reliable outcomes than perfunctory or 'check-list' interviewing. Furthermore, my way of interviewing, I trust, is in keeping with the learning values I espouse and the pedagogical manner of attending to the value of personalized learning.

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family and initially caused an interruption in research interviewing with these two participants. After a 4-6-week suspension we resumed our interviewing which continued to the conclusion of this phase of the project.

4.5.6. Ethics and Reflexivity

In conducting phenomenologically-oriented, qualitative research it is important for the researchers to continuously self-appraise and self-critique their roles under the guise of reflexivity (Dowling, 2006). This is done to help illuminate how the researcher's own experience may be influencing the research process. Etherington (2004) says reflexivity requires researchers to consider their roles from multiple perspectives. This is similar to Lyle (in-press) who advocates performing reflexive inquiry to help critically assess our efforts as they unfold during the research, which means "to interrogate our assumptions and critically examine our claims to knowledge regardless of our ontological frameworks" (p. 11).

I was aware that I was interacting with and seeking data from a participant group of youth, including minors. As a career educator I knew their demographic as a sensitive and potentially vulnerable population. In all my communications with participants I made every attempt to self-appraise the modes and tenor of how I interacted, especially my languaging, as I sought to be sensitive, first and foremost. To this end I extended myself in accommodating logistical concerns, such as scheduling interview times and determining locations, per interests communicated by the participants. I tried to set the interviewees at ease by displaying a friendly, personable demeanor, whether conducting the interviews in-person or via Zoom. I made it a point to ask each participant if the interview process was 'working for them' and I said I welcomed suggestions they might offer to improve our sessions. No one offered anything substantive. Some issues of a sensitive, personal nature did occur over the duration of research for several participants. In all instances I offered an empathic response and encouraged them to continue seeking the support of their parents and professional practitioners whom these participants had identified as supporting them. I confirmed to them that confidentiality was assured in our research and the interviewees seemed further reassured by this.

Another gesture I enacted served the purposes of reflexivity and provided a way of confirming research validity, and that was through sharing a research data summation with participants soon after our interviews were concluded. The data was an early-stage, generalized summation drawn from a cumulative document of research transcripts compiled for each participant. I invited each participant to review the respective summation and offer feedback to me as to whether they perceived it to be accurate and

if they had suggestions to correct or extend it. All participants reviewed the summations I provided and confirmed accuracy to me, encouraging some minor corrections. None offered substantive feedback or additions.

An act of reflexion that is also important to consider is my shifting, evolving positionality in completing this research. Enacting the *epoché* of the phenomenological reduction was felt most strongly during interviewing and data analysis and was a determined act of suspending my personal knowledge and beliefs so I might better intuit the nature of learning as described by the research participants. This was a technique of providing a conversational opening that I otherwise would not have attained. Through this epoché I was constantly challenged to perceive and question what I determined as my ethical and pedagogical responsibilities. As a career educator committed to honouring personal sensibilities, I felt deeply obliged to honour and sustain these sensibilities for the participants. Concurrently, I felt consistently destabilized by shifting events, dispositions, and e/merging thoughts throughout the research process. In experiencing these perturbations, and seeking to sustain my obligations, I engaged in many acts of juggling and re-balancing that felt analogous to steering a canoe through choppy water or maneuvering a vehicle on an icy road, but without the physico-motor manipulations.

Ultimately, I am satisfied that I honoured my ethical and pedagogical responsibilities in co-creating a body of work the credibility of which lies in its emergent, phenomenological validity. That said, what emerged as new, challenging and sometimes more than a little unsettling for me, was grappling with and seeking to clarify *notions of truth* in what I was committed to describe. Recognizing or positing a single truth most often emerged as a hybridized act, *a little of this and some of that.* I grew more comfortable with this process as I proceeded, and agree with Hanne Jacobs (2013) who writes:

> The phenomenological insight that truth is within reach does not entail that we either are the creator of this truth or that we always already have access to this truth. Rather, we are always on the way to truth insofar as being is the correlate of a completely fulfilled experience that is always on the horizon. The insight into our epistemic fallibility is but the other side of our commitment to truth since the awareness of our fallibility is the awareness of the distance to be travelled to arrive at truth. (p. 366)

4.5.7. Data Analysis

Data collection focused on eliciting descriptions of participants' experiences of learning. The next phase of this research project comprised data examination and analysis. In objectivist scientific analysis, data is commonly normalized in keeping with theoretical and hypothetical constructs. This is not the case in phenomenological research where data analysis helps reveal inceptual or originary, intentional meanings of as presented to consciousness and intuitive perception. Moustakas (1994, 2011) insists that

> descriptions retain, as close as possible, the original texture of things, their phenomenal qualities and material properties. Descriptions keep a phenomenon alive, illuminate its presence, accentuate its underlying meanings, enable the phenomenon to linger, retain its spirit, as near to its actual nature as possible. (p. 59)

In this project, data analysis served to explicate what was presented and revealed upon close examination of the participants' experiential descriptions. All phases of data analysis had to and did remain congruent with the learning accounts offered to me by the six participants.

Data analysis for this phenomenological study was completed according to general steps articulated by descriptive and hermeneutic phenomenological researchers (Braun and Clarke, 2021; Finlay, 2009; Giorgi, 1989, 2009, 2012; van Manen, 1990, 2014). In this stage of research I strove to reveal the eidetically essential features of participant experiences and interpret the thematic and structural meanings in keeping with these experiences. The steps below comprise the descriptive phenomenological method of initial data analysis I adopted from Giorgi (2009) who details a three-part process of data analysis and Braun and Clarke (2021) who detail a six-part process pf Reflexive Thematic Analysis (RTA). I considered both approaches to be companionable and appropriate to my ends.

1. Prior to analyzing the data, I bracketed or suspended my previously acquired knowledge about learning to better remain open and sensitive to the experiential data described by each participant. Transcripts of participant interviews were initially reviewed and corrected through careful listening to audio files and highlighting notable quotes. On first or second reading I

sensitively read through the interview transcripts from each study participant to get a sense of the whole, making some notes and codes in the documents to identify potentially relevant indicators of an experience. This process is generally known as “horizontalization” (Moustakas, 1994).

2. On subsequent readings and re-readings, I perused each description slowly and began identifying smaller descriptive units in which I perceived or intuited a response suffused with meaning. Differences and transitions in meaning were colour coded. Per Giorgi’s guidance (2009), I perceived meaning units to vary in length and remain free of external criteria and objectivity. These were mine alone to determine.

3. I next translated each description-based meaning unit into more concise expression to reflect what the research participant said implicitly in his/her own words and to refract what I intuited as an essential structure of experience. In this, I was challenged to use descriptive, common-sense language without translating or correlating the data to theoretically based interpretations. To Giorgi (2009), these second-order descriptions comprise structures having “the strength of facts, even though they are pure facts” (p. 131) and as such are “invariant meanings” (p. 131). To Braun and Clarke (2006, 2021), these phases comprise the initiation of reflexive thematic analysis. In this step, where Giorgi, a psychologist, advises adopting a psychological attitude in interrogating each meaning unit, I adopted an attitude commensurate with my pedagogical experience and phenomenological orientation as primarily an educator. I reviewed the transformed meaning units, looking for patterns and essential elements that were then synthesized into a written structure of consciousness idiographic to a participant or perceived generally for several participants.

4.5.8. NVivo (software) Coding of Data

The last step overlapped with what is commonly known in qualitative analysis as thematic analysis, that is, “a method for analyzing qualitative data that entails searching a data set to identify, analyze, and report repeated patterns” (Braun & Clarke, 2006; Kiger & Varpio, 2020). A theme is “a patterned response or meaning” (Braun and Clarke

2006, p. 82) derived from data that reflects the research questions. Thematic analysis is an inductive method for describing data that also involves interpretation in the processes of selecting codes and constructing themes. To van Manen 2014), uncovering a fundamental theme is “not a rule-bound process but a free act of ‘seeing’ meaning as it arises from phenomenological research” (p. 320). Joffe (2012) states that thematic analysis permits the researcher to “combine analysis of the frequency of codes with analysis of their more tacit meanings, thus adding the advantages of the subtlety and complexity of phenomenological pursuits” (p. 211).

Joffe also sees much benefit in the use of computer software in thematic analysis, a step I undertook as part of this research. Following initial content analysis of interview transcript data, each transcript was imported into NVivo data analysis software where patterned meaning units were initially identified for each transcript as a “first pass.” NVivo software was used to categorize and collate data units and/or themes. Subsequent “second pass” analysis carried out distinguished meaningful characteristics (codes), and, finally, “second pass (modified)” characteristics (codes) were distinguished. More information about this process follows in the next chapter.

4.5.9. Data Synthesis

Once I interpreted, analyzed and characterized (coded) the data, I created a general structure to synthesize patterns and essential characteristics held uniquely and in common by participants. Following, I wrote detailed participant profiles for each of the six interviewees that enabled deeper, reflective interpretation of data, correlated to emergent characteristics. This helped as a preparatory step to explicating research results.

4.5.10. Explicating Research Results

Explicating the results of phenomenological research comprises a final methodical step in helping reveal phenomenality. One describes the phenomenon through writing, reflecting and rewriting (Braun & Clarke, 2021). As van Manen (1990) points out, the *logos* of phenomenology implies a fusing of language and thought, retaining “the meaning of conversation, inquiry, questioning: of questioningly letting that which is being talked about be seen” (p. 33). The researcher amalgamates the

components illuminated during research and strives to shape a coherent narrative that traces back to the bases of research inquiry. While van Manen (1990) asserts “Hermeneutic phenomenology is fundamentally a writing activity” (p. 7), he also says (1990, 2014), the purpose of explication is to be evocative and, thus, the language chosen for it may be straightforward, poetic, visual, musical, or it may combine all of these modes.

The phenomenologist does not produce conclusive pronouncements, theories, a list of themes, or a selection of findings. Instead, as van Manen writes (2014), the phenomenologist “aims to be allusive by orienting the reader reflectively to that region of lived experience where the phenomenon dwells in recognizable form” (p. 390).

I embraced the challenge and entered deeply into writing, rewriting, amalgamating, interpreting excerpts from my participants and reflecting. Part of this included reflecting on and amalgamating my own learning experiences and also the insights pertinent to learning of phenomenological scholars, such as Husserl, van Manen, Henry and others mentioned in my chapter three literature reflection. I liken it in many ways to the challenge of producing evocative music and food as compositional and gardening activities in which I am also experienced and which also require heightened sensitivity to cultivating, selecting, sampling and sharing. In writing my research, I didn’t rely on my sense of taste or musicality, of course, but I experienced the fusion of intellect with embodied listening in considering how this research can evocatively address the research questions I posed.

4.5.11. Research Limitations

Moustakas (1994, 2011) writes that rich and vivid phenomenological descriptions “keep a phenomenon alive, illuminate its presence, accentuate its underlying meanings, enable the phenomenon to linger, retain its spirit, as near to its actual nature as possible” (p. 58). I aimed to satisfy this ambition through my relationship with six participants and wished, in addition to interviewing them, I could observe them closely, from which I might glean further descriptions about their learning experiences. This ambition was constrained, especially, by limitations imposed on this research emerging from health measures restricting human contact during the Covid-19 pandemic of 2020 to 2022. Throughout the duration of research collection two transmissible and serious

variants of the Covid-19 virus circulated regionally. Health measures introduced and enforced by the local school district precluded opportunities to observe three participants in schooling situations. Additionally, general health guidance urged people of all ages to limit interactions, particularly in interior settings, and this set a general tone of caution that influenced one other participant. The majority of research interviewing was thus done via online video interaction. Research participants were very comfortable in this interviewing environment and there were no obvious constraints noted. But I consider the circumstances that constrained researcher-observational settings to represent a limitation to this study. Having worked as a school educator I know varied situations occur during classroom life through student-learning object interactions, student-student interactions and student-educator pedagogical interactions. Each offers moments of insight about learning experiences. I tried to overcome this limitation by questioning the six study participants about their schooling and classroom experiences and I feel this did address to some extent the obvious limitations and illuminate their learning experiences.

4.5.12. Credibility and Validity

To demonstrate credibility or “truth value” (Gadamer, 1975), the qualitative researcher must show that his or her representations posited as “the truth” have been represented adequately and, as such, they are credible. Adhering to the research method outlined above and rooted in established phenomenological research praxis, helps to establish credibility. Claims of credibility in this case do not infer replicability or transferability in the empirical sense but reflect validity of a process of collecting “thick, rich descriptions”, the subsequent construction of participant perspectives, and adequate data synthesis. To van Manen (2014), reflexivity or “reflecting critically on oneself as a researcher” (p. 292), is also crucial to help regulate and validate research praxis. I embraced a reflexive stance throughout this inquiry which has guided me in further immersing myself in all the research processes and findings.

Another measure of credibility is linked to the subjective experience of reviewing the stages of research collection and data synthesis. Credibility is established particularly through engaging with the text, imaginatively, critically, and hermeneutically. Van Manen asserts the evaluation of a research inquiry does not rest with just the one writing up the text. He frames interpretive credibility as a series of interrogations a reader may pose: “Does the text induce a sense of contemplative wonder?” “Does the text offer

rich and recognizable experiential material?" "Does the text 'speak' to and address our sense of embodied being?" (pp. 355-356).

As a human science, phenomenology aims to be systematic, methodical, general, and critical. Giorgi (2012) advises that the phenomenological researcher is challenged in establishing research credibility, especially when pitted against almost all other branches of research that rely on empirical science linked to theoretical and hypothetical formulations. To reiterate, phenomenology does not strive to serve objectivist science; it concerns itself with subjective experience arising in and through consciousness, describing "what is given to consciousness and how it is given" (Giorgi, 2009, p. 68).

As a researcher striving to be systematic and methodical, I believe it is also important to consider how Husserl framed human science research. He wrote (1970),

> personal life is generally not theoretical, things are not generally scientifically thematic for persons in terms of how they are "in objective truth," "in themselves,"; rather, [they are present] just as they happen to be valid for them, just as the things which otherwise motivate them, determine them in their extrascientific action and passion. (p. 318)

With this statement, Husserl helps to set out a subjective notion of "validity" that is established in a person's consciousness and given, "extrascientifically" in motivation and passion. Husserl (1970) further situates a person's embodied consciousness arising through spirit and "concrete personal being" and leading to "experience of his surrounding world" (p. 320). This, he says, "is a fact for humanistic science" (p. 320).

Husserl's assertions stand in marked contrast to established notions of research credibility in naturalistic, empirical sciences, including domains of qualitative research that have diminished or ignored human subjectivity and spirituality (Bortoft, 2012; Husserl, 2012; Kaufman, 2013; Kimmerer, 2013). Husserl (1970) contended that empirical truth is attainable since: "As long as experience verifies itself and as long as I follow its harmoniousness, I attain empirical truth, I get to know the person" (p. 327). And in following the steps he prescribed for conducting phenomenological research, "an essential form of a spirit can be extracted and known" (p. 327). I concur with this and through recording and describing the givenness of learning arising in and through

subjective experience, as I have done in this research, I hope to have established the basis of the study validity.

4.6. Conclusion

This chapter offered an overview and rationale for the qualitative phenomenological research methodology used to gather and analyze participant data. It also detailed the methodical steps I followed to help reveal the meanings of the "experiences" of learning as they emerged in my interactions with my research group comprised of six teens. Details regarding participant solicitation were discussed, as well as details regarding the interviews and interview protocol. I employed all the steps circumscribed by descriptive and hermeneutic approaches to phenomenological research and I believe that purposefully integrating description and interpretation helped strengthen my research. I adopted a phenomenological attitude of openness and curiosity about learning as I began my research and I suspended or bracketed previous notions I held about learning as best I could. Through interviewing, I registered the individualized experiences of participants, in particular seeking to explore, elucidate and better understand the perspectives they shared of their lived-through, concrete experiences of learning. I listened carefully and repeatedly to audio transcriptions to register nuanced responses, such as pauses, changes in tempo and pitch of response. I welcomed and perused other artifacts that helped elucidate the research questions. Participant descriptions revealed variegated and idiosyncratically intentional structures of consciousness through which deeper, "horizontal" reflection yielded thematic iterations during the data analysis. I liken these to windows into each participant's lived-through experiences of learning. These thematic iterations were shared with participants for feedback and clarification, and some additional conversing about essentialized meanings occurred, which contributed to further synthesis of the study findings.

This chapter also included a discussion of ethics and reflexivity, data analysis, the approach to interpreting and writing research results, limitations of research and establishing credibility and validity. In the following chapter I address the specific data and results emerging from this qualitative fieldwork research component of this study. As a preface to that study, I will provide autobiographical inquiry into the arising and appearing of meaning-making and thus learning.

Chapter 5. The Appearances of Learning as Revealed Through Autobiography and Fieldwork Research

"You road I enter upon and look around, I believe you

are not all that is here,

I believe that much unseen is also here.

- *Song of the Open Road* (Whitman, 1892, p. 119)

In the Introduction I reflected on the character and appearance of learning revealed through the *Pond/ering* and *Pushing off from Shore* experiences I recounted from my childhood and youth. This helped to establish a first-person, experiential footing for this dissertation. The present chapter extends this initial inquiry by synthesizing data from various autobiographies which are, in turn, linked to a fieldwork project based in qualitative, phenomenological research methodology. These dissertation components provide a sustained explication of the nature and appearances of learning.

5.1. Learning Revealed through Autobiography

Autobiography comprises personal descriptions and reflections on lived experiences, presenting or *presencing* a life-in-motion. Rich autobiography illuminates poignant, personal insights and intersections with contextual forces shaping and influencing one's existence. Like a complex puzzle that comes into focus, autobiography reveals intuitive or pre-theoretical contact with originary drives and sensibilities that guide the evolution of a self. Readers of autobiography glimpse the forming of beliefs, thoughts and affects that fuel the fires of living and learning.

I've long been a seeker of autobiographical insights, particularly because of the nuanced senses I discern about learning when I read them. The selection in this chapter includes several excerpts I've referred to throughout my educator career. In reading and re-reading them I grasped a depth of encounter that has inspired much thinking and, to some appreciable extent, melded with my own experiences. I filed them on bookshelves

or in folders but they also endured within my consciousness, and are not so different than my *Pond/ering* as a young boy and *Pushing off from Shore* descriptions. Investigating the nature of learning has provided me yet another opportunity to review these autobiographical snippets and consider others in the arising of meaning-making, or learning. I was further motivated in this direction after reading how sociologist-author Edith Cobb (1977) compiled an extensive collection of autobiographical insights for *The Ecology of Imagination in Childhood*. With fresh energy, I chose a selection of autobiographical reflections in which I intuited a variegated phenomenality of learning linked to an undeniable subjectivity. In these excerpts I sensed a primary presence or first-person givenness for constituting a felt, corporeal sense of self.

In the excerpts I provide below, I glimpse originary insights, appearances and arisings of learning. And with the help of a phenomenological lens, they detail personal discovery and affective states given through self-inspiring and also traumatizing events. They offer insights into relationalities, connecting to human and non-human entities, as well as imaginative ideation. This broad relationality extends to pedagogical observations made by students and also educators like me. Other educators include Ann Sullivan, long-time tutor to blind and renowned disability activist Helen Keller, and John Holt, author of numerous books and articles about student learning and the state of public education. These excerpts help reveal characteristics of educative praxis that, in the nurturance of student learning, reflect a pedagogy deeply acknowledging student subjectivity.

Philosopher Maxine Sheets-Johnstone has written extensively about impressions of “selfhood” linked to lived experience. Acknowledging important contributions from phenomenologist Edmund Husserl and psychiatrist Daniel Stern, she writes that the lived body is “fundamentally grounded in an affectively and kinetically alive hereness” (Sheets-Johnstone, 2020, p. 8) from which the sense of a core self emerges “not reified in any way, shape, or form” (p. 14). Phenomenological reflection, she continues, is key to precisely elucidating “what the character of that feeling is, what tensions, pressures, propulsions, dispositions, and overall dynamics one finds reverberating in a bodily felt presence, a hereness” (p. 18).

Sheets-Johnstone confirms how studying subjective experiences and reflecting on them phenomenologically can reveal important insights that may have been

overlooked or dismissed while seeking to theorize or scientifically categorize experiences in general. Learning is such an experience and, in considering how it "hangs together" for oneself or another phenomenologically, readers should be provided a clear sense of a pre-theoretical self-revealed and opened-up to expose a "foundational reality of animate life" (p. 23).

The autobiographical excerpts below meet these criteria. In reading and listening to them with a phenomenological attitude open to encountering the Other, I discerned learning and living described-as-experienced subjectively in raw, exuberantly joyful and also painful ways. I have distinguished several common characteristics associated with the descriptions. These characteristics provide further inkling of the subjective appear*ances* of learning and consolidate this study's deeper exploration of the nature of learning in the fieldwork study that follows.

Excerpts i-ix are first-person descriptions in which learning is either directly referred to or clearly inferred from the passage. Excerpts ix-x are first-person descriptions that provide insights into learning as influenced in an educative context with the help of a mentor. Excerpts xi-xiii convey a pedagogical interpretation directly related to student learning.

5.2. Autobiographical Insights into Learning

Excerpt i: childhood learning experiences described by author and lifelong disability rights activist Helen Keller:

> As the cool stream gushed over one hand (my teacher) spelled into the other the word water, first slowly, then rapidly. I stood still, my whole attention fixed upon the motions of her fingers. Suddenly I felt a misty consciousness as of something forgotten—a thrill of returning thought; and somehow the mystery of language was revealed to me. I knew then that "w-a-t-e-r" meant the wonderful cool something that was flowing over my hand. That living word awakened my soul, gave it light, hope, joy, set it free! There were barriers still, it is true, but barriers that could in time be swept away. (Keller, 1905, loc. 263-264)
>
> … I recall many incidents of the summer of 1887 that followed my soul's sudden awakening. I did nothing but explore with my hands and learn the name of every object that I touched; and the more I handled things and learned their names and uses, the more joyous and confident grew my sense of kinship with the rest of the world. (loc. 276)

> Knowledge is happiness, because to have knowledge—broad, deep knowledge—is to know true ends from false, and lofty things from low. To know the thoughts and deeds that have marked man's progress is to feel the great heart-throbs of humanity through the centuries; and if one does not feel in these pulsations a heavenward striving, one must indeed be deaf to the harmonies of life. I enjoy my lessons very much. (loc. 1116)

Excerpt ii: childhood learning experiences described by actor John Lithgow:

> Standing onstage at age seven in my first scene in *A Midsummer Night's Dream* is one of the most potent memories of my childhood. ... Poetry pours forth from Oberon and Titania as Shakespeare seems to swoon at the chance to write dialogue for fairy royalty. And there I stood, half-forgetting that I was in a play, drinking it all in -- in the moonlit night, the pungent summer air, the cool breeze, the warm glow of stage lights, the distant shriek of cicadas, and the mysterious, half-lit faces of the audience hanging on every word.
>
> And such words! They washed over me in waves, unamplified and gorgeously spoken, especially in the honeyed baritone of Earle Hyman as Oberon. And age seven, I barely knew what any of those phrases meant, but their sheer beauty enthralled me. (Lithgow, 2012, p. 12)
>
> The laughter was earsplitting. It filled me with joy. ... For a week I had been a shy, despondent, homesick camper. As of that night, I was a Scout camp star. If you hear enough applause and laughter at a young enough age, you are doomed to become an actor. After performance as the damsel-in-distress, my fate was probably sealed. (pp. 16-17)

Excerpt iii: childhood learning experiences described by award-winning writer Susan Sontag:

> When I was five or six, I read Eve Curie's biography of her mother. I read comic books, dictionaries, and encyclopedias indiscriminately, and with great pleasure. ... It felt like the more I took in, the stronger I was, the bigger I got, the bigger the world got....I started writing when I was about seven. I started a newspaper when I was eight, which I filled with stories and poems and plays and articles, and which I used to sell to the neighbors for five cents. I'm sure it was quite banal and conventional, and simply made up of things, influenced by things, I was reading..... Whatever I saw I loved, and whatever I loved I wanted to imitate – that's not necessarily the royal road to real innovation or creativity; neither, as I saw it, does it preclude it....I started to be a real writer at thirteen. (cited in Sacks, 2018, pp. 130–132)

Excerpt iv: teen learning experiences described by (autistic, non-verbal) writer Naoki Higashida

> (listening and writing) Spoken language is a blue sea. Everyone else is swimming, diving and frolicking freely, while I'm alone, stuck in a tiny boat, swayed from side to side. Rushing toward me are waves of sound. Sometimes the swaying is gentle. Sometimes I'm thrown about and I have to grip the boat with all my strength. If I'm thrown overboard I'll drown – a prospect so disturbing, so laden with despair, It can devour me. At other times, however, even if I can't swim in the water, I gaze at the play of light on the surface, delight at being afloat on it, trail my hands and feet in the sea, and dream of jumping in with everyone else. When I'm working on my alphabet grid or my computer, I feel as it someone's cast a magic spell and turned me into a dolphin. I dive down deep – then shoot back up, break the surface and surprise all the swimmers. The process can feel so free, so effortless, that I almost forget I was ever stuck in that boat. (Higashida, 2017, p. 61)
>
> (composing a story): When I'm writing a story, I try to inhabit it by becoming the main character. Passing to and fro between the world of the story and my daily reality, the dreaming boy I once was coexists with the adult I am now. Time loses definition. Translating into words the thoughts and landscapes that appear in my head brings me profound fulfillment. I don't really map out my plots or decide upon a structure too much in advance. As I write, a story's elements kind of settle into place by themselves.
>
> … Ideas and emotions exist first, to my mind; words come second, to give form to the ideas and emotions. Certainly, people with an impressive vocabulary can express their ideas more precisely, but these ideas exist independently of the words used to describe them. (p. 63)

Excerpt v: young adult learning experiences described by Academy Award-winning documentary film-maker Michael Moore:

> I *looooooved* the movies. I always did. ... I came of age as a teenager when the great films of the late sixties and early seventies blasted their way onto the screen. ... At seventeen, I saw Stanley Kubrick's *A Clockwork Orange*, and then I saw everything else by Kubrick, and after that there was no looking back. I was hooked on the potential and the power of cinema. ... Two years later I opened my own "art haus" in Flint where, for just two nights a week, I would show everything by Truffaut, Bergman, Fassbinder, Kurosawa, Herzog, Scorsese, Woody Allen, Buñuel, Fellini, Kubrick, and the masters of cinema. Each film would get four showings, and I would spend my Friday and Saturday evenings watching all four shows. On the first viewing I would sit close and enjoy the experience. On the following three screenings, I would sit in the back and study them, sometimes taking notes. This became my one-room, one-student film school. (Moore, 2011, pp. 398-399)

Excerpt vi: childhood and adolescent learning experiences arising through abuses described by First Nations students who attended Canadian First Nations Residential Schools:

> Even our own language was considered ugly; we weren't allowed to speak Cree language. I wasn't allowed to be myself as a Cree woman. Everything was filthy, even our monthlies and that's how I learned it at home and what I learned from the residential school, everything was ugly. And that's where I learned a lot of ugliness also, I became a compulsive liar, learned to live in the world of denial. When I was younger, I learned how to hate, I hated my own mother, I blamed her for allowing us to be taken away even though at that time I didn't realize she didn't have a choice. It wasn't until 1990 that she told us that "I didn't have a choice. It was either that, or me going to jail. I had to let you kids go to school," 'cause that's when I disclosed to them both my mom and dad what I went through in residential school in 1990. (Truth and Reconciliation Commission of Canada, 2015b, pp. 56-57)

> Some students never reported abuse for fear they would not be believed. Other students who did report abuse were told that they were to blame. In some cases, school officials took immediate action when abuse was reported to them, but the rarity of such actions is itself noteworthy. Former students spoke of how betrayed they felt when nothing was done about their complaints. Many simply felt too ashamed to ever speak of the abuse. Family members often refused to believe their children's reports of abuse, intensifying their sense of isolation and pain. … The impact of abuse was immediate and long-lasting. It destroyed the students' ability to function in the school and led many to turn to self-destructive behaviours. Staff abuse of children created conditions for the student abuse of other students. (Truth and Reconciliation Commission of Canada, 2015a, p. 108)

Excerpt vii: childhood learning experiences arising though childhood abuse described by poet rupi kaur:

> believe them when they say
>
> you are nothing
>
> repeat it to yourself
>
> like a wish
>
> *i am nothing*
>
> *i am nothing*
>
> *i am nothing*
>
> so often

the only reason you know

you’re still alive is from the

heaving of your chest

- *the art of being empty* (kaur, 2015, p. 33)

Excerpt viii: adult learning experience described by writer-photographer Hannah Bourne-Taylor:

For the next 84 days, the fledgling lived on me. We became inseparable. He would fly alongside me, or cling to me as I went from room to room in the house, while we walked the grasslands or when I drove. He’d rest in my hand. As he learned to fly, he’d make short flights from my hand, to my shoulder, to my head, then abseil down my waist-length hair to rest again. He investigated my clothes, belt and shoelaces. I ate and went to the toilet one-handed, as he took daily naps in my cupped palm. At dusk, I would stroke and chirp to him until his eyes drooped and his head lolled to one side. Then I’d lower him into his tea towel nest and leave him until dawn**.**

Each day, he made little “nests” in my hair, on the groove of my collarbone, which filled me with awe. He’d tuck himself under a curtain of hair and gather individual strands with his beak, sculpting them into a round of woven locks, resembling a small nest, then settling inside. He would allow it to unravel when he was done and start again the next day.

I learned his different calls; he purred when he was content, sounded a high-pitched alarm when he was afraid. I’d forage for his food and clean up his litter, which was exhausting. I never named him because he didn’t belong to me – I had to remind myself that he needed to return to the wild.

Our bond was so strong that it became immeasurable – we both needed each other. In return for putting his life back on course, he was replotting mine by giving me purpose and new perspective. (Bourne-Taylor, 2022)

Excerpt ix: childhood learning experiences described by author-conservationist Gerald Durrell:

During the last days of the dying summer, and throughout the warm, wet winter that followed, tea with Theodore became a weekly affair.

Theodore would welcome me in his study, a room that met with my full approval. It was, in my opinion, just what a room should be. The walls were lined with tall bookshelves filled with volumes on freshwater biology, botany, astronomy, medicine, folklore, and similar fascinating and sensible subjects. At one window of the room stood Theodore's telescope, its nose to the sky like a howling dog, while the sills of every window bore a parade of jars and bottles containing minute freshwater fauna, whirling and

twitching among the delicate fronds of green weed. On one side of the room was a massive desk, piled high with scrapbooks, micro-photographs, Xray plates, diaries, and note-books. On the opposite side of the room was the microscope table, with its powerful lamp on the jointed stem leaning like a lily over the flat boxes that housed Theodore's collection of slides. The microscopes themselves, gleaming like magpies, were housed under a series of beehive-like domes of glass.

'How are you?' Theodore would inquire, as if I were a complete stranger, and give me his characteristic handshake - a sharp downward tug, like a man testing a knot in a rope. The formalities being over, we could then turn our minds to more important topics.

'I was . . . er . . . you know . . . looking through my slides just before your arrival, and I came across one which may interest you. It is a slide of the mouth-parts of the rat flea . . . *ceratophyllus fasciatus*, you know. Now, I'll just adjust the microscope. . . There . . . you see? Very curious.

'Now this one is a *cyclops* . . . *cyclops viridis* . . . which I caught out near Govino the other day. It is a female with egg-sacs. . . There are several species of *cyclops* found here in Corfu. . .

Tea would arrive, the cakes squatting on cushions of cream, toast in a melting shawl of butter, cups agleam, and a faint wisp of steam rising from the teapot spout.

Sitting there, neat and correct in his tweed suit, Theodore would chew his toast slowly and methodically, his beard bristling, his eyes kindling with enthusiasm at each new subject that swam into our conversation. To me his knowledge seemed inexhaustible. He was a rich vein of information, and I mined him assiduously. No matter what the subject, Theodore could contribute something interesting to it. At last I would hear Spiro honking his horn in the street below, and I would rise reluctantly to go. (Durrell, 1959, pp. 80-82)

Excerpt x: adolescent learning experiences described by (autistic) student Donna Williams:

It was my last year in primary school. I was twelve years old. It was the seventies, and my new teacher was something of a hippie. His face seemed to peep out from a bush of bristly hair. He was tall and gangly with a gentle voice that seemed somehow "predictable."

Mr. Reynolds was fairly "alternative," I suppose. He brought in records and asked us to tell him what we thought the music and songs were saying to us. What I liked, most of all, was that there were no wrong answers. Everything was supposed to mean only whatever it was to each child.

We would put on plays, and everyone go to do bits of whatever they chose to do -- setting up props, painting scenery, or trying different parts. Even the audience was made to feel that they had a role to play.

Mr. Reynolds never emphasized ability, but instead allowed me to show him what I was capable of, and he would tell me which things I did better than others. It was as though the class was his family and he had, for me, become my new father.

This teacher spent a lot of time with me, trying to understand how I felt and why I did the things I did. Even when he raised his voice, I could still sense his gentleness. He was the first teacher at that school to whom I made an effort to explain what was happening at home, though I still never discussed what was happening within myself. His mood never changed. He never seemed to betray my trust. (Williams, 1992, p. 47)

Excerpt xi: observation of learning while seeking to personalize learning for one of my students[14]:

Addy: I began working as Addy's learning consultant (educator) in SelfDesign Learning Community, a BC-based, innovative, online school oriented to personalizing learning for all students, in 2014. He lived in a town in the province's interior and the main way of communicating with him and his tutors was via email and via Skype. When I first met Addy, he was 15 and enrolled as a Special Needs learner, diagnosed as autistic with several impairment issues. Addy had previously had many negative experiences at a local public school, and he was working at two-three grade levels below the expected grade for his age. With additional program funding, he was receiving personal tutoring at a private learning centre in his hometown. I first met Addy as well as his tutors and his mother face to face on a visit to the learning centre. It was challenging to converse with him at that time as he retreated behind a dark hoodie and said very little. His mother confirmed he lacked confidence though he was clearly well supported by her and the learning centre tutors. Like them, I strove to understand and accept Addy 'as he was' and not how others had determined him to be, for example, from the results of test scores.

Through the year, Addy made plodding, modest progress on a range of social, behavioural and academic goals as summarized in his Individual Education Plan (IEP); I received reports from his tutors, and I had monthly contact with them via skype. Over this time, I sensed my relationship with him was growing and it was also evident he was becoming more animated with his tutors who responded in kind. One day he mentioned to me he had a writing project he'd been working on at his home, something about monsters, a favourite subject of his. He hadn't shown it to his mother or his

[14] Personalizing learning, for me as an educator, emerges through, first, perceiving a learner as a person striving to come-into-being, and then, working to create a relationship of co-existence in which we may work together in serving his or her learning interests.

tutors, but he knew I was a writer (I'd shared some of my writing experiences with him), and he was willing to share his story with me. An email message from him soon followed with an attached file, *Monster Quest*. I opened it tentatively and read it over. I was stunned. He had written a near-flawless short story of around 12,000 words. The subject matter might have been a little 'cheesy' but it had gripping drama, excellent cadence and flow, and it was polished. I re-contacted him immediately via skype to offer my congratulations and review with him what I thought were the story highlights, and why I admired the writing. He was beaming, shaking in fact, at getting such feedback. He consented to me sharing my impressions with his mother and tutors, and I did so. They were all deeply surprised and emotionally moved at the news. His mother sobbed when I remarked to her that I thought this was a step for Addy that would change his life trajectory. Somehow, he had learned how to write, I said, and I confirmed his cognitive writing abilities were equal to most adults I knew, and maybe better.

We checked in with Addy to ask him how he wanted to use this achievement to continue learning. He was elated that we recognized his achievement, and told us he wanted to continue writing, and just keep on with the habits he was developing and nurturing at the centre. We all agreed that was a good plan.

I continued as Addy's learning consultant for two more years, during which time he completed additional story manuscripts which were sequels to, and on par with the original *Monster Quest*. He also soon accelerated in other aspects of his learning life, catching up to his expected grade levels in core subjects, the progress of which he documented in learning reports he wrote and sent to me. By this time his hoodie was gone and Addy presented himself in and beyond the centre with zeal and confidence. When I last spoke with him and his mother, in 2017, he was anticipating graduating from high school with a Dogwood diploma, after which he hoped to join her in her cleaning business. And as I had suggested to him, he was sending his story manuscripts to potential publishers.

Something 'clicked' for Addy in the winter and spring of 2015, something that propelled a deep, personal urge to develop his writing skills and tell a story, through which his sense of self significantly shifted. This experience happened for him, I believe, neither accidentally nor serendipitously, but in conjunction with unconditional, positive support offered to him by his mother, two tutors and myself, and through seeing him, not as we wanted him to be, but just as he was in his being-and-becoming. And through this I felt as if all of us had waded in the water and were helping steady a canoe until Addy found the right balance and confidence to 'push off from shore' with his own power.

Excerpt xii: observation of learning by Anne Sullivan, tutor-educator to Helen Keller:

> I tried from the beginning to talk naturally to Helen and to teach her to tell me only things that interest her and ask questions only for the sake of finding out what she wants to know. She (Helen) observes the slightest emphasis placed upon a word in conversation, and she discovers meaning in every change of position, and in the varied play of the muscles of the hand 4538. (Keller, 1905, loc. 4538).
>
> Helen acquired language by practice and habit rather than by study of rules and definitions. Grammar with its puzzling array of classifications, nomenclatures, and paradigms, was wholly discarded in her education. She learned language by being brought in contact with the LIVING language itself; she was made to deal with it in everyday conversation, and in her books, and to turn it over in a variety of ways until she was able to use it correctly….Children will educate themselves under right conditions. They require guidance and sympathy far more than instruction. (loc. 4940)

Excerpt xiii: observation of learning by author-educator John Holt:

> On days when I have a lesson, I bring my cello to school, take it to a classroom, and give the children a turn at “playing” it. Except for the timid ones, who make a few halfhearted passes with the bow and then quit, almost all little children attack the cello in the same way. They are really doing three things at once. They are making the machine go. They are enjoying the luxury of making sounds. And they are making scientific experiments. They start off by working the bow vigorously back and forth across one of the strings. They keep this up for a long time. Just the feel and sound of it are exciting. Then they begin to vary their bowing a bit, trying different rhythms. After a while they begin to move the bow so that it touches more than one string, or they move to another string. But it is important to note that the first few times they do this, they do not seem to be doing it in the spirit of an experiment, to find out what will happen. They do it for the sake of doing it. They have been bowing one way, making one kind of noise; now they want to bow another way, and make another kind of noise. Only after some time does it seem to occur to them that there was a relation between the way they bowed and the kind of noise they got. Then there is quite a change in their way of doing things….They have to pile up quite a mass of raw sensory data before they begin trying to sort it out and make sense of it.
>
> A trained scientist wants to cut all irrelevant data out of his experiment. He is asking nature a question, he wants to cut down the noise, the static, the random information, to a minimum, so he can hear the answer. But a child doesn’t work that way. He is used to getting his answers out of the noise. He has, after all, grown up in a strange world where everything is noise, where he can only understand and make sense of a tiny part of what he experiences. His way of attacking the cello problem is to produce the

> maximum amount of data possible, to do as many things as he can, to use his hands and the bow in as many ways as possible. Then, as he goes along, he begins to notice regularities and patterns. He begins to ask questions—that is, to make deliberate experiments. But it is vital to note that until he has a great deal of data, he has no idea what questions to ask, or what questions there are to be asked.
>
> Where the young child, at least until his thinking has been spoiled by adults, has a great advantage is in situations—and many, even most real life situations are like this—where there is so much seemingly senseless data that it is impossible to tell what questions to ask. He is much better at taking in this kind of data; he is better able to tolerate its confusion; and he is much better at picking out the patterns, hearing the faint signal amid all the noise. Above all, he is much less likely than adults to make hard and fast conclusions on the basis of too little data, or having made such conclusions, to refuse to consider any new data that does not support them. And these are the vital skills of thought which, in our hurry to get him thinking the way we do, we may very well stunt or destroy in the process of "educating" him. (Holt, 1967, 1982, loc. 1064-1120)

5.3. Reflections on the Excerpts

Autobiographical writing is concerned with constructing a coherent narrative through sharing personal insights and subjective experiences. Its use has been validated in counseling practices and also qualitative and quantitative research spanning various domains, including education. (Moustakas, 1994; Siegel, 2010; Smith, 2017). Pedagogical (educator) observation and reflection also serves to synthesize important details about a student's experiences of learning, albeit from a third party or researcher perspective. In opening myself to the autobiographical excerpts above, I perceive learning arising and entangled with the foundational characteristics I linked to phenomenology in chapter three. Below, I elaborate how I understand these characteristics.

5.3.1. Learning is fused with a sense of emerging selfhood, arising idiosyncratically and often linked to deep, vital interests and personal meaning, or questing to create meaning.

This is seen clearly in many of the descriptions where learning is an act of encountering one's self. Where Michael Moore describes seeking to satiate his deep passion for cinema as a teen, Donna Williams recounts how her teacher thoroughly acknowledged her in her unique ways, and Naoki Higashida's tells of an immersion in

writing that impels him to imagine himself as a free, frolicking dolphin. The accounts by residential school survivors are sad but no less compelling, reflecting a sense of self-shame, self-denial and self-destruction, as is Rupi Kaur's poem intimating profound self-deprecation. And Susan Sontag recounts how the activities that were so compelling to her as a child were vitally linked to her lifelong career as a professional writer.

Educator John Holt notices how children making music on his cello are seeking to deduce patterns in the ways they interact with the instrument and create sounds; tutor Ann Sullivan observes how Helen Keller precisely adduces meaning through her tactile encounters with sign language and the circumstances of her lifeworld.

5.3.2. Learning arising as an animated and embodied dynamic act of the sensing (affective) and life-infused body.

This characteristic can be discerned in many of the descriptions where learning is recounted as emotionally charged. John Lithgow is "filled with joy" in acting in a childhood play, Helen Keller speaks of the "wonderful cool water" she was experiencing as a breakthrough with the help of sign language, and Michael Moore was enraptured by the movies he watched, studied and "looooooved." A survivor of Canadian residential schools describes how she "learned to hate" and engaged in acts of denial and lying as a result of her school residency. Susan Sontag says that what she read as a child she "loved" and what she loved she was moved to imitate in her early writing. Gerald Durrell contributes a colourful description of his mentor, Theodore, a professional scientist whom the young student deeply admired and enjoyed spending time with, listening to raptly, and with whom he conversed about issues of scientific interest.

"Life-infused" is also an appropriate conjunction for a phenomenological characteristic appearing consistently throughout the excerpts. To infuse is to permeate and also inspire, derived from the Latin *infundere*, "to pour into or mingle" (Online Etymological Dictionary, 2017). I mean it not as a materialistic feature but psychologically inked to notions of vitality I referenced in the previous chapter. in many excerpts the authors directly confirm a learning experience linked to or inspiring a sense of "aliveness." I see this in the description by Helen Keller who experiences a somatic and intellectual epiphany about water with the help of sign language and through which she experiences "a living word" awakening her soul. Helen Keller's tutor Ann Sullivan

also perceives Helen's learning arising through contact with "LIVING LANGUAGE" which she encountered through reading, conversing and world-exploring with the help of her senses. Actor John Lithgow describes being "enthralled" through the language he hears and recites onstage in a childhood performance of a Shakespearian play. And with respect to Addy, the autistic student I mentored, I regarded his writing breakthrough as a dynamic, vital event that compelled me, his other tutors and his mother to affirm not only his breakthrough but also confirm him as a living being undeniably transformed through this learning act. This confirmation and his self-satisfaction impelled him to continue writing. I also discern this demonstrable characteristic of leaning inferentially in the case of the residential school survivor who describes how she experienced the school as degrading alienating, and where she "learned to live in the world of denial." Life is indeed an animating, enlivening power we experience in myriad forms and effective gestures.

5.3.3. Learning arising through aspects of relationality (intersubjectivity, empathy and pedagogy), and in some fusion with the surrounding environment, the 'lifeworld', which includes non-human living things.

This learning characteristic is gleaned from many of the descriptions as a kind of physical or preconscious contact. Hanna Bourne relates a vivid experience of co-habitating with a bird for 80-plus days, and Helen Keller enthusiastically explores the objects around her, each of which kindled a "sense of kinship" with the world. Michael Moore describes how he absorbed the experiences and lessons of film over multiple viewings in the personal cinematic "art haus" he created in his home city. Gerald Durrell emphasizes how the room of his biology lessons, adorned with science paraphernalia and living specimens, captivated his attention and primed his study. Naoki Higashida relates his own captivation with fantasy worlds through writing and with the help of the technology that provided him this opportunity. The residential school survivors relate events linked to the attitudes of the people abusing them and the structures of an education-incarceration system that brought anguish into their lives in so many ways.

Educator John Holt provides details about children interacting in significant ways with the cello he presents to them and he notices the different ways each student interacts with the instrument and discerns some personal meaning. My personal comment in regard to this learning characteristic pertains to noticing how Addy has

produced a fantasy world with which he creates a breakthrough story, written exquisitely, as an event that propels him on to write additional stories. Tutor Ann Sullivan relates how her student Helen Keller "learned language by being brought in contact with the LIVING language itself," which propelled her "to turn it over in a variety of ways until she was able to use it correctly."

5.3.4. Learning arising as an event, encounter or circumstance of some sustained duration and temporality.

All the excerpts I selected, including my own pedagogical reflection, evoke a sense of temporality, of many different things emerging, arising, being shaped or manipulated "over" and "through" time. This temporality, or eventiality as Claude Romano (2009) called it, helps define a lingering, lasting significance, even if the time is but a moment, as exemplified by John Lithgow encapsulating his rapturous, first experiences acting on-stage as "drinking it all in in the moonlit summer night." Helen Keller conjures up a much longer duration in exploring the world through somatic language and creating her own "knowledge" just as others have done who have felt "the great heart-throbs of humanity through the centuries." Gerald Durrell is absorbed in his lessons with Theodore until he hears a horn honking, signalling the lesson's end, and rises "reluctantly" to leave. Donna Williams describes how her teacher spends much time with her, "trying to understand how I felt and why I did the things I did," in a growing trust. Poet Rupi Kaur relates an ongoing, percussive sense of time passing while experiencing domestic, emotional abuse, while Hanna Bourne describes many acts she co-experiences with the young fledgling she helps raise over 80+ days. An experience of "learning hate" and blaming her mother for having to endure residential schooling is tempered when she realizes later on that her mother was manipulated into surrendering her to government authorities under penalty of jail.

Educator John Holt relates an important distinction in noting that children playing his cello spend time acquiring sensory data that helps them interpret the results they are experiencing. Each child, he asserts, will form questions as part of discovering meaning in their-cello-playing only when they have had sufficient time; in the absence of sufficient time, they will not reach a stage of asking questions. From Addy's learning and writing breakthrough that I relate, I understand his use of time as a kind of "embryonic" period – a natural time of assimilation and growth until a new life-form is ready to emerge from its

previous form. During this time I believe Addy was plotting, gathering information, anticipating and experimenting with story-writing. Then he had a transforming experience that propelled him to create ‘Monster Quest’ in such a commendable form.

Phenomenological philosopher and author Max van Manen asserts (1990) that “the project of phenomenological reflection and explication is to effect a more direct contact with the experience as lived” (p. 78). The autobiographical excerpts above imply broad and diverse appearances of learning. Yet amidst these appearances it can be said that learning is directly or tacitly refracted in these descriptions as bound to subjectivity, affectivity, relationality and emerging, animated selfhood that is temporally cast. Through its phenomenal appearances learning arises idiosyncratically and, as such, personal meaning is to be found in each autobiographical account. I also discern the above learning characteristics as substantiating the phenomenality of learning posited in chapter three. Accordingly, these autobiographical reflections contribute to a more granular understanding of the nature of learning and serve as a further primer for the fieldwork portion of this dissertation which I will now discuss in the next sections.

5.4. Learning Revealed through Fieldwork Research: Data Analysis and Discussion

Fieldwork research involved interviewing six research participants at approximately 5-6-week intervals over an eight-month period. Research participant profiles are detailed in Table 5.1

Participant	Age (Jan 1, 2022; mid-research)	Gender	Education status	Interview details	Interview format(s)	Research, quantified	Other considerations
AM	17	F	High school, ft	6 in total; 45-60 min. duration, each	Zoom + in-person	approx. 83 pp. int. transcript; no additional artifacts	Emigrant from Ukraine, 2020; English = 2nd language
BM	16	F	High school, ft	6 in total; 45-60 min. duration, each	Zoom + in-person	approx. 70 pp. int. transcripts, no additional artifacts	Emigrant from Ukraine, 2020; English = 2nd language
CS	18	M	Home-learning, no program affiliation, ft	7 in total; 45-60 min. duration, each	Zoom + in-person	approx. 90 pp. int. transcript;	medically identified with OCD (2022)
KL	13	F	Home-learning, BC-certified independent program, ft	7 in total; 45-60 min. duration, each	Zoom + two observational visits	approx. 117 pp. int. transcript; + photos from two observational visits	none of note
SR	17	F	High school, ft	7 in total; 45-60 min. duration, each	Zoom + in-person	approx. 98 pp. int. transcript; + 2 additional email responses	medically identified with ADHD, anorexia (2021)
WJ	17	M	Home-learning, BC-certified independent program, ft	7 in total; 45-60 min. duration, each	Zoom	approx. 130 pp. int. transcript; + reviewed var. media creations + game session recording	none of note

Table 5.1. Research participant characteristics

The purpose of this phase of the study was to test out the emerging nature of learning through *in situ* inquiry, and through reflecting on what transpired between the participants and me through the data that was generated, the bulk of which consisted of interview transcripts and audio files, supported by some additional observational data and textual material. In concert with the steps associated with Reflexive Thematic Analysis (Braun and Clarke, 2021), interview transcripts for each participant were carefully reviewed and re-reviewed, from which I initially generated a first pass assemblage of characteristics or codes. Coding was completed with the help of NVivo qualitative analysis software which afforded efficiencies of data capture and display. A Data Analysis Journal was faithfully maintained for two months (as referenced in Appendix C).

On the first pass through the data I designated 23 to 55 codes per participant. Each code revealed a singular unit of meaning or characteristic of the participant's experience of learning. Following the first pass, I carefully reviewed the coded documents and, on reflection, determined that it was important to consider first pass selections for each participant more deeply. Subsequently, I completed a second pass of coding in which I applied deeper focus and consideration to participant replies with respect to the main research question. In completing this, I merged some first pass codes, ignored some, duplicated some, and also created a few new categories which

helped create a more granular and accurate document for each participant. Advancing to craft profiles for each participant based on this coding primed additional reflections and meant modifying my second pass coding, thereby further grounded the drafting of participant profiles and subsequent elaboration of themes related to my research question. A researcher-generated codebook, comprising all the codes designated for second pass (modified) coding, is given below as Table 5.2.

CODEBOOK – *Unfolding Learning* research

SECOND PASS (modified) Characteristics (Codes)

Participant - Characteristic	Description	Files	References
AM		1	
- Self-Aware	This designation reflects learning that is linked to self-awareness		10
- Learning attitude/disposition	This designation reflects learning that is linked to aspects of attitude and disposition		10
- Methodical	This designation reflects learning that is linked to personal methodology and strategy		11
- Relational (inet/tech/social)	This designation reflects learning that reflects aspects of relationality		7
- Personalized/personalization	This designation reflects learning that is linked to aspects of personalization and/or a personalized nature		37
BM		1	
- Self-Aware, self-discerning, critical	This designation reflects learning that is linked to self-awareness and self-discernmnent		
- Methodical	and criticality		6
- Personalization/personalized	This designation reflects learning that is linked to personal methodology and strategy		2
	This designation reflects learning that is linked to aspects of personalization and/or a personalized nature		9
CS		1	
- Learning attitude/disposition	This designation reflects learning that is linked to aspects of attitude and disposition		29
- Methodical	This designation reflects learning that is linked to personal methodology and strategy		6
- Generative	This designation reflects learning that is generative and creative		3
- Evential-Temporal	This designation reflects learning that is evential and/or temporal in nature		4
- Relational	This designation reflects learning that reflects aspects of relationality		10
- Personalized/personalization	This designation reflects learning that is linked to aspects of personalization and/or a personalized nature		5

Participant - Characteristic	Description	Files	References
KL		1	
- Relational	This designation reflects learning that reflects aspects of relationality		9
- Ethicality	This designation reflects learning that is linked to aspects of ethicality		12
- Learning awareness/sensitivity	This designation reflects learning that is linked reflects critical awareness and sensitivity		15
- Study and apply to learn and improve	This designation is linked to disciplined and applied study to learning and improve		9
- Personalization/personalized	This designation is linked to aspects of personalization and/or a personalized nature		4
SR		1	
- Affectivity & learning environment	This designation reflects learning that is linked to affectivity and learning environment		8
- Methodical	This designation reflects learning that is linked to personal methodology and strategy		5
- Ethicality	This designation reflects learning that is linked to aspects of ethicality		5
- Personalization/personalized	This designation is linked to aspects of personalization and/or a personalized nature		3
WJ		1	
			3
- Ethicality	This designation reflects learning that is linked to aspects of ethicality		5
- Affectivity	This designation reflects learning that is linked to affectivity		5
- Generative	This designation reflects learning that is generative and creative		12
- Study and apply to learn and improve	This designation is linked to disciplined and applied study to learning and improve		7
- Relational	This designation reflects learning that reflects aspects of relationality		7
- Personalization/personalized	This designation is linked to aspects of personalization and/or a personalized nature		

Table 5.2 Research Codebook generated from second pass (modified) coding

5.5. Descriptive and Hermeneutic Reflection

This chapter focuses on data analysis via descriptive and hermeneutic or interpretive reflecting, integrating processes proposed by both Giorigi and van Manen, respectively. Giorgi, in pioneering descriptive empirical phenomenology, emphasized describing how phenomena are given in consciousness. Participant profiles below serve this research purpose. Writing a profile of each participant helped me further ground a participant-specific reflections oriented to the generated codes and research questions. This helped me weave together critical research threads and to ultimately generate the essential themes emerging through the data analysis detailed above.

Following (descriptive) participant profiles, I progressed to hermeneutic or interpretive reflection which, according to van Manen (1990, p. 77), is a process of "making explicit the structure of meaning of the lived experience," the goal of which is to "make a more direct contact with the experience as lived" (p. 78) via textual description and through reflectively analyzing the structural or thematic aspects of that experience (p. 78). In *Hermeneutic Phenomenology and Education*, Friesen et al. (2012) write: "Phenomenology is the study of experience, particularly as it is lived and as it is structured through consciousness" (p. 3). The meaning of experience, they add, "is not a thing that is final and stable, but something that is continuously open to new insight and interpretation. Hermeneutic phenomenology is consequently the study of experience together with its meanings" (p. 3). It isn't possible to study experience, they write, "without simultaneously inquiring into its meaning, and it is impossible to study meaning without experiential grounding" (p. 4).

Van Manen (2002) describes a hermeneutic phenomenological approach as representing an “attitude or disposition of sensitivity and openness: it is a matter of openness to everyday, experienced meanings as opposed to theoretical ones” (n.p.). He writes (2014), “In the reflective process of writing the researcher not only engages in analysis but also aims to express the noncognitive, ineffable and pathic aspects of meaning that belong to the phenomenon” (p. 240). These expressions, he adds, are “mediated by empirical material drawn from life, such as anecdotes, stories, fragments, aphorisms, metaphors, memories, riddles, and sayings” (p. 248).

While my research was often limited to interviewing via video and audio-based technology, I remained attentive to how participants described their lifeworld experiences. What they shared was very broad in scope and comprised stories, anecdotes, nuanced remembrances, visions and fanciful thoughts. I did my best to register these in-the-moment insights about learning and I encouraged participants to extend them when I perceived them to be especially pertinent to the research questions; although sometimes I only clued into them later, while listening to interview recordings or re-interpreting my initial impressions.

The next stage of the analysis involved integrating Giorgi's and van Manen's processes for the sake of discerning essential, thematic structures to that which the participants' related about their own learning experiences, While some perceive a discrepancy between Giorgi's and van Manen's interpretive approaches (Friesen et al.), I consider the two approaches to offer more overlapping features than not and that they are duly and equally appropriate to my data analysis.

Following an explication and elaboration of my thematic analysis I address my subsidiary research questions in the context of data analysis.

Three additional signposts oriented my interpretation and analysis. The first was guidance from Finlay (2011) in recognizing how meaningful, thematic analysis of phenomena happens, not through 'discovery' but via acts of personal grasping and perceiving by the researcher. Thus, what follows are my own reflections and interpretations of the data.

A second signpost pertains to methodological guidance originating with Husserl that urges researchers to set aside or bracket beliefs or theoretical constructs so as to make "more direct contact" with the project data. In this way the nature of the phenomena (of learning) might be perceived concretely, and reveal foundational essences, which is the primary goal of phenomenological research. To this end, I have endeavored to set aside, to the best of my abilities, my beliefs about learning, child and youth development, pedagogy, schooling, and social interactions. This suspending of my beliefs, however, does not preclude other aspects of my *self* in such interpreting. This includes my *self* as lead researcher in this project and the one doing the interpreting, per Finlay, and also as one who has many diverse lifeworld learning experiences to reflect

upon, which is what I can indeed share with my research participants. Giorgi (2009) likewise confirms that "the researcher's consciousness is involved with both the presence to the experience and with the analyses" (p. 97).

I have, thirdly, striven to recognize and grasp "meaning insights" about the phenomenality of learning as revealed by the participants in our conversational exchanges. Meaning insights, according to van Manen (2017), help disclose the hidden nature or inner character of things. They arise, he says, "when we wonder about the sense or the significance of the originary meaning of an experiential phenomenon" (p. 822). By originary he means "inceptual" as that which discloses the primary meaning and significance of a phenomenon through lived experience.

Max van Manen (1990, 2014, 2017) also emphasizes the critical importance of writing, reflecting and re-writing when doing phenomenological research to help discern inceptual meanings in research texts. He states: "The more profound phenomenological insights may only come in the process of wrestling with writing and reflective rewriting—weighing every word for its cognitive weight and vocative meaning" (van Manen, 2017, p. 823). Language and attending to language, then, is the primary source of meaning generation, description and interpretation. As the researcher, I am called to "seek to ‘ek-sist’ in the data by ‘dwelling’ (as neither subject nor object) in the language of the participants" (Ho et al., 2017, p. 1759). And through such ‘dwelling’ I am enabled to "reflect on the praxis of daily language and preserve the various manifestations of beings veiled behind the spoken message" (p. 1759). I understand language as holding worlds within worlds for myself and my participants to ponder and re-ponder in our attempts to confer meaning on our lived experiences of learning.

While I initially designated codes for my data, I was not seeking to discover a theoretical frame nor a foundational meaning of learning. Nor did I try to centre a meaning of the phenomenon or to reduce learning to a single “essence”. Instead, I retained a methodical openness, intuiting the context and situations that might help reveal or unfold the character of the learning phenomenon. In this, I perceived the identifiable characteristics of learning-as-experienced to be ever-shifting, continuously moving, and overlapping. I also appreciated how the phenomenon lay concealed in language which shaped my conversing, listening, interpreting, and analysing. As Ho et al. (2013) relate, while thematic analysis helps reveal how and why a particular theme

characterizes a phenomenon under investigation, “the theme will come to presence on its own when the beings are disclosed out of the unspoken meanings of language” (p. 1760).

5.6. Synthesizing Participant Profiles

Following the first and second pass coding, I created participant profiles combining personal information with observational and descriptive textual data to help establish a more holistic and generalized understanding of each participant. In many instances I discerned characteristics (codes) as overlapping as opposed to being clearly distinct. Conversing with each participant over eight months afforded me much opportunity to better know the circumstances of each participant's situated, lifeworld learnings, which is important to phenomenological research in relation to any experiential topic (van Manen, 1990; Vagle, 2014).

Patton (2002) reported that: “The raw data of interviews are the actual quotations spoken by interviewees. Nothing can substitute for these data: the actual things said by real people. That’s the prize sought by the qualitative inquirer” (p. 380). Presenting the participants’ reported experiences in their own words helps preserve the data as clear and unadulterated (Moustakas, 1994). Accordingly, I integrated much of the originally transcribed interview material into each of the participant profiles. Per ethical research guidelines, participants’ initials were deliberately changed to increase confidentiality.

5.6.1. Participant Profiles

Understanding AM

AM was a 17-year-old female who, during the research period, attended high school full-time and completed grade 12. AM was friendly yet serious in all our interviews. She has good fluency of English although she and her family (including research participant BM, her younger sibling) emigrated from Ukraine to Canada in summer 2020. I had not met AM prior to starting this research.

Academically inclined, AM enrolled in a full slate of grade 12 courses including math, sciences, social science and English. Near the end of our research period AM told me she had been accepted at a local university where she intended to study biomedical

sciences and eventually become a doctor. Just as our research period wound down, I learned that AM received several graduation scholarships and bursaries and that she garnered 'top graduating student' honours at her high school.

Outside of completing her school courses and homework, AM had little time to attend to other interests even though she spent a fair amount of time on social media chatting with friends. On most Saturdays she worked at her parents' enterprise located nearby her school, and which was a learning centre offering novel workshops for children and youth as well as also being a busy drop-in café serving specialty drinks. When I observed AM there, she shared duties with her siblings in managing the learning centre and filling café orders.

Just after the halfway point in the school year AM's routine was abruptly interrupted due to the Russian invasion of Ukraine. In a matter of days, the Russian army shelled her home city, including the neighbourhood in which she had lived before emigrating to Canada and where many friends and family still lived. AM and her family registered much shock and sorrow at the invasion but soon after they jumped into action as a family and began fundraising and donation activities in the community while also preparing to welcome refugees fleeing Ukraine who were being taken in by Canada. Many community residents dropped by the learning centre with donations and offered personal assistance[15]. The family members, including AM, were extremely grateful for the support offered to them and they suddenly found themselves very busy.

The start of the war, coinciding with the start of a new semester, was also AM's last semester in school before graduating. She said this was a very chaotic and stressful time, telling me, "it felt so overwhelming, it was difficult to sit down and do work." The stress didn't dissipate for her in the coming weeks. In our last interview she told me, "A lot of learning (in school) feels very inconsequential. Like, why the hell should I be learning right now? It's ridiculous. I don't want to do this anymore."

[15] My wife and I volunteered and began leading introductory English classes to refugee families when they started arriving in our community in May. We conducted our classes out of the learning centre run by AM and BMs' parents.

Methodically, and with some trepidation, AM did find ways to cope and adjust to the stress impacting her and her family and complete her year and receive the accolades previously mentioned. I provide some insights below as to how she did this.

Our meetings were Zoom-based or in-person at her parent's learning centre. Each meeting was of 45 - 60 minutes duration. AM was very thoughtful in responding to my questions though at times she spoke very quickly which made direct translation challenging, given her accent.

What is the nature of learning for AM?

Through initial coding, I distinguished 48 first pass research codes for AM. On reviewing and re-reviewing audio and textual transcripts I distinguished the following second pass characteristics (codes) as most significant to AM's learning: *self-aware, learning attitude / disposition, methodical, relational*, and *personal/ized.* As with some other participants, the characteristics I discerned from reading and re-reading AM's audio and text transcripts for both first and second-pass coding were often not clearly distinct but rather a blend of two or more characteristics.

Self-aware was a second-pass characteristic (code) I chose for AM, reflecting characteristics that commonly emerged in our interviews. By self-aware I mean insights about her learning that showed a heightened self-understanding and self-sensitivity. Sometimes it reflected self-awareness of the manner in which she engaged, or disengaged, in class-based learning activities; other times it reflected a significant emotional response.

AM said that she engaged better when instruction was auditory in nature and that it irritated her when teachers talked and instructed her to take notes, which she believed impeded her understanding.

> I would say I'm more of an auditory learner than anything else. Because when I try to recall something like on a test, I will usually skim my brain through if someone said it out loud. I can usually remember that. And I understand well when something is orally explained. If it's visual, sometimes it can be quite confusing with all those lines and squiggles. My notes aren't very colorful and I'm fine with them as they are.

Another aspect of AM's self-awareness was an acknowledged comfort in being in school, an environment she said helped her focus and where she was prepared to work hard to learn and obtain the results and good grades she sought.

As I've already stated, the invasion of Ukraine interrupted AM's school year and learning and brought her much frustration and anxiety, some of which I referenced above. One additional interruption she described was her attention span. "In school, my attention span has been impacted to say the least. It's a consequence of a lot of things, mostly because I'm not able to focus on real work." While her attention on schoolwork has been negatively affected by the war, it has served to bring some new learning to her from her daily interactions with friends remaining in Ukraine to helping with fundraising activities in her community. By her own admission, "there's no situation in which a war wouldn't bring you learning."

Learning attitude and disposition was a characteristic (code) shaping AM's learning in many ways. In responses to me about what motivated her to be so attentive to schoolwork, she reflected a confident and grounded sense of fulfilling an obligation to attend to school in this way.

> I'm privileged, actually, in getting the opportunity to learn. And my life is made so much easier by the fact that I have teachers to teach me a lot of subjects. When I am in school it's my responsibility to not waste the time that I'm given.

AM extended her appreciation for the opportunity to learn to the opportunity to acquire knowledge.

> Knowledge is great, and everything is interesting to learn. Everything is interesting to me. Like, there's nothing that if I was given the opportunity to learn about for free or whatever I would say no to. Because everything is knowledge that, even if you don't use, it makes you know things better.
>
> I enjoy gaining new knowledge. And I really liked learning about stuff that I hadn't known. For example, I took physics 12 with physics 11. And it was fun because I got to learn a lot of really interesting things."

This attitude also helped shape a future in which she saw herself, animated by self-confidence and a strong emotional response to continue to learn. "I'd say a general motivator works through me all the time, through all the tasks in getting grades, getting into university. There's not an emotion to learn besides the emotion 'I want to learn'. "

AM has envisioned herself being a doctor, grounded by an innate pragmatism.

> I want to do medicine. And I personally believe that there's always going to be a need for doctors because there's always going to be sick people. This is not a good thing but it is how it is. And that means that if I'm good at what I do, I will always have a job. I value stability more than anything else.

AM's attitude also reflected self-determination. "I strive to get the best marks and that pushes me in not stopping doing a task, learning this stuff, learning that topic until I understand it."

After the war in Ukraine began, it was apparent that a determined attitude helped AM persevere while she was feeling so much stress that she largely kept to herself. Most of her teachers were unaware of her situation, she said, or that she was even from Ukraine. She said she was waking up mornings with a feeling of dread and yearned for a break. At those times she kept telling herself, “You’ve got to do the work. It is what it is." Not once, she said, did she miss an assignment.

It was apparent to me that AM was also very *methodical* in her approach to learning, and this helped her achieve the goals she sought. In her schoolwork this was evident in a sophisticated strategy, her self-developed "learning formula for success" which she consistently applied in all her courses. The components of her "formula" were first. To study new information until she thoroughly understood it, second to apply the new information to solving problems, three vocalize the new information to herself, and four, explain or teach the information to someone else.

AM was also very disciplined in the singular focus she applied to study subjects, sometimes for up to a day or more reviewing and preparing for exams. This discipline, she said, helped her "get in the mood of a subject."

AM related that the war strained her strategic approach to learning, but she did her best to adapt to the new circumstances. Her attention span, she said, became very limited and so she forced herself to go slowly and focus on one question at a time. To assist her she began making to-do lists that helped her track all outstanding assignments and not fall behind, which is something she dreaded. "The worst thing that could happen is for me to fall behind right now because of all the crap I'll have to pick up later. It's awful falling behind."

She also developed a strategy for helping relieve self-induced stress she might otherwise have felt. "I am giving myself a lot of slack in completing tasks," she said.

Dealing with such stress and juggling final exams with applying for universities also caused AM to adapt a strategy to help her succeed. "I will hopefully be done with all my applications for universities soon, and I won't have to worry about that. And I think there's not going to be any stress about that anymore, and that is going to add to my to my ability to work better. If I am able to train myself to study for an hour then I will be pretty fine before final exams and stuff."

Relational is another characteristic (code) I perceived as influencing AM's learning via comments she made throughout our research. In this case, I interpret relational to mean a situation of '*being-with'* that AM described and through which she related an impact on her learning and/or activities that implied learning. The relationality she described was institutional, interpersonal, or technological in nature and, at times, a blend of all of these.

School, as institution, was a site AM valued as an entity positively influencing her behaviour and learning. She looked forward to returning to school after a summer break.

> Going back to school means it's time to focus on learning and gaining more knowledge rather than thinking about other things ... I'm not the best home learner, it's a place I find myself distracted a lot. I enjoy school and I like learning there.

I also discerned relational significance when AM described being-with friends when studying and also when she undertook to explain and teach them, as she related she did fairly often, as part of her "learning success formula" described previously. AM also connected with her friends and others in Ukraine very regularly as the war unfolded, not just to stay in touch but also to learn of new events and updates.

As per technological relationality, the internet and social media were of vital help to AM for keeping in touch with people near and far. She discerned its value as unfairly criticized.

> It's insane how much the Internet helps. It's quite stigmatized, but it provides all of these resources like social media that I would in no way be able to access if I didn't have it. Social media helps me talk to people who are in the zone of war and directly impacted by it. And it adds incredible

> relief to me knowing that with social media I can keep these relationships alive and thriving.

AM also described her experiences using technological tools as a positive adjunct to online learning when Covid-19 pandemic restrictions shut down in-school, in-person learning.

> When online learning started when COVID hit, I started learning more in some places than I would have otherwise. I started picking up stuff that made the section really interesting and I would pay attention and do homework and extra work to learn about it. More so than in person.

This reference also meshes with AM's attitude which I described earlier as self-motivated and conscientious. It seems evident that this attitude propelled her to use technology to meet her self-described learning obligation:

> It's still your responsibility to learn it whether or not (teachers) present it to you in the way you can learn it. There are resources, thankfully, now in the 21st century, you can type in YouTube or search for Khan Academy and such.

Lastly, AM's learning was *personal/ized* to her present goals to get good grades in her final year of high school and longer-term goals of being accepted at university and eventually studying to be a doctor, which is the longer range goal for which she had strong, anchoring beliefs. AM personalized various learning strategies including her "formula for success" that she had developed in previous years but applied continuously and successfully in many school situations.

When the war in Ukraine began, AM was significantly and emotionally impacted in ways that interrupted her routines and focus. She initially despaired but she adapted, personally, retained her focus, completed assignments, applied to universities, and graduated high school with top honours. She also expanded her focus to learn about the war, via technology and interpersonal communication, and also help refugees who relocated to AM's community as well as others directly impacted by the war in Ukraine.

As with her sister, BM, I conjecture that the war in Ukraine will continue to resonate for AM personally and influence her future learning. Such a conjecture is consistent with recent research and acknowledgement of the multi-faceted and often-traumatizing impacts of war on civilian populations, directly and indirectly.

Understanding BM

BM was a 16-year-old female who, during the research period, attended high school full-time and completed grade 11. BM was friendly yet serious in all our interviews. She has good fluency of English although she and her family (including research participant AM, her older sibling) emigrated from Ukraine to Canada in summer 2020. For grade 11, BM enrolled in a full slate of academic courses including math, sciences, psychology, and English. She was academically inclined and described herself as a 'B' grade learner, harbouring an ambition to attend university and study sciences or social sciences, which meshed with her interest in psychology.

Outside of completing her school courses and homework, BM spent little time attending to other interests although she said she regularly chatted with friends on social media. Most Saturdays, she worked at her parents' enterprise located near to the school. This was the 'Ideas Space' learning centre which offered novel learning workshops for children and youth and had a busy drop-in café serving specialty drinks. When I observed BM there, she shared duties with her siblings managing the learning centre and serving customers.

Just after the halfway point in the school year BM's routine was abruptly interrupted with the Russian invasion of Ukraine. In a matter of days, the Russian army shelled her home city including the neighbourhood in which she had lived before emigrating to Canada and where many friends and family still lived. BM and her family registered much shock and sorrow at the invasion but soon after they jumped into action as a family to begin fundraising and coordinating donation activities in the community. They also welcomed refugees fleeing Ukraine who were helped in emigrating to the region. Many community members dropped by the learning centre with donations and questions and offering personal assistance. The family, including BM, were extremely grateful for the support offered to them and they suddenly found themselves extra busy.

Addressing the invasion and trying to co-manage many new activities while attending school full time was, initially, very stressful for BM. "At first, when the war started, school was going from bad to worse, but then I kind of just got used to it," she said. By the end of April, BM said managing the stress of war was "a bit better." At that time a role she served was communicating online with people fleeing Ukraine and

helping answer their questions about relocating to Canada and her community. "I never did anything like this before," she said. "I just did what I could. A big surprise to me was how many people wanted to help the refugees."

I had not met BM prior to starting this research. Our meetings comprised a mix of Zoom-based and in-person, close to her school at her parents' learning centre. Each meeting was about 45 minutes duration. BM was thoughtful in responding to my questions although at times she spoke very quickly which made direct translation challenging, given her accent. Of all research participants, BM shared the least with me and I subsequently coded the fewest number of first pass characteristics (codes) for her from our interviews. At times it was challenging to get her to share much information beyond fairly clipped and reserved answers. In our interviews in late winter and spring I perceived BM as wishing to expedite them, something I interpreted as a reflection of her distraction due to the war.

What is the nature of learning for BM?

I distinguished 16 first pass research codes for BM. On reviewing and re-reviewing audio and textual transcripts I winnowed her responses to the following second pass characteristics (codes) as most significant to her learning: *self-aware, self-discerning and critical*; *methodical;* and *persona/lized.*

Self-aware, self-discerning and critical was a second pass characteristic (code) I chose for BM, reflecting characteristics that commonly emerged in our interviewing. By self-aware, I mean an aspect of her learning that related an acute sense of self and awareness of personal behaviour(s) that helped her accomplish school-based learning goals, especially. I noted that she was also self-aware of the manner in which she engaged, or disengaged, in class-based learning activities.

BM related that she engaged with learning materials and content when instructional materials were visual in nature and that she was easily distracted or bored when a learning presentation by a teacher was mainly auditory or relied on note-taking. "I really don't learn much if a person is just writing or talking about it," she said. "If I'm distracted, I think about something else and I don't hear anything after that."

BM was also critical of habitual classroom processes that she felt impeded her learning. She cited sitting "for hours at a time" and "doing boring schoolwork" as examples of this. She was also critical of classroom learning that wasn't sensitive to learning differences among BM and her classmates.

> I think some students learn differently but school only does one kind of learning like reading and writing. I think they should change this and include more creative stuff, and more outside or PE. Make it more exciting to do and more interesting. It's really repetitive.

Methodical: I clearly discerned this quality when BM described how she was methodical and strategically personalized her approach to learning and schoolwork, something which helped her succeed and achieve her academic goals. BM devised her own ways of keeping course notes, comprised of meticulously organizing them and adding visual aids like squiggles and lines. She also said she was very disciplined in studying for tests, enacting a final pre-test preparation that resembled a 'cramming' process to optimize her short-term memory.

She related that she also deliberately helped her fellow students when they had difficulties understanding schoolwork.

> I'm not really patient but I help them as much as I can. I teach them so that I can understand the subject better, more. Like, if you teach someone about something, you will have more knowledge about it.

Personal/ized was another characteristic (code) I assigned in reviewing BM's transcripts. Although an aspect of *personalization* infused some of the references mentioned above, BM also related that she is motivated to learn more when she is focused on a subject in which she is interested, an example of which was psychology. In an early interview she said, "I find it really interesting how humans act the way they do, and why. It's a cool thing to learn about and I'm just really interested in it."

She said she wants to learn more about psychology because she thinks she might pursue it at university and choose it as a career path. Following this interest, BM enrolled in a grade 11 psychology course in the fall and she described how she was motivated to do extra study on a research project of personal interest to her, exploring the behaviour of middle siblings in large families. Unfortunately, the course was interrupted when the teacher fell ill and a substitute teacher suspended class projects

and assigned only readings for the remainder of the course. "I was disappointed when that happened," she said about the project cancellation, "I thought it kind of sucked."

I conjecture that the war in Ukraine will continue to resonate for BM, personally, and influence her future learning, as with her sister, AM. Such a conjecture is consistent with recent research and acknowledgement into the multi-faceted and often-traumatizing impacts of war on civilian populations, directly and indirectly.

Understanding CS

CS was a 17-year-old male who, during the research period, completed most of his learning activities from his home from where he mainly focused on his own learning interests. He also registered in an online school for a grade 11 math course. CS had never gone to 'regular' school though he had previously taken some courses and workshops and he learned much from the internet. During our research period, his main learning foci were critiquing popular music and practising skills at his new job as a barista and café helper.

I had known CS for 5-6 years prior to this project. Mainly I encountered him with his father when they participated in a drop-in program at a local school woodshop where they learned and practised woodworking skills. I was a volunteer mentor in the program. CSs' parents have always been very supportive of his independent learning and, as a family, they occasionally took extended trips, sometimes for months at a time when CS and his sister were younger. I recollect CS describing his trips in detail and relating many stories to me whenever we conversed about them. One interest that he learned and practised in concert with his parents was writing and in the past 3-4 years he had written a series of novels that were published and for which he has received some recognition.

Our meetings were a mix of Zoom-based and in-person interviews, which took place just outside of his home at his request, spanning 60 - 90 minutes. Occasionally I bumped into CS at his worksite, which was a local café where we cordially interacted and where I observed him, informally, carrying out his duties. In all our meetings CS was quite talkative and always very thoughtful in responding to my questions or prompts.

What is the nature of learning for CS?

I distinguished 55 first-pass research codes for CS. On reviewing and re-reviewing audio and textual transcripts, I reduced these to the following second pass characteristics (codes) as most significant to his learning: *learning attitude / disposition / affectivity (enjoyment re-music and music criticism), methodical, generative, relational, evential-temporal nature,* and *personal/ized.* The characteristics I discerned from reading and re-reading CS's audio and text transcripts for both first and second-pass coding often blended two or more characteristics.

I perceived CS's learning attitude or disposition as discerning, open, sensitive, and joyful, characteristics that often propelled or primed his learning. I especially noted these characteristics in relation to his critiquing of popular music and his (new) job working at a local coffee shop.

With respect to his critiquing of popular music, CS was very engaged in listening to popular music via the internet and evaluating it according to his own determined criteria such as technicality, musicality, and overall enjoyment. He had thought critically about music for several years after following various well-known, online bloggers who had serialized music criticism. These personalities annually created lists of their favourite songs and music collections according to critical criteria. CS was very attentive to these lists and in recent years he had he created his own critical music lists reflecting his criteria. During our research period CS also started his own critical music blog reviewing new musical releases, and within a few weeks he wrote several dozen critical reviews.

CS attributed his interest in music criticism to an earlier interest in music. "I always loved music" he said, although when he was younger he was just enjoying songs, not really listening to different musical or production elements. He said he started paying more critical attention when he started following critics sharing insights and opinions that really expanded his way of considering and music. From this he honed his discernment of music criticism.

> One thing I really find interesting in music is there's no real answer to how good this is or what's the best. I'll often see two different youtubers talk about the same song or the same album. One person thinks it's great, one person thinks it's terrible. But they both have really good points for why and I can see both perspectives a lot of the time. I find it really interesting when I can watch a review and be like, well, that's a weird argument or I don't think it was explained very well. But sometimes I'll think, wow, this is a really great argument, even though I disagree. It doesn't change my opinion but

> I understand where they're coming from. ... Watching music critics, I think it's a good way to look at giving more reason behind things. I love hearing the different reasons behind these opinions.

CS related that his interest in music criticism fueled a deeper appreciation for musical production and honed a deeper sensitivity to this. "Criticism gives more depth to the music and helps you understand, you know, why the lyrics are good or the production sounds a little off or appreciate the vocals are great."

This deeper engagement inspired CS to create his own critical lists of favourite music and non-favourite music, which he initially only shared with his parents. This helped him develop his own critical voice for which he has developed a discerning perspective.

> I'm not that great at explaining my music opinions why I love this song or this album," he related. "But I try to give somewhat of an explanation, and I don't like to feel pressured into liking a certain album or song just because I'm a fan of an artist, or just because every everyone else, or pretty much everyone else seems to think it's great. I try to be more honest with my opinions now.

He said writing music criticism is satisfying. "I find it really fun to put together the list and see at the end of the day what ends up making it on the list what ends up missing the list."

In reading entries on his blog site, I noted a depth, breadth, and sophistication evident in his reviews which I considered comparable to other professional music critiques.

CS was also open and sensitive about his “first real job” working at a local coffee shop, something he had started a few months prior to our research period. He recounted that he had had much to learn about specific job skills, working with others, taking directions and that he was sensitive about doing a 'good job'.

> I've tried to understand if someone tells me something like, Oh, hey, I think you need to do a better job, here's how you can improve. I'm all for that.

He said he is sensitive to wanting to improve his work performance. "After a shift where I feel I did a bad job, I'm usually feeling like, alright, I really want to go back tomorrow and do a good job this time."

He was also perceptive and conscientious about a 'learning cycle' that seemed to characterize his work.

> I'm always still learning stuff there I think. It seems pretty much every day, there's something, I'm like, 'Wow, this whole time, I never knew that'. I mean, I feel I'm at the point where I know how to do the job for the most part, but still, there are some parts that I haven't done very much. I am still learning how to do things.

I perceived CS's openness also extended to an attitude or philosophy that guided his overall learning. He shared examples of this.

> I'm always learning all the time you know. Even just going out for a walk, I could end up learning something I hadn't noticed before, right.

This openness extended to a show CS was watching on YouTube, called *What would you do?* through which he pondered scenarios posed in the show, and responded in a manner I would characterize as 'learningfully'.

> In the show I see how somebody handles a situation, and I think that's not how I would handle the situation. Or I think, hey, that's, that's a really good way to handle that situation. ... you can see both sides of the argument. It's really interesting to see whose side they take ... I'm not saying I would do exactly the same, but it just kind of makes me think.

Methodical. When CS described and reflected on his learning, I discerned that he was methodical in his approach, no matter his focus. For example, he shared that when he was engaged in music criticism the past few years he studied widely, watching and listening to many music critics and listening critically to a lot of music. For two years running, he listened to every song on the 'Billboard (magazine) Top 100 list' (an annual release by the music industry) and judged them critically, himself, of his own volition and for his own learning experience. "There was always something to learn," said about this, "and it was fun completing my own lists." Then, when he initiated his own critical blog, he devised a self-honed strategy that started with an opinion based on first impressions.

> I consider what do I think of this music. Do I like it or not, and how much do I like it? Then I listen more and consider how I might describe it. What is it about it? Why do I love how this sounds? Maybe it's because this is using these chords or whatever, and that really caught my attention. But I try not to overthink it too much. If it sounds good to me, it sounds good to me, and maybe I can't really describe it.

Another interesting and unique strategy CS related was how he devised an approach to learning math, intellectually, instead of following conventional guidelines. "I learned to do math in my head instead of just writing it down. I don't usually write things down. Math is easy, just try to figure things out between your ears, in your head."

During our research period CS began and completed a grade 11-level distance education math course. He said he wasn't very impressed by the course and he considered the assignment work, almost all based in completing mathematical operations by pencil and paper, to be tedious and much less engaging than he anticipated.

I also perceived CS's learning activities to be frequently g*enerative;* that is, he generated or produced specific things: listings of favourite musical recordings, music critiques (blog entries), a series of written novels. In a more subtle way, I discerned how he oriented to producing a 'good shift' on his work after he described his sensitivity to this several times in our interviewing. All these generative activities were important to him, motivated by his interest and curiosity and often guided by a tacit ethical sense. They were also linked to ongoing and future ambitions in that he said he wished to continue doing all of these, implying a future *generativity*.

Relational was a characteristic (code) I perceived as implied in CS's value and perception of music, his efforts to critique music and also his job experiences. For many years CS has related to music, deeply and sensitively, listening and re-listening to songs and collections. Eventually he critiqued the music he listened to according to his own sensibilities - he "liked" or "disliked" them because of how he felt listening to them, reflecting an intimate kind of relating and learning. Subsequently, he determined to critique the music through writing and ranking, which likewise implied an intimate-interpretive relationality. With respect to his work, CS related his performance to the responsibilities and duties assigned to him; when he judged that his performance on a shift was lacking, he determined that he would seek to improve his work performance on a future shift through various means, including learning.

> I think I'm at the point where I know how to do the job for the most part, but there are some parts of the job that I haven't done very much. I am still learning how to do things.

Another characteristic (code) I perceived in CS's learning experiences was how they seemed to be linked to an *evential-temporal nature.* I sensed this especially when CS related work experiences that he often characterized in terms of events: a shift, a training period, a duration, or temporal horizon of job activity. This framing helped him determine and reflect on his learning progress.

> Usually, when I've been closing (a shift), we've been getting out of there earlier. And I think maybe that's me improving? I'm still asking some questions, but for the most part, I feel like I have the job pretty figured out except closing, I'm still kind of like, this is just a whole bunch of stuff going on that I'm not really sure what to do about.

In another instance he said, "I've been there for over five months now. And I still feel like I'm a bit behind where I probably should be after five months, but I feel like I've gotten a lot better though."

Temporal framing also seemed to help CS reflect on learning he experienced when he was compiling a critical music list. This was evident when he said, " at the end of the year, I can kind of look back and see here were my favorite songs. You know, despite everything that went wrong in my life during the year, I can look back and say, well, there were these songs, right."

CS's learning was clearly *persona/lized* to his passionate interest in music and music criticism. This personal interest propelled ever-deepening cycles of learning and reflection. Another important personalized learning experience for him was having a first "real" job that involved training, full-time and part-time work hours, working and interacting with others, and earning a wage. I considered this as priming existential consideration and satisfaction for CS – it was his choice, after all, to begin and sustain this job and I believe he experienced a deepening sense of personal confidence as a result.

I also noted a significant element of *personal commitment* in activities CS chose to participate in and through which he experienced much learning. This was exemplified by his commitment to music criticism, writing his novel series and completing his work shifts, all of which reflected his own volition.

Understanding KL

KL was a 13-year-old female who, during the research period, was enrolled in an online BC independent school that afforded students opportunities to work on their own projects of interest. KL's main interest, dating back several years, was training and riding horses and caring for calves as part of a 4H curriculum. She undertook these activities at locations nearby to where she lived, south of Vancouver, Canada. Other regular learning activities for KL included swimming lessons and studying and singing opera. In all these activities SR was strongly supported by her mother. By her own admission KL was "not much of a reader", her preference was for "hands-on", physically engaged learning. As part of her 4H curriculum she was required to complete some study components and compile and present various reports to instructors, something she said she enjoyed doing. In 4H she was also required to compete in various competitions, 'showing' calves she had been working and caring for, and also critically judging various artifacts such as first aid kits and smoothies.

Being with, and caring for animals, had been very important to KL for several years before our research period. She valued being with all kinds of animals, saying she believed they all had remarkable characteristics and that she learned many things from being with them, interacting with them and observing them carefully. This extended to a pet gecko.

I had not met KL prior to starting this research project. During the research period, I interviewed KL six times for 45 - 60 minutes duration via Zoom. We had a shorter exit interview at the end of the research period. On two occasions I travelled to the south of Vancouver to meet KL and her mother in person. On the first visit I met her and her mother on a cold December day at a riding facility and observed KL interacting with her horse, Libby, for about 1.5 hours. On a second visit I met KL and her mother at a dairy barn for about 1.5 hours and observed KL interacting with a calf, René, that she was caring for and training as part of her 4H program.

In all our meetings KL was talkative and enthusiastically shared insights about her learning activities and responding to my questions.

What is the nature of learning for KL?

I distinguished 46 first pass codes for KL. On reading and re-reading interview transcripts, I winnowed these to the following second pass characteristics (codes) as most significant to KL's learning: *relational, ethicality, learning awareness and sensitivity, study and apply to learn and improve (technique and skill development),* and *personal/ization.* The characteristics I discerned from reading and re-reading KL's audio and text transcripts for both first and second-pass coding often blended two or more characteristics.

Relationality played a very significant role in KL's learning experiences during our research period. During the fall portion of this, KL spent several hours each week at a horse-riding facility where she completed lessons and practised with one of two horses with which she had worked for several years, Libby or Outlaw. KL also assisted her mother in Equine Assisted Therapy (EAT) sessions that involved handling a horse while her mother guided a client to interact and create a trusting relationship with the horse. KL said she'd been doing this for about a year before our research began and she continued to provide this assistance throughout the research period. In the winter and spring, KL continued her horse activities and she added in weekly visits with a young calf that was born in December 2021. Caring for and training the calf formed part of a 4H curriculum KL was completing.

With the horses, she pursued two relational activities: riding and also 'groundwork' or working with a horse to influence and improve relational activities with it through various exercises. When riding, KL engaged in a relational practice she called 'biodynamics' in which she was coached to position herself on the horse so that the horse might carry her and respond while completing different movements. Using biodynamics, she said, made riding

> the easiest for the horse to carry you and get around in a good position in a forward way, in an energetic way. With Outlaw, it works really well. It's easy for me to turn, I don't have to use a lot of aids and it's easy for him to go forward and transition up and down.

Groundwork activities involved KL walking alongside her horse without a lead and synchronizing movements like stopping, turning and walking at different speeds. One other activity involved rolling a large ball back and forth with her horse. KL said this about her interactions:

> With your energy and your intention with the horse, you're feeling them, and when you ask the horse to come to you and you can just walk with them, they're really reading your body language, they know what your intent is, they know what you're thinking, almost. They're really reading you. And then in that moment, you have a lot of connection with that horse. I wouldn't say control but you can definitely get them to do all sorts of things.
>
> I've been doing a lot of groundwork with Libby and we really connect. Like I can do a little motion and she reads my body language. I taught her a lot of the grammar that she knows.

KL perceives a benefit in developing this kind of sensitive relationship with a horse.

> I rode Libby for five years and she's never bucked me off. People ask how that is and I say it's because I listened to her. And of course the groundwork helps with that, it's a very connected and safe way for them (horses) to let emotions out and things like that.

KL also attested to another attribute of this kind of experience:

> I'm definitely learning from the horse. You can understand their body language and everything. I mean, the horse knows different things than I've learned so far. You have to be very focused on them. You're paying attention to what's happening physically and where the horse is to you, how fast you're going. And you're paying attention to the horse's energy and you pay attention to your energy and what you're asking, which relates to your body language as well.

Learning to connect and interact with a horse in such an 'energetic' way was hard at first for KL, she said, but it had become easier thanks in part to training she had received.

> I've had really good coaches and I've had some bad coaches. Definitely my coach affects me a lot and really affected my riding as well. Coaches kind of get very upset and emotional when things don't go the right way. But when you're with the horse, that's never what you want, you don't want to get very angry or predatory, or upset, because then your mind just leaves and you can't work with the horse properly.

In working with René, the second calf she had worked with, KL also sought to create an 'energetic' or mutually trusting relationship. Though a calf may be as young as six weeks old when she first meets it, KL said she worked to help the calf develop acceptance of human presence through touch and voice and gentle pressures as it is stood or walked. KL clearly perceived a benefit in working this way with cows to help them, and humans, stay safe in different situations that may occur.

> I think the benefit (of creating a trusting relationship) is it does keep you more safe, because you can read their body language and you know how to get them back when they're stressed, which is the main cause of aggression with the cows, it keeps them more safe because they're not getting into bad situations. And if you have close relationships with animals on farms, it does make it easier to get things done as well.
>
> My goal is to get a really good bond with René. I hope she will get a bit more calm so we can get into a rhythm of doing things and I can train her really well. And that she likes me which she already does. Starting a calf is a little bit like taking care of a child, which I haven't really done. But you're definitely looking after them. And if they're really stressed, you take them inside and tie them up and brush them. You make sure they're not hungry or thirsty, and you're always watching what are they doing.

KL reflected that such training had benefited her and her previous calf, Mary Todd, that had been aggressive toward other human handlers but not KL.

> Mary Todd never tried to hurt me or anything. But she would never do that to me because she knew me. And she knew I wasn't going to hurt her. I listened to her and I saw her body language. So I think it does make a safer environment for everyone.

I discerned *ethicality* as a significant characteristic (code) influencing KL's learning and closely linked to *relationality*. KL was often moved to relate to horses and calves as described above because she cared deeply about animal welfare and especially how they lived their lives.

> I think you definitely have to respect the animals and help give them a good quality of life. When you're with animals or own animals, it's your responsibility to make them feel safe. It's your responsibility to treat them like an animal should be treated, which is not to just be paraded around like an object.

KL expressed this sentiment on several occasions, and it obviously influenced how she perceived events like animal exhibitions that she was required to participant in through 4H.

> I honestly don't like it very much. And the cows hate it. The most fun is training them for the fair and just being with them every day. It's pretty fun. But fairs are pretty stressful for both you and the calf.

Ethicality also influenced how KL acted with animals at all times and in all kinds of situations. During winter she ensured that her horses were warmed up before she led them outside into the cold to prevent injury and she always rubbed them down following

a workout. And when she entered a crowded paddock to single out her calf, she walked slowly and cautiously among all the calves to ensure she didn't startle any of them, which she said could lead to injury.

KL also expressed a belief that animals can be of benefit to humans, not just by providing labour or material goods like milk and meat, but just through the way they acted, naturally.

> I think animals can definitely help people, especially horses, because they're very aware animals and tuned into body language and things like that. I think animals can kind of read emotions. And of course, like, there's no lying with them," she said. "So it's not just what animals can do for us, it's also what we can do for animals so that we can help each other right?
>
> t doesn't mean we have to be, like, anthropomorphic. Or to say, I don't care, it's not the same living thing as me. It just seemed always right to acknowledge that animals have feelings and thoughts in their consciousness of what's around them, and that we should respect them as, as beings of Earth.

Learning awareness and sensitivity are characteristics (codes) I also discerned in much of what KL shared with me, and I noted them as closely related to *ethicality* and *relationality* and, in some ways, imbued in them. To build relationality and act ethically, KL first had to sensitively perceive the animals she was working with, and that knowledge guided her actions. An example of this is how she discerned an animal's developing maturity as key to the kinds of activities she chose to do with it. "A playful (relationship) wouldn't be appropriate for something so large and unaware of itself as a young horse or cow. I get more playful with Outlaw, he definitely likes that a lot."

KL's knowledge of animals, gained through experience, coaching, and studying videos and texts, also helped shape her responsiveness. "Obviously horses can think and they are very emotional animals, and they're sometimes unpredictable," she said. “And cows as well, though it's not really the same set of emotions."

KL's sensitivity extended to observing how horses behaved during EAT sessions with her mother and a client. "With some of my mom's clients, they'll want to pet Libby maybe, or they'll show emotions, or problems. Libby picks up their energy, and she knows exactly what they need to get back on track, which you wouldn't think a horse would know. And they do."

KL also believed that Libby deliberately suppressed emotions during such sessions, but KL perceived she released them later by running around, rolling and chewing. This belief extended to how KL noted horses perceiving her.

> Horses cannot tell exactly what you're thinking, but they can tell what your intent is and what your body language is relating. Because if you think about it, horses in the wild would need to know if a predator is lying in the grass looking very relaxed or if they're hunting them. You definitely have to understand the prey drive (that horses possess) to be nervous about things. And then you definitely have to be a leader for them, you have to kind of take care of them.

In her learning KL is often quite focused on *study and application to learn and improve* (*technique and skill development)* as exemplified by her learning and practising groundwork and also biodynamics in her work with horses, as previously described. KL attributed these skills to the domain of 'natural horsemanship', a non-violent style of equestrian training that has become more popular in recent years. These skills align with KL's ethicality and sensitivity, and interest in strengthening a bond of trust with horses. She reflected a strategic and thoughtful approach to such training.

> To learn very advanced things. you take it in small steps. I'd say consistency is really key. You have to be very consistent in what you're doing. Not to say you can't change anything, but you have to be confident and consistent. And again, from a technical point of view, picking up small tools kind of translates into something bigger. For example, horses can move sideways on the spot, where they kind of move their hind feet under and pivot, while their front feet stay still and the same as the front feet. And once those are both very fluid, you can ask them to engage both at the same time to go sideways. So as soon as you have all those little fundamental skills really, really good, you just combine them into something bigger. Which helps a lot.

KL likewise reflected a clear purpose in working with her calf. "My goal every year is just to get a really good bond with my cow and get them to walk pretty easily if I can."

Another skill that KL honed through her 4H program was critical judging in which she has felt challenged but also self-satisfied. She also garnered some acclaim according to sophisticated criteria.

> I've done judging at 4H rallies and I'm actually really good at it. You basically have to look at different photos of animals and then you rate them based on certain criteria. You have to give reasons why you're doing this and then you have to learn all about the things you're judging. This year I had to judge dairy goats and that was really hard because I didn't actually

> know much about dairy goats even though I love goats. I also judged dairy cows and horses, and in 4H we also judge smoothies and assembling first aid kits. I've won several awards in the province for judging.

Finally, in an area not related to animals, KL described her learning pursuit and training in opera, something she had done for a couple of years after her mother took her to a show in Vancouver. "I just knew I'd like to learn it, and it's really fun to sing because you get to do all different ranges and so many different things. I've always liked to sing and now I can sing so much more stuff in lower ranges now that I've done opera. I know most of the techniques and it's really built my strength up as a singer, which is nice. But I've still got a lot to learn."

Several times in our interviewing KL referenced various people who had influenced her learning and development in her animal work. Most were positive influences and role models and included Jonathan Field, a horseman raised nearby to KL who has developed a training program oriented to natural horsemanship. KL has attended Field's workshops and watched his online videos. "He's just quite amazing," she said. "And the reason he gets so many good results is because he is very kind to the animals and he understands them."

Another person KL admired and has learned from through videos and some books is the renowned autistic author and animal educator Temple Grandin. Thanks in part to a popular eponymous biopic (2010), Temple Grandin is well known for advocating for more humane methods of treating domestic livestock. A basis of Grandin's advocacy was her way of perceiving from an animal's perspective, and she urged animal owners and trainers to express heightened sensitivity to the welfare of animals, a sentiment that influenced KL's perspective and learning.

> I don't have the Temple Grandin brain as much as she is able to see all these things from animals' perspectives, but what I find really interesting is that she can find what matters for the animal and make that better for them.

KL also credits local coaches and trainers for helping her learn, and she related how her learning was also reinforced by observing bad examples of horsemanship.

> I knew this woman, a really good rider. One day at the stable she was not in a very good mood and she got onto her horse and she wanted to do a lot of cantering. And her horse was like, 'No, I don't want to do that.' She kept pushing the horse to canter. And then the horse bucked her off and kicked her. I think she hurt her hips somehow and she hasn't been able to

> ride for a year or something. So that came from not listening to her horse or not perceiving what her horse was trying to tell her.

KL's learning was clearly highly *personal/ized* to her passionate interest in working and being with animals and her sensibilities of learning-by-observation, energetic sensing, physicality and high-touch, and ethical relationality. Being with animals, horses and calves, especially, reflected a comfort and satisfaction she felt through the relations she created with animals and the mutual learning she perceived in that, as related earlier.

> It's an important part of my life, I really enjoy it. Learning with people is a different thing. I don't easily get along with many people so I kind of avoid them.

She also said learning with and through animals reflected a sense of destiny she grasped at the same time as it remained mysterious to her.

> I've just always felt a little bit called to be with animals and just want to have a relationship with them. It's just kind of my nature to want to have a relationship with animals and be with them. I can't really explain it.

Understanding SR

SR was a 17-year-old female who, during the research period, attended high school full-time and completed grade 12. For grade 12, SR enrolled in a full slate of courses including math, English, French, art, and physics. SR had a broad range of school-oriented interests and she harbored an ambition to attend university and study business, aligned with a long-running interest in enterprise and following many varied entrepreneurial experiences. SR said she definitely enjoyed school where she learned many different things and socialized with friends, which she said was very important to her. School also helped provide SR with a structure she valued, especially a daily schedule that helped her stay organized in what was obviously a busy life in and outside of school. The experience of Covid and the health order that restricted schooling to online learning was generally a negative experience for SR, especially because she was unable to physically be with friends. In the 18 months of Covid before the research period SR experienced some significant mental and physical health issues that she felt were exacerbated by pandemic-related restrictions. At one point she was hospitalized and that impacted her (grade 11) schooling. She said that being sick "really sucked", but at the same time she "learned a lot about mental health because of it." In the time of our interviewing, SR said she felt her mental health had been fully restored although she felt

keeping up with monthly medical appointments interrupted schooling and learning activities. SR also said she had a longstanding chronic back issue, diagnosed as scoliosis, and this caused her discomfort in some classrooms.

Outside of school, SR held two part-time jobs in local retail stores. Both jobs required her to learn and practise a range of skills including customer interactions, filling orders, baking, and adapting to pandemic-related, work-site conditions. Special interests for SR included reading, baking and cooking, entrepreneurial activities, and social activities in and out of school. "Doing anything with people makes it more interesting for me," she said in our first interview.

SR also volunteered in various activities, something she first started doing several years before when she twice volunteered at a summer reading camp at a local library. During our research period SR volunteered in designing and leading a reading club for young children as part of a mandatory grade 12 graduation project, an experience she said was very successful and satisfying. She also participated in several school clubs and was especially excited about participating in a new 'Diversity Club' to expand LGBTQ awareness and sensitivity. Following the Russian invasion of Ukraine which impacted the life of one of her best friends, SR also volunteered in community-based activities to help raise funds and coordinate donation activities.

During the research period, I interviewed SR six times for about one hour each interview, several times via Zoom and other times in person at an office site nearby to her school. We also had a shorter exit interview at the end of the research period. SR was the only participant who emailed me some written responses to questions I posed, and I also interacted briefly with her at one of her work sites (a café). In all our meetings SR was talkative and animated and she enthusiastically shared insights about her learning activities in response to my questions.

What is the nature of learning for SR?

I distinguished 32 first pass codes for SR. On reading and re-reading interview transcripts, I winnowed these to the following second pass characteristics (codes) as most significant to her learning: *affectivity and learning environment, methodical and strategic, ethicality,* and *personal/ization.*

By *affectivity and learning environment* I refer to how SR emphasized connectivity between her feelings and her learning. "if I'm in a good, productive feeling or mood," she related, "I can do whatever excites me most in that moment, and I'll do it well." She related how excited she often feels about schooling in general. "I definitely have things that I know I enjoy and things that I want to learn more about."

Contrasting with the above, SR related affective experiences that negatively impacted her learning. "I think the biggest thing for my learning is definitely the environment," she said. In particular, she expressed a high sensitivity about physical aspects of school environments like portable classrooms where she had several classes. She related that she sensed subtle movements in portable classrooms that distracted her and made her very uncomfortable. When that happened, she often requested and received permission to work in the school library, instead. "Often that's a good choice for me," she said. " You can configure chairs and it's way nicer to do your work there."

Long classes and uncomfortable seating also contributed to SR's feeling uncomfortable and distracted.

> I always have had back pain from scoliosis and stuff and I need to move around or go on a little walk. ... I wish we had standing desks like in art class. They have high tables and really tall stools. It was the perfect level to stand up and do a painting. It was so nice.

SR related how when, if she was feeling overly stressed in a schooling situation, her learning was impeded. In addition to time constraints, situations when SR was feeling stressed included preparing for class and feeling overwhelmed with assignment chores.

> When I feel really pressured and stressed because I have to finish something in a specific amount of time, or maybe it's a test and I don't know the answer to something, then it's almost like I am zoning out and watching myself. It's really uncomfortable. When I feel stuck that's when I feel the worst. My body just kind of shuts down and I don't know what to do. It's really not great.

Methodical and strategic are also characteristics (codes) I denoted in SR's learning experiences. Throughout the year and extending across all her learning activities, SR sought and used techniques, strategies, and tools to help her stay organized, study, address self-identified learning concerns and motivate her. These included using to-do lists, Google calendar, and reading early in the morning while still in bed. Reading each morning, she said, "is the first thing I do. I read about stuff. And I try to find out how I can

apply those things to things I do in school. I'm always seeing things I want to learn more about." She also registered for a government-supported one-on-one tutoring program ('Rural e-mentoring' service) and was paired with a BC university student studying business. It was "really cool" she said, "a great resource. I found out about it through one of the school counselors who posted it online."

Another strategy she initiated was to actively seek out someone with a differing perspective than hers and initiate or join in a conversation with them.

> You learn a lot through someone else's experiences, and just conversing with them. In a really good conversation, you don't need to agree on something. So if I was talking to somebody and we had completely different opinions or views on something, it can be a really good learning experience.

SR's willingness to be methodical and try new strategies and techniques was key to her enjoying academic success in what, overall, was a challenging year for her. Her willingness was girded by a positive, open attitude and belief in her own capabilities and trust that she can create future success. I consider this statement as confirming such an attitude: "I want to be smarter, I want to try new things, I want to meet new people. And I find things to motivate me to do new things."

Ethicality was also a quality I perceived in SR's learning reflections. Two activities and experiences she related several times were obviously important to her. The first was joining in to help support and lead the high school's first 'Diversity Club'. She said this about her participation:

> My friends and I and a bunch of other people and other grades have helped to give ideas for this and it's not just on sexual health. It's also how we can make things like a PE class more inclusive and how we can make school in general feel more comfortable for everybody because I know there are other people who could need extra support. I'm very happy to be part of that. And I want to learn more and help other people.

The second experience that emerged emerged during SR's learning year was the invasion of Ukraine. One of her close school friends was from Ukraine which motivated SR to learn more about the invasion and subsequently volunteer to support community fundraising events, donation activities and community protests against the war.

“I've never been close to something this terrible," she said, referring to the war. During the first weeks of the invasion she said she spent time "just trying to listen to people and help them.

> I'm hoping that's helped ease some extra additional stress from all the things that they have to do, like creating all these things on their own to support their own country. That's the least I can do.

Helping with fundraisers and other events was "not something I've done before," she said. "But I guess when things have to be done, you can do them.”

As with the other participants, I perceived *personal/ized* and/or *personal/ization* as both a subtle and distinct characteristic of SR's learning. SR's school-based learning choices and activities she chose beyond school, including her part-time jobs and her interests in reading and entrepreneurism, all reflected personal interests and a zestful attitude that fueled a personal motivation to learn. I likewise discerned how each of the characteristics mentioned above contributed a holistic, personal understanding of "who" SR was as a sensitive, strategic, enthusiastic and ethical learner.

Understanding WJ

WJ was a 17-year-old male who, during the research period, was enrolled in a BC-based, online independent school offering some programing to high school students and opportunities to work on their own projects of interest. WJ's main interest, dating back to 2019, was online gaming and especially playing and leading *Dungeons and Dragons* (D & D), a popular, online role-playing game. Starting in 2020, WJ assumed the role of a 'Dungeon Master', planning, organizing, managing, and leading online D & D 'campaigns'. In 2021 and 2020, WJ was Dungeon Master for two online campaigns, each of which lasted for many months and involved 10-12 players fellow players from across North America.

I had known WJ 6-7 years prior to starting this research when I was involved in the same school program in which he was enrolled. I remembered him from our earlier encounters as an animated, friendly and creative boy who was keenly focused on his own learning interests, which at that time was consuming the Harry Potter series of books and exploring and leading fantasy-related activities for other youth.

WJ lived in a fairly remote region of southeastern British Columbia and relied on the internet for many if not most of his learning experiences. His main learning environment in which he spent much time each day was akin to a home-office equipped with comfortable chairs, a new-ish computer and monitor. Occasionally, his mother would drive him hundreds of kilometers to participate in learning workshops and conferences, or to meet with friends he had met online.

During the research period, I interviewed WJ six times for 1-1.5 hours each interview, via Zoom. We also had a shorter exit interview at the end of the research period. I also reviewed a recorded D&D game (three hours duration) for which WJ had provided me a link after getting permission from his fellow gamers. The recording, he said, was fairly typical of a weekly gaming session he led. No personal identities or information was shared in the recording. In all our meetings WJ was talkative and enthusiastically shared insights about his learning activities in responding to my questions.

What is the nature of learning for WJ?

I distinguished 36 first pass codes for WJ. On reading and re-reading interview transcripts, I reduced these to the following second pass characteristics (codes) as most significant to his learning: *ethicality, affectivity (per deep enjoyment and satisfaction in playing and contributing to D&D), creativity and generativity; study and apply to learn and improve (game design management and performance), relational/relationality* and *personal/ization.*

Ethicality was a significant quality infusing WJ's leadership and learning activities in being a D&D Dungeon Master. In his campaign planning and managing he strove to create positive gaming experiences for himself and his fellow players and he was sensitive to any and all things that might influence or impede this. An example of this is how he committed to learning how to build and create anonymous surveys to elicit information from present and future D&D gamers about what campaign elements they most valued and also what elements might trigger a negative response. Such surveying, he said, helped him discover if there were topics to avoid using in a game. "Maybe you don't know beforehand that someone has a phobia of bugs or something," he said. Without survey information a game player "might feel really uncomfortable if you have

written in a game scenario including a swarm of bugs attacking the party." Triggering a phobic response was not something he wanted to induce. "You just know someone in the group is not okay with this so I don't include it."

WJ also strove to elicit feedback from game-players about how they were experiencing his game leadership and management. This provided him with information he used in planning future game development and management and also adjusting his leadership. Midway through our interviewing WJ related how such surveying also provided him with information about a player who was not playing ethically and whose behaviour was upsetting other gamers. When WJ learned of this he contacted fellow players personally to listen to them recount their experiences and share their opinions about how he might proceed. Subsequently, WJ banned this player from further participating in the campaign, a decision he ruminated over.

> I thought about what to do for about a month. I was worried what would happen if I did ban him because a lot of people were good friends with that person and probably wouldn't see anything wrong with their actions. So I talked to a lot of people outside of the situation and every single person I talked to told me I needed to ban him.

Affectivity (deep enjoyment and satisfaction in playing and contributing to D&D) was another characteristic (code) shaping WJ's learning. He related several times how he was motivated to play D&D and learn so much about playing, leading and managing the experiences because he enjoyed the experience so deeply.

> I really enjoy playing Dungeons and Dragons. I enjoy crafting the encounters. I enjoy a playing these different characters that I create, sort of in this world I'm creating.

A part of the enjoyment WJ experienced also emerged from the shared and collaborative nature of planning and playing. He had gotten to know many fellow gamers in the past few years and he distinguished some of them as now being good friends, though many lived thousands of kms away from him.

> I enjoy having fun with my friends playing D&D. ... We play all these wacky characters and we have fun in this invented world with all these fantasy elements, you know, magic and all the other stuff. Yeah, it takes some time. But for the most part I enjoy it, especially when it's something I had prepared or thought of. It's because of me that it was able to happen.

In concert with this comment by WJ, I noted how *creativity and generativity* also grounded his learning. In every interview he related some experience of creating and generating something supporting his D&D gaming and management. These included creating sophisticated and professional-looking D&D 'spell cards' with the help of drawing software he learned to help him create these. He also dedicated much time to imagining and creating game scenarios and fantasy character roles, both of which he wrote out and then read aloud to help him refine this work. In one session he told me,

> Every night I've been putting a bit of work into it. I outlined some of the timeline of the scenario, how technology will progress in it, and I have a bunch of ideas for the different continents and archipelagos. Then I've been working through the different fantasy races and sort of writing what I want them to be like in my world. I've written all of this sort of lore, but what they're like in my world, and how they affect the world around them, and their own sort of cultural history, and how the different sub races of them sort of interact with one another and make their place in the world. It's been really fun sort of just going through all that.

WJ said he spent a fair bit of money buying D&D and role-playing game textbooks. On more than one occasion, he held up a textbook to his computer camera, flipping through the pages. He told me a dream he harbored was to one day be a recognized published author of D&D content. "I would love if someday I could get my setting in a book like this that you could put on a shelf."

I recognized WJ's creative gestures as extending beyond the recognizable products just mentioned to also include his leading of D&D campaigns as significant, generative acts and, as described earlier, designing and completing surveys that helped him refine and improve his campaigns.

Throughout our interviews, another aspect of WJ's learning experiences I noted was his dedicated and consistent s*tudy and application to learn and improve (game creation, management, and performance)*. I mentioned that he bought textbooks which he studied carefully. In his collection he also had many other instructional books including handbooks, manuals, and how-to guides that he had read cover-to-cover. He said he also watched many hours of instructional YouTube videos created by D&D and role-playing game experts in which they discussed and conversed about planning, playing and managing their games. In recent years, WJ had also attended several gaming industry conferences where he listened to keynote speakers, attended

workshops and interacted with fellow gamers. "I aspire to be like them, you know, run my D&D campaigns as well as they do," he attested.

From one expert WJ learned of the importance of surveying game-players in advance and while completing a campaign. From another he learned of the value of including messaging in his storytelling.

> I remember hearing the late renowned Stan Lee of *Marvel* fame, once say 'all stories have a message ever so subliminal, and if they don't, they just feel soulless.' And so when you enjoy any kind of media, there will be some form of learning in there, or some form of message, some takeaway, even some very common ones like family or doing good, you know. I see that in good gaming.

Relationality was a characteristic (code) I perceived directly and tacitly when I reviewed and WJ's interview data. In a direct manner, WJ formed learning relationships with fellow gamers to teach them himself and also when he wanted to learn from them.

> It helps if I'm trying to learn something and someone who actually knows what they're doing is instructing me a bit. Like, yesterday, I started playing the game *Elden Ring* and my friend T was there with me, helping me learn how to play the game. So I was playing the game, sort of learning it myself as well. But he was also there, giving me pointers and helping me understand how to play it. I think that's the best way when I'm learning something is to be doing it with a little bit of assistance, you know?

Tacitly, WJ also immersed himself in all aspects of gaming in ways that were deeply and intimately relational, many of which I have previously described.

Personal/ization was a characteristic (code) of WJ's learning that, as with the other participants, seemed to be subtly and observably ever-present. Clearly, his immersion in D&D game creation, playing and managing was motivated by personal interests and a deep sense of enjoyment and satisfaction. He confirmed this.

> I'm not very good at learning things I don't really want to learn or that I don't find interesting. But if those are coupled with something that I am very interested in, it can very much help me learn it.

WJ was also confident he benefitted from his game playing experiences.

> I do see it as valuable. And if someone doubts that I would want to show them what I was like maybe two years ago, before I started my D&D campaigns. And then just show them myself now as well, noting the difference. One thing is, I used to be a really big pushover. Like, I was afraid

> and I would leave the campaign if I did something wrong. And if I thought someone else got something wrong, I would blame it on myself rather than on them. I don't do that anymore.

WJ was completing high school during the year, but he had little to say about completing conventional course credits or about whether he might pursue formal post-secondary education. One thing he was confident about was his choice to pursue alternative, online learning as opposed to attending conventional schooling.

> I know some people enjoy physical school, but it just really didn't work for me. I guess it's something about being told to sit there and just listen that doesn't work for me. ... I'm glad I'm not there now. I've heard there's a lot of drugs at school. So I'm not really interested in going there.

Although WJ was not entirely certain of his future learning trajectory, he felt quite certain it would include D&D gaming as a player and Dungeon Master.

5.7. Data Analysis Discussion of Research Questions

The purpose of this section is to address the main research question and subsequent questions.

5.7.1. Thematic Unfolding (Analysis) of Main Research Question

What is the nature of learning as it arises for student research participants?

Braun and Clarke (2021) ascribe a theme emerging from qualitative research as “a pattern of shared meaning, united by a central concept or idea" (p. 341). Themes, they add, are also multifaceted, capturing multiple observations, and may be likened to "stories we tell about our data" (p. 341).

Giorgi (2009) invokes the notion of 'free imaginative variation', as derived from Husserl, to help discern an essential or thematic quality. This process, he says, requires the researcher to

> mentally remove an aspect of the phenomenon that is to be clarified in order to see whether the removal transforms what is presented in an essential way. If the given appears radically different because of the removal of a part, it is leaning toward being essential. (pp. 69-70)

When an essence is determined, Giorgi continues, "it is carefully described, which includes, when possible, the relationships the essence has with other phenomena" (p. 93).

The experiences of learning gathered through the interviews, conversations and artifacts comprising my data collection were given by participants and constitute a body of concrete descriptions reflecting interactions within their respective lifeworlds. Each individual interview 'series' holds together as a narrative extended through time, circumstance, and revelation through which I perceived learning as an ever-present and significant, lived dynamic shaping each participant's life. The second pass learning characteristics (codes) I distinguished in my research data are summarized in Table 5.3 (modified from Table 2), below. Some determinations of *meaning* of these learning characteristics (codes) are found in participant profiles. Yet further reflection is required to synthesize facets of meaning that might stand as essential, foundational characteristics or themes addressing the main research question.

Participant	Second-pass-modified characteristics (codes) for research participants
AM	self-aware, learning attitude / disposition, methodical, relational, and personalized
BM	self-aware, self-discerning and critical; methodical; and personalized
CS	learning attitude / disposition / affectivity (enjoyment re-making music and music criticism), methodical, generative, relational, evential-temporal nature, and personalized / personalization
KL	relational, ethicality, learning awareness and sensitivity, study and apply to learn and improve (technique and skill development), and personalization
SR	affectivity and learning environment, methodical and strategic, ethicality, and personalization / personalized
WJ	ethicality, affectivity (per deep enjoyment and satisfaction in playing and contributing to D&D), creativity and generativity, study and apply to learn and improve (game design, management and performance), relational / relationality and personalization

Table 5.3. Second pass-modified characteristics (codes) for each research participant

As Table 3 shows, I discerned both overlapping similarities and differences in the research data with respect to the collective, recollected experiences of learning shared by the research participant. Reflecting the criteria mentioned above, and considering the strongest, essential features following an act of free imaginative variation, I discerned six core themes emerging from this research and central to addressing the main research question. These core themes are listed below along with elaborations summarized from participant profiles.

Core themes discerned during analysis

i. Learning arises idiosyncratically in a personal/ized manner through phenomenal acts fused to a dynamic subjectivity, and suffused in personal biography, disposition, vision, belief, interest and lifeworld or existential circumstance.

The data I collected and analyzed indicates to me that participants' learning is foundationally and essentially personal/ized as phenomenal, affective acts fused to subjectivity, dynamically self-propelling, and suffused in personal biography, disposition, vision, belief, interest and lifeworld or existential circumstance.

I can think of no instance where a participant described learning that did not reflect personal or idiosyncratic meaning in some way. It was most apparent in listening to participants (WJ, CS, KL) describe how personal interests primed their learning in significant ways. I also discerned how personal vision and responsiveness guided the learning of the others (AM, SR, BM) though not as strongly. In other words, though some variations were noted, the personal, idiosyncratic character of learning appeared for all participants.

ii. Learning is a generative, creative act, arising in imagination for all, materially for some, and performatively in various ways.

Learning precipitated acts of generation and creation, imaginatively, for all participants. This included varying acts of relational horsemanship for KL, methodological planning and execution with respect to academic tasks for SR, AM and BM, music criticism for CS, and for D&D game planning and stewardship for WJ. For CS and WJ this additionally led to acts of material generation and creation, producing, respectively, music critiquing lists and blogs and game scenarios and character development.

iii. Learning reflects phenomenological intentionality, orienting in consciousness toward *something*: a goal, a vision, an impulse, a sensibility, an affect, an ethical concern or drive, and it may include combinations and intertwining threads of this nature.

Learning is intentional in character, directing towards a goal, a vision, an impulse, a sensibility, an ethical concern or drive, an affect, and it may include combinations and intertwining threads of this nature. CS, WJ and KL all had (differing) ethical concerns that meshed with and sometimes directed their learning; AM reflected an ever-present moral commitment in her attitude to learning as well as a strong learning vision to become a doctor; BM's learning was affectively jarred by despair over the invasion of Ukraine; and SR's sensibility to explore and "try new things" fully grasped and meshed with her learning.

iv. Learning is taken up by methodical and strategic approaches in consciousness.

All participants progressed and made sense of their learning, strategically, methodologically, and idiosyncratically. To this end, learning was initially grasped subjectively and, secondarily, engaged or embarked upon with purpose and design to effect a personal/ized outcome, different for each. WJ carefully studied and learned from other gamers before elaborating his own gaming plans; CS likewise studied and emulated other music critics before doing this himself; KL practiced many different routines with her horses and calves and also perceived others' interactions with animals as something she would or would not emulate; AM, BM and SR all devised unique, strategic approaches to school-based learning to help them achieve their learning goals.

v. Learning arises through intersubjective relationality with a preconceived idea, circumstance, entity, ethical concern or sensibility held in consciousness.

Learning arose relationally for all participants; for some, relationality was evident in the form of a vision, goal or idea, an ethical concern or sensibility. I perceived the strongest form of relationality in KL's horsemanship and 'calf-caring,' but I also denoted relationality in CS's learning on-the-job at a local cafe in which he evaluated his performance in relation to execution of job duties and the responsibilities he was taking on. WJ had deep relationality with games/gaming, imagining scenarios as he pre-planned gaming strategies and anticipating an unfolding relationality with fellow gamers; likewise, he adapted and responded to games and other situations as they unfolded in real and also reflective time. WJ's gaming was also informed through relationalities he

held in consciousness with gaming mentors whose texts and blogs he read or who he had met and paid special attention to at industry conferences. I also discerned technology as a significant relational tool for participants' learning activities and thus their experiences, from AM and BM's interacting with social media to keep abreast of news from Ukraine, to WJ's leading of D&D games via the internet, to CS's music blogging. Another aspect of relationality I discerned was how all participants held a sense of future learning and learning performance.

vi. Learning induces animation in multiple ways, perceived in somatic and affective responses, inducement of wonder and curiosity, engagement and repulsion, gestures to improve learning or relationality or to create or generate an imaginative or material outcome.

All participants were animated by learning, leading to somatic and affective responses, inducement of wonder and curiosity, engagement and repulsion, gestures to improve learning or relationality or to create or generate an imaginative or material outcome. I noted animation in KL when she self-corrected her physical positioning while riding her horse and seeking to perform a new relational maneuver; I discerned animation in WJ when he responded to his surveying of fellow-gamers to create more engaging game scenarios; animation arose in BM when she seized an opportunity to broaden her knowledge about psychology which was a significant personal interest; I distinguished animation when AM responded to learning of the invasion of Ukraine through committing to learn how to help in fundraising activities and to assist refugees; and there was animation in SR when she was determined to enliven her graduation project through designing and leading a reading project for young children, and when she recounted relieving her discomfort in certain schooling environments. In these examples, participants' animations manifested in various ways and means, and were fused to a self-propelling life-energy. Another aspect of animation I discerned was how all participants sought to improve their learning through various means and ways, to help them attain a future learning goal, be it a higher level of performance or special achievement.

Other Noteworthy Characteristics Revealed in Data Analysis

In addition to determining the above themes, I distinguished the following noteworthy characteristics of participants' learning, albeit less emphatically:

Each participant had a meta-awareness of learning by which they reflectively considered their own learning, past and present, understood and distinguished various kinds of learning, compared and contrasted their learning with others, and anticipated future learning.

I noted many instances where learning was understood and imaginatively conceptualized. For example, WJ learned how to plan, create and manage D&D gaming scenarios; CS studied and practised music criticism; KL worked relationally with horses and calves and consistently relied on imaginative hypothesizing; AM, BM and SR enacted their learning procedurally after devising imaginative strategies to enhance positive outcomes.

Participants often experienced learning as a dynamic act fused with and responsive to life forces, moving 'towards something', exploring and seeking to understand the world, and improve self-agency in a future-oriented trajectory. Sometimes the circumstances they engaged with were within their control and sometimes not, but agency was sought nonetheless. For example, this was the case of the Ukraine war (for AM, BM and SR) and when WJ was interrupted in his gaming-planning to deal with a fellow-player who had breached gaming conventions. These circumstances motivated participants to adapt their learning to deepen their understandings and experience some measure of agentic control.

Each participant ascribed implicit and explicit values to learning activities and experiences. Sometimes these were articulated, as when WJ described the value of learning gaming management experiences, and when AM related using the internet to learn information that helped her respond to unfolding circumstances of the Russian invasion. Other times, learning values were implicit or more diffuse, such as when KL related her belief that guiding a calf to learn behavioral skills contributed to making animal-human interactions safer.

I noted schooling was clearly linked to learning for the three participants who attended school (SR, AM and BM); and their reflections comprised positive and negative comments and insights. Overall, they valued school-based learning and linked their future learning to formal education and professional career-oriented trajectories. Negative reflections about schooling focused on tedious and impersonal practices,

uncomfortable environmental surroundings, and interrupted learning opportunities. "It is what it is," said BM about her experience of grade 11. "There's nothing I can do about it. It's a means to an end." At the end of the research period, two participants (AM, SR) were accepted into university and rewarded for their academic efforts with significant financial awards and accolades from their high school which they were very grateful to receive.

Non-school-based learning experiences described by three participants (WJ, CS, KL) were full, rich, dynamic, and sophisticated. In many instances I considered their learning experiences to what older students might focus on or specialized training professional workers or executives might receive. In particular, I'm thinking of the (game) management dynamics WJ described, the equine-assisted therapy sessions KL participated in with her mother and clients, and CS's practice of music criticism following his careful study and emulation of professional critics. These participants benefited from immersive learning experiences that were distinct from conventional schooling practices and afforded them opportunities for extended / extensive learning.

Embodied knowledge is very important to the learning experiences of two participants (KL and SR) but not significantly noted by others. Yet each of the participants attests to the lived, affectively-felt, and often kinetically and kinaesthetically enacted arisings of meaning that characterized the essential nature of their learning.

5.7.2. Elaborating Subsidiary Research Questions

How does learning arise and become personalized for participants?

As listed in theme 1, above, in all formal and informal learning situations, research participants personalized their learning through phenomenal acts that were dynamically self-propelling, fused to subjectivity, and suffused in personal biography, disposition, vision, belief, interest and lifeworld or existential circumstance. I also noted this arising and appearing through idiosyncratic methods and strategies. Such personalization was sustained in consciousness and fused to life-unfolding events, moment to moment and also persisting for longer durations.

In what ways are participants' learning experiences influenced?

Participants' learning was clearly influenced by motivation, which is what I have come to regard as an energetic dynamic refracting different and intertwining factors: personal interest and engagement as well as temperament and attitude about learning in general and about a particular subject. For WJ, CS, SR and KL, their motivation was primed by positive affective experiences such as joy, delight and curiosity infused with anticipated enjoyment and satisfaction. Other notable factors influencing participants' learning were: ethicality, grounded in participants' beliefs (KL, WJ, SR); circumstances such as war (AM, BM and SR) and physical dis/comfort (SR); personal challenges (WJ); conventional classroom practices (SR, AM, BM); quality or character of learning support (CS, at his job), the learning environment (SR) and previous learning experiences (all).

In what ways does personal identity coalesce in and through learning experiences?

As an aspect or outcome of personalization, identity is fused to a phenomenality of learning intertwined with personal biography, disposition, vision, belief, interest, and lifeworld circumstance. 'You are what you learn' could clearly stand as an appropriate meme about learning and identity, signifying an integration of character with learning interests and commitments. SR, for example, had numerous learning interests that deeply linked to her disposition towards wonder and introspection, such as wanting to know why a person thought about something the way they did even though it differed from her thinking, or how she might help assist others in response to the war in Ukraine. As a character trait, she seemed committed to being open to encountering and coaxing learning, no matter the circumstance. CS, too, projected a disposition of openness in his consideration and critique of music and also with respect to on-the-job training in a coffee shop. WJ was persistently animated by his ‘gamesmanship’ and the creative and imaginative nature of learning associated with his gaming; he laughed easily and brightened when relating a gaming scenario or sharing a character-profile he had created as a gaming prop. KL was fairly reserved in online interviewing, obscuring her identity, somewhat, however I saw her as much more animated when she was ‘presencing’ with her horse and calf on my visits to observe her. In these encounters her identity was fully imbued with a sensitivity reflecting caring and reciprocating relationality. Identity was not as perceptible in the other participants (AM, BM) who may have felt less comfortable or more cautious about opening themselves up in the interviews to reveal a deeper facet of their identities. This is understandable considering the anxiety they were

obviously holding before and after the start of the conflict in Ukraine. I believe the latter two also self-identified strongly as high-achieving students and this was reflected in a fairly conservative, stoic comportment reflecting their studiousness.

What invested meanings form for students in and through their learning?

Learning, fused as it was to personal identity, merged with individual purpose and vision and often arose as very meaningful in-the-moment and also as holding meaning for a much longer duration. Learning was understood ethically and consonant with personal beliefs. Meaning thus was interpreted positively, negatively or of negligible consequence. KL and WJ were guided in their learning by strong ethical beliefs that shaped the meanings they gained. In interpreting and adapting to the news of the Russian invasion, AM and BM had strong affective responses; thus, the meaning was similar to the learning responses for AM and BM in encountering news of the war.

When learning was linked to generative and creative acts, materially and/or imaginatively, additional meaning was noted for CS creating music critiques, WJ planning and imagining gaming scenarios, AM anticipating and planning a study session, BM exploring and researching psychology as a project of personal interest, SR planning and living-through a school graduation project of her own creation, and KL anticipating and co-leading a 'groundwork' session with a horse. The meanings from such acts were notably positive and satisfying.

5.7.3. Comparing the Two Studies

This chapter has offered, first, a study of autobiographical excerpts chosen because each excerpt ‘pointed to’ something about learning as rendered phenomenologically. Each excerpt was rooted in varying circumstances from near-ecstatic self-discovery to painful reminiscence and, collectively, they helped reveal appearances of learning rich in subjective meanings. I discerned these appearances of learning to overlap with the four characteristics of learning I elaborated in chapter three. This initial study of autobiographical excerpts anticipated the fieldwork component based in hermeneutic phenomenology. The key study component, completed over eight months of interviewing, resulted in profiles of six teenage research participants derived from interview transcripts and other artifacts. The data were analysed carefully to discern

how each participant described and reflected on their learning emerging from differing educational circumstances. Six emergent themes were elaborated characterizing the nature of learning as: idiosyncratic and personal/ized; aligned with generative, creative and imaginative acts; always about some way of being in the world; enacted methodically and strategically; relationally configured; and individually animating and life-enhancing. Analysis of the fieldwork study also yielded important answers to the subsidiary research questions.

The core themes emerging from both studies overlap and help to recognize learning as essentially subjective. I have given additional specificity to the core themes of learning as a result of the fieldwork study because this study allowed more detailed interrogation of participants' learning experiences and afforded me much more participation than the autobiography study.

The next chapter will discuss research findings consonant with the literature review presented earlier, implications arising from research, and future considerations for study.

Chapter 6. Conclusions

This chapter begins with a research overview and summary of results gleaned from my research data. Follow-up discussion will widen the lens of interpretation to consider implications of this research. Future consideration will be paid to how this research might be extended to inform existing K-12 and post-secondary educational practices. The chapter will conclude with a discussion of research implications related to the Covid-19 pandemic, since this was the time when the study was conducted.

6.1. Research Overview and Summary of Results

This research developed out of a personal interest in the nature of learning that has remained with me throughout my life and my 30-plus years as a professional educator. The focus of this dissertation is on exploring how learning is experienced subjectively as a way to better understand the essential nature or character of learning.

I had long reflected on this subject and noted confusing and discrepant interpretations of learning in academic literature and in my professional practice. At the outset of this research, I reflected on two important personal learning experiences. A literature review provided additional insight in understanding the history, foundations and evolution of academic knowledge about learning, and particularly its intertwining with and at times discrepant positionality in modern schooling. Considerations of various phenomenological researchers helped elaborate the phenomenality or nature of learning and, in particular, its vital, animated, relational, idiosyncratic and evential characteristics. I began the more formalized research portion of this dissertation with a study of autobiographical excerpts about personal learning experiences or observations that provided insights into the subjective character of learning. These insights link to a fieldwork study I completed during 2021-2022 and which involved interviewing six participants, 13-17 years, at regular intervals about their learning.

The fieldwork research was undertaken as a qualitative study based on the accepted practices of descriptive phenomenology (Giorgi, 2009), hermeneutic phenomenology (van Manen, 1990), and reflexive thematic analysis (Braun and Clark, 2006). The fieldwork research was completed to explore the question,

What is the nature of learning as it arises for student research participants?

And to address these subsidiary questions:

How does learning arise and become personalized for participants?

In what ways are participants' learning experiences influenced?

In what ways does personal identity coalesce in and through learning experiences?

and

What invested meanings form for participants in and through their learning?

Throughout this work, I have contributed personal insights, particularly through a pedagogical lens reflecting my 30-plus year career as a professional educator. Over this time I have sustained a special focus on personalizing/personalized learning. This orientation has influenced my educational praxis especially in terms of *how* I perceive my students and, in reflection of this, how I might modify my teaching to better serve these students' educational goals. I have been especially influenced by the tenets of humanistic science and other domains of knowledge and practice that have emerged in the past several decades and now contribute to the rise of personalizing/personalized learning in schools and districts across North America, including in British Columbia which is the Canadian province where I live and work. Examples of these tenets include the general acceptance of the Theory of Multiple Intelligences (Gardner, 1984) and the tenets of Social Emotional Learning that have helped educators adapt to greater range of neurodiversity in students (Diamond, 2010). As I have noted, personalized learning, while widely acknowledged as holding much potential to help more students achieve educational success, is not buttressed by much research to date. It is my hope that the research I have conducted in creating this dissertation will contribute to a growing knowledge base for this emerging educational orientation of personalizing learnng.

The most significant limitation of this study is due to the Covid-19 pandemic which coincided with this design and implementation of the field study component. Due to restrictions imposed by local health authorities I was prevented from directly observing learning activities of three participants attending public high school. I feel this was

adequately addressed by detailed questioning of these participants about in-school learning events and activities. Another limitation might be found in the small sample size and narrow demographic of the fieldwork research participants. A small sample size, however, is not considered a constraint in phenomenological research according to van Manen (1990) or Finlay (2009).

6.2. Summary Findings of Fieldwork Research

6.2.1. Elaborating the Main Research Question

Through data analysis and reflection, I rendered the *nature of learning* for student research participants in these thematic ways:

i. Learning arises idiosyncratically in a personal/ized manner through phenomenal acts fused to a dynamic subjectivity, and suffused in personal biography, disposition, vision, belief, interest and lifeworld or existential circumstance.

ii. Learning is a generative, creative act, arising in imagination for all, materially for some, and performatively in various ways.

iii. Learning reflects phenomenological intentionality, orienting in consciousness toward *something*: a goal, a vision, an impulse, a sensibility, an affect, an ethical concern or drive, and it may include combinations and intertwining threads of this nature.

iv. Learning is taken up by methodical and strategic approaches in consciousness.

v. Learning arises through intersubjective relationality with a preconceived idea, circumstance, ethical concern or sensibility held in consciousness.

vi. Learning induces animation in multiple ways, perceived in somatic and affective responses, inducement of wonder and curiosity, engagement and repulsion, gestures to improve learning or relationality or to create or generate an imaginative or material outcome.

In addition to these thematic essences, I discerned other important characteristics of participants' learning, albeit less noticeably: participants holding a sophisticated meta-awareness of their own learning; learning forming imaginatively for each participant; learning as an act fused with and responsive to life forces, moving 'towards something', exploring and seeking to understand the world, and improve self-agency in a future-oriented trajectory; learning reflecting implicit and explicit values held by participants; learning linked positively and critically to schooling for those participants attending school; learning as full, rich, dynamic, and sophisticated for those participants who were home-based learners following their own deep interests. Learning as an embodied and physical act was very important to two participants but not evidently to others, although it might be argued that all the participants describe meaningful learning as affectively, energetically and synergistically charged and, thus, in some significant way, to be embodied.

6.2.2. Elaborating Subsidiary Research Questions:

How does learning arise and become personalized for students?

In all formal and informal learning situations, research participants personalized their learning consonant with the aspects listed in theme 1, above, and also through idiosyncratic methods and strategies.

In what ways are participants' learning experiences influenced?

Participants' learning was strongly influenced by motivating factors, especially personal interests; temperaments and attitudes about learning; ethicality, grounded in participants' beliefs; lifeworld circumstances; personal challenges; conventional classroom practices; quality or character of learning supports; learning environments (SR); and previous learning experiences.

In what ways does personal identity coalesce in and through learning experiences?

Identity is fused to a phenomenality of learning that comprised and is intertwined with personal biographies, dispositions, visions, beliefs, interests, intersectionalities and interactions, and lifeworld circumstances.

What invested meanings form for students in and through their learning?

Meaningful learning reflected individual purpose and vision, ethicality, and personal beliefs, sometimes emerging in-the-moment and sometimes enduring for longer periods of time. When learning was linked to generative and creative acts, materially and/or imaginatively, participants elaborated additional meaning(s).

6.3. Interpretive Summary of Findings

Learning was denoted for each participant in many varied circumstances as arising in consciousness and deeply integrated with a sense of self and subjective experience, and intersubjective relationality. Significant learning was perceived as manifesting meaning idiosyncratically, for example, with WJ learning how to create, plan and manage *Dungeons and Dragons* games, AM devising unique strategies to help with her academic studying, CS carefully studying and honing his skills of music criticism and self-orienting to receive feedback and improve job performance while working at a café, SR devising and completing a sophisticated graduation project and proactively modifying personal strategies to improve her learning success, BM assisting colleagues as a way to improve her studying, and KL committing to improving her relational interactions with horses and calves as a reflection of her deep ethicality about human-animal interactions. For most participants, idiosyncratic learning also reflected deep personal interests that helped motivate learning.

6.3.1. Correlation between Fieldwork Research and Autobiographical Excerpts

There is considerable overlap of the findings of fieldwork research and the autobiographical excerpts I reviewed on the character of learning experiences forming in similar subjective yet idiosyncratic ways:

- the sensual, affective ways Helen Keller, Michael Moore, Naoki Higashida, John Lithgow and fieldwork participants SR, CS and WJ describe how they are subsumed by learning experiences.

- the ways Michael Moore, Susan Sontag and fieldwork participant CS, KL, SR and WJ are motivated and impelled to participate in learning experiences reflecting powerful personal interests.

- the obvious relationality with non-human entities shaping the significant learning experiences of Hannah Bourne-Taylor and KL (bird and horses/calves, respectively).

- the generative learning described through educator-observations related by me and John Holt and described by fieldwork participants WJ, CS, SR and KL.

Even when the related learning events reflect painful and traumatizing experiences, e.g., as related by poet Rupi Kaur and Residential school survivors, that learning is of a different affective quality but it remains subjective, idiosyncratic and generative in nature.

Finally, I draw two additional findings from these inquiry components:

- learning is not primarily an intellectual process driven by activities of the 'mind' but it is holistic in nature, melding sensorial (referring to emotional, relational, embodied) characteristics with individual subjectivity (reflecting sensibilities, dispositions, personal biography, and personal biology). This mirrors a distinction noted by Miller (2019) who asserts “wholeness recognizes the interconnected nature of experience and the multidimensionality of human beings” (p. 8).

- learning experiences are not static and fixed but dynamic and responsive to evolving and unfolding circumstances as they are experienced subjectively.

6.4. Discussion and Implications

6.4.1. Main Findings

Research validated the primacy of subjectivity as a significant characteristic and motivating factor in learning. The fundamental nature / character of learning appearing in the experiences related by research participants is a subjective sense of *life-and-self-*

vitalized events, especially resonant with the aforementioned insights by Henry (2003), Marion (2012), Smith (2006, 2014), Sheets-Johnstone (2020), Beith (2018) and Cobb (1977) and coinciding with the phenomenal characteristics of learning I elaborated in chapter three. This life-force emerges in individuals through a power or *puissance* (Beith, 2018) experienced in consciousness and through our inherent neurobiology, impelling us to engage with the engulfing world and ongoingly construct meaning from this very manner of engaging. Learning acts are generative (Beith, 2018; Cobb, 1977), animated Sheets-Johnstone (2020), relational (Smith, 2014) and evential (Romano, 2009), enduring through Kaironic time (van Manen, 2017).

I recognize alignment with phenomenological researcher and author Eugene DeRobertis who writes in the text *Phenomenology of Learning and Becoming* (2017) that learning "denotes an originating, transformative act that results in the emergence of a novel dynamic-relational, meaning-laden gestalt" (p. 24), that it "plays out from within the temporal unfolding of one's becoming," (p. 27), and that it is "primordially personal and interpersonal" (p. 39). Alignment is not resonance, however, and I feel that DeRobertis, and others conceptualizing learning in such psychologistic terms overlook the extent to which learning arises as an aspect of *a person's* living and is taken up in idiosyncratic affective, animated and animating ways. The entangled aspects of subjectivity noted in this research confirm the variegated modalities by which learning appears, reflecting a maxim for phenomenological investigators to reveal "what appears in its appearing."

Life, Henry writes (2008), is "not a something, like the object of biology, but the principle of everything" (p. 3). It is a phenomenological life, he says, in the radical sense where life defines the essence of pure phenomenality. The living being, he continues,

> is coextensive with all of the life within it; everything within it is its own life. The living being is not founded on itself; instead, it has a basis in life. This basis, however, is not different from itself; it is the auto-affection in which it auto-affects itself and thus with which it is identical. (p. 132)

Referencing Henry's auto-affection of life, Smith and Lloyd (2019) write "life brims over with affectivity" as a "force of life of which we are not only a part but with which we are inherently, vitally animated" (p. 1). They advocate recognizing a "flow state" beyond the psychologistic one defined by Csikszentmihalyi (1990), through which we might "appreciate how life itself seeps, gushes, rushes, bursts, and flushes ecstatically in activations of vivacity that are also synergies of hetero-affection" (p. 3).

This flow state is consonant with experiences I have brought forward in this research in which participants' learning can be seen as a kind of flow that does not just reflect "life's auto-affectivity" but is grounded in the very sense of oneself. To this end, Henry asserts (2003) that subjective givenness is the distinguishing characteristic of life.

> There is no life without a living being, like this Self that all life carries in it in so far as it is this experience of self of which we are speaking. But equally there is no Self without this Life in which every Self is given in itself, in such a way that outside of life no Self is possible. (p. 104).

By extension, this research helps identify how learning is personalized in primary, pre-reflective experiences that do not stand apart from self-consciousness but are an immanent feature of self-consciousness, self-construction and self-identity, or ipseity. In other words, this study reveals ontological constructions of self-identity and self-affirmation, framing and marking important characteristics and events in the learning lives of the fieldwork participants and the autobiographically-rendered learners.

These self-narrative constructions, grounded in 'ever-eventing' learning experiences, are also guideposts to health. Individual mental health and maturity are, in fact, linked to an ability to consciously construct coherent, integral self-narratives as fundamental to self-care. Existential psychologist Rollo May writes (1983), "an intrinsic and inseparable element in being human is self-consciousness" (p. 97), adding,

> the awareness of one's own being occurs basically on the level of the grasping of oneself; it is an experience of Dasein, realized in the realm of self-awareness ... the achieving of the sense of being is a goal of all therapy. (p. 100)

Grounded in affectivity and there-being, the experiencing self is not confined to an isolationist perspective but one of expansive communing with the worlds within and beyond one-self. Describing selfhood, philosopher-author Corey Anton writes (2001): "We are existential openings, valuative and finite clearings in and through whom worldly existence – cosmos – comes to meaningful manifestation" (p. 150). Anton's and May's self-conceptualizations align with the results of this research and confirm the primacy of subjectivity as an impelling force of meaningful and significant learning.

This research confirms the nature of learning appearing as an existential "essence of life in terms of auto-affection" (Henry, 2008, p. 127) and an innate, generative force inviting us "to assume and inhabit it, to take it on as one of our active

capacities (*pouvoir*)" (Beith, 2018, p. 9). Research results of the present study extend conceptions of learning through re-cognizing its foundational nature at the same time they contest conceptualizations of learning that dismiss or undervalue subjectivity.

6.4.2. How Might Research Results be Taken Up in Education?

Schooling concerns itself with learning, as stated earlier (p. 21), as an elemental context integrated to its own purpose. Given the grounding of this project in my schooling experiences and interests, I would like now to consider the implications of this research in an educational context including reflecting on the literature reviewed and considering present and future educational praxis. I consider especially how educators might further take up and help advance personalized/personalizing learning.

A main finding of this research is that *learning is idiosyncratic and personal/ized*, forming as a pre-reflective experience before any educational or pedagogical 'act' is imposed on a learner, which is to say, before any curriculum goal, learning directive or motivational intervention is introduced to a learner. To learn is to experience learning and, as described above, learning has “a basis in life” (Henry, 2003) as shaped by myriad subjective influences including personal biography, background, previous experiences, interests (attractive forces), dis-interests (repellent forces), sensibilities, dispositions, and biological characteristics (behavioral, neurological). It arises relationally and intentionally, motivating a student involved to attend to the "things" held in consciousness that create the context for the learning to manifest.

Learning has gripped me in this way throughout my life, in myriad events, shaping me, pulling me, enticing me, and propelling me to learn a little and, often, a little more. As a young boy I immersed myself in the swamp to embrace and learn about the mysterious watery world that I related in my *Pond/ering* adventure. In *Pushing off from Shore*, learning gripped me as a “life-infused” force impelling me to grow beyond my/self in exciting and also unnerving ways. In both cases, learning’s fiery tongue ignited my imagination and animated my responses – *reach now, feel this, hear that.* It also propelled me to my career choice as a geologist and fueled lifelong interests that continue to this day.

I feel no differently about my experiences as an educator, observing and engaging the lives of my many students. In this contact, I see their lives are no less rich or poised with opportunities for further learning than mine, though in my pedagogical encounters with them I note that much hangs in the balance in terms of how I respond to them, beginning with how I first encounter them. At the outset, I seek to better understand the nature of their *livingness* which can only be grasped in perceiving them as whole *selves* with unique histories, sensibilities, interests, and proclivities. I interact with them to help *this* self and *that* self unfold a life, richly and in ways meaningful to them. This is how I personalize learning for my students, and I will present more insights into this pedagogy a bit later.

Aspirations by many educators, including myself, to personalize learning for our students in some form often conflicts with conventional schooling goals and practices. To understand this conflict it is critical to note how schooling practices define learning. Schooling is historically, socially and politically constructed, and while it is often perceived as synonymous with learning, this is not necessarily the case. Learning is an innate power fused to our living and not dependent on schools or schooling. Schooling and learning exist relationally, however, and both exert influence on each other through circumstantial entanglements. Schools and schooling are institutional entities created by humans to influence learning although many times in my educational career I have witnessed how when schooling authorities intervene to manipulate learning, ignorant of the character of learning, the outcome will most likely be little to no learning, and this intervention may impede a student's motivation to learn. The most glaring examples of this are linked to standardized schooling methods, based on the continuing primacy of scientific psychologism as a schooling ideology (as elaborated upon in chapter three).

As an outcome of this research, I feel more strongly that educators have much to gain from 'learning more about learning' and particularly its subjective nature. And I regard this research as circumscribing two important questions:

How might educators better understand, perceive and nurture holistic, personalized learning?

How might educators recognize and better support the subject, self, person in our efforts to nurture learning?

How might educators better understand, perceive and nurture holistic, personalized learning?

To better understand the nature of learning, practising educators and educators-in-training need to receive guidance in deciphering typologies of learning that impact or seek to influence education and consider how their own learning insights might be balanced with contractual expectations and standardized practices that may otherwise impede learning. Such concerns continue to be discussed among educators, as they have throughout the history of western education, and especially since the rise of modern schooling in the 1800s. As discussed in this literature review, educators adopted rationalization processes in the 1800s, in many ways seeking to mimic industrialization efficiencies. Institutionalized schooling practices soon followed, prioritizing objective learning through reliance on techniques such as age segregation, standardization, mass testing and streaming. The resulting authoritative system did not value the *self* of the individual student and this system has proved remarkably enduring despite protests from leading educators since its inception. Critical voices have included Charlotte Mason (Ho et al., 2017, p. 1759), John Dewey (Dewey, 1929), Maria Montessori (Hainstock, 1997), John Holt (Holt, 1985), Maxine Greene (Greene, 1971), Paulo Freire (Freire, 2000), John Taylor Gatto (Gatto, 2000), bell hooks (hooks, 1994), and Arthur Zajonc (Palmer & Zajonc, 2010), all of whom advocated for learning to be oriented to subjectivity.

As discussed earlier, insights and emerging theoretical frames of recent decades, especially in what are known as the learning sciences (e.g., neurobiology, psychology, cognitive science), have led to challenging the dominant, standardized educational model. These insights, aligned with this research, help conceptualize a subjective nature to human learning grounded in important characteristics unique to each individual, no matter their age, background, or psychological determination. Concurrent with these emerging frames, mandates are also emerging in kindergarten through post-secondary institutions about being more inclusive of students who have traditionally been marginalized because of physical, intellectual, or cultural differences, to provide students with more opportunities to achieve success. To this end, educators of many stripes and levels have modified approaches to course design, instruction, assessment, and administration. As summarized in the literature review, different approaches include holistic education, personalized learning, differentiated instruction (DI), tenets of Universal Design for Learning (UDL) and Response to Intervention (RTI).

Traditional indigenous or First Nations approaches to learning also orient to holistic/whole-person learning, as described by Cajete (1994), Simpson (2014), and others.

Each of the approaches listed above differs slightly in foundational precepts, goals and strategies in addressing student learning differences. Some educational jurisdictions, including British Columbia, have sought to integrate approaches, which, since 2010, has advocated support for DI, UDL and RTI throughout the K-12 system under the overarching frame of personalized learning. In its curriculum documentation, the BC Ministry of Education (2022) states:

> Personalized learning acknowledges that not all students learn successfully at the same rate, in the same learning environment, and in the same ways. It involves the provision of high-quality and engaging learning opportunities that meet the diverse needs of all students. Personalized learning focuses on enhancing student engagement in learning and giving students choices — more of a say in what and how they learn — leading to lifelong, self-directed learning (website documentation, 2022).

Additional aspects of BC's documented approach includes the co-development of student learning plans "to build on student's interests, goals, and learning needs," the development of thematic units or learning experiences that "focus on students' needs and interests," and "the configuration of combined grade classrooms."

In my fieldwork research, participants enrolled in a BC high school related that, while they did experience some flexibility in approach to course and assignment completion, such as being given extra test time, they reported little personalization of their school programming during the research period. Most of their programming, they said, emphasized curriculum delivered through what they reported as "traditional" approaches.

That is perhaps unsurprising considering that, in its documentation, the BC Ministry of Education states "the BC curriculum is competency driven," emphasizing "skills, strategies and processes that students develop within each area of learning." In each grade and across all (traditional) school subjects, curriculum guides list hundreds of learning standards comprising the "content" that teachers are mandated to complete.

Per learning assessment, documentation states that students will be offered choices in how they might demonstrate their competency in different ways for different

tasks. Despite this guidance, research participants in high school reported they were offered few choices, if any, in academic assessment. And as noted in participant profiles, each student provided critical insights and suggestions on how their educational programming might have offered additional, personalized considerations of their learning.

Of course, this critique of participants' learning experiences vis-a-vis the BC schooling system is extremely limited in scope. But as an experienced educator I have consistently noted an imbalance between "official" curriculum documentation coming from the BC Ministry of Education about supporting personalized learning and contractual expectations governing the delivery of curriculum content. In the majority of instances, the delivery of core curriculum content is prioritized while tenets and aspects of personalization, including budgetary measures for staff training in personalizing learning, are under-prioritized. Any personalization of curricula is thus largely dependent on the efforts and whims of individual educators and administrators, making notable implementation more challenging.

These challenges are not unique to British Columbia; research cited earlier (Gross et al., 2018; Rogers et al., 2014) and the voices of other educators and administrators advocating personalizing K-12 learning (Kallick & Zmuda, 2017; Rickabaugh, 2016) provide critical insights about inconsistent and divergent approaches that do little to gird the implementation of more personalized educational approaches.

Idaho school superintendent James Rickabaugh has helped to implement personalized learning throughout schools in that state since 2010. Writing in *Tapping the Power of Personalized Learning*, Rickabaugh (2016) says that If school leaders are unable or unwilling to provide the support necessary for a transition to personalized learning, "they cannot expect a robust implementation of personalized learning at the classrooms level" (Rickabaugh, 2016, p. 100).

It is beyond the scope of this research to critically assess the implementation of personalized learning in BC schools, but on reflection of the above, limited critique, I think it is a worthy topic for future consideration. During my professional career in K-12 education, I have felt several pulses of personalizing learning, the most recent and enduring being felt since 2010 when sweeping changes to the K-12 curriculum were

announced by the British Columbia Ministry of Education. In that year the education ministry announced with much fanfare[16], the K-12 curriculum was shifting to focus a new curriculum on personalized learning, "where students have more opportunity to pursue their passions and interests – while maintaining B.C.'s high standards on foundational skills like reading, writing and numeracy" (Searchfield, 2017, p. 10).

Soon after this announcement, I was invited, based on my experiences with personalizing learning, to serve on a professional educator committee and offer feedback to government. I did so and shared how, during my career, various factors including underfunding for educator training, lack of research, political interference and intransigence have all contributed to challenging innovative curricular transformation, including the implementation of personalized learning.

In addition to my experiences in K-12 education, I have also served as a post-secondary educator in two graduate-level (MA) programs wholly oriented to supporting personalized learning since 2012. Overall, I judge the adoption of personalized learning approaches in higher education to be not as advanced as in K-12 education in North America, but it is of rising interest and showing definite benefits to instructors and students (Alamri et al., 2021). A changing landscape in higher education into which personalized learning for students of all ages is incrementally creeping may be traced to well-known author-professors like the late bell hooks who, in her groundbreaking book, *Teaching to Transgress*, advocated "engaged pedagogy" as a way for educators to help

[16] This announcement was made via a special animated video-message created and sent by the British Columbia Ministry of Education to parents of BC school children, parent advisory groups, and schools. It featured then-Minister of Education George Abbott speaking directly about the coming curriculum changes in 'BC's Education Plan' being introduced for the 2010-11 school year. Special graphics and other messaging accompanied the announcement (See Appendix D). In a later interview I had with the former minister in 2014 after he left politics, he related to me he had been inspired to introduce the sweeping curriculum changes after meeting with a group of BC high school students convening as the *BC Student Voice* in 2009 to critique education and offer suggestions for change which they detailed in a report, *Learning in the 21st Century* (B.C. Principals' & Vice Principals' Association, 2009). In the report (reprinted in Appendix E) they envisioned a revised system with many changes, such as education as "student-driven and individually catered to each person." The role of the teacher, they said would "dramatically change", with teachers serving "more as a mentor and less as a giver of knowledge." Education needed to be "less rigid" they also wrote, adding, "the concept of students as a homogeneous group sitting in classrooms listening to a teacher present material is outdated to them." Abbott said he was very impressed with the substance and scope of the report and moved quickly to conceptualize and introduce 'BC's Education Plan' within the year. He resigned from political life in 2013 and his envisioned curriculum changes were substantively modified in coming years.

provide students with more meaningful learning (hooks, 1994). It is also seen in advocacy for 'contemplative pedagogy' by educator-author Arthur Zajonc who, in *The Heart of Higher Education* (2010), urges educators to be more attentive to students' intellectual, emotional and character development and "learn to see them as richly endowed, malleable beings" (Palmer & Zajonc, 2010, p. 102).

Aligned with these calls for transformational change in the way pedagogy is conceptualized and practiced, innovative pilot programs have been launched in various higher education institutions. Early adopters have shown creativity and imagination in implementing personalized learning and, likewise, they have overcome challenges inhering in a system historically oriented to conventional curriculum delivery (Howard et al., 2021). There, educators are re-orienting their foci and adjusting instructional gestures (e.g., course design, assignment guidelines, agency locus, orientation to student competencies, backgrounds, and interests, etc.) so that students coming from increasingly diverse backgrounds might have greater success and experience more satisfaction in meeting educational goals (Armstrong, 2018; Bishop et al., 2020; Turner et al., 2017).

In my experiences supporting personalized learning approaches in higher education, graduating students have been forthright in commending this approach [17] As well, I have heard other faculty instructors describe their experiences of personalizing learning very positively[18].

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[17] I share here comments from two different students about a personalized approach to supporting their learning. Student 1: "We all learn in diverse ways and learning should be tailored to the way we learn so that students feel supported and encouraged to use their strengths and work on their weaknesses. Students will be engaged in learning if the materials interest them and it is designed based on their strengths in learning." Student 2: "Having the opportunity to explore two areas I am passionate about, my children and the epidemic of childhood obesity, made the course fulfilling. … Sharing our personal experiences in class and then being able to connect them put a new perspective on how our lives are all connected to subject."

[18] In spring 2019 I attended a plenary session at a university (SFU) teaching conference where three professors who had received prestigious teaching awards were asked to share what they believed were the most important educational gestures they offered to their students. Each said they sought to personalize learning for their students in some way(s) and they were confident that this was beneficial to students' learning, and also to the nature of their pedagogical relationship with students. In a follow-up meeting I held with one of the professors, a veteran first-year math instructor, he related that his gesture amounted to him inviting his students, numbering in the 100s, to drop by his office and share a little bit about themselves. He told them he was interested in better knowing them better, if even a little. Over many years of doing this, he said, he'd met well over a thousand students who had come by to meet with him, usually for only a few minutes. He related

As in K-12 education, higher education instructors are likely to encounter challenges in initiating and sustaining personalized learning, ranging from confusing definitions of personalized learning to resistance shifting conventional pedagogical practices tied to contractual constraints. Other noteworthy issues are also entangled in educational gestures to advance the implementation of personalized learning in K-12 and higher education. These include technological and corporate interests marketing software and hardware linked to personalizing learning and sometimes directly funding or sponsoring educational projects favorable to their ends (Brass & Lynch, 2020). This funding buys products, services, systems, educator training-time, and administrative approval, all of which influence educational praxis. Some authors link these interests to entrenched, powerful forces aligned with neoliberalism. Emerging in the 20th century as an economic ideology favoring free-market capitalism, globalization, austerity and reduction in government, neoliberalism has insinuated itself in education at all levels so as to manipulate processes and engineer outcomes favourable to this ideology. In the introduction *to Phenomenology and Educational Theory in Conversation* (2021), the editors assert neoliberalist doctrine emphasizes educational commodification, competition and a "fixation on measurement and quantification. (Howard et al., 2021, pp. 1–2).

Giroux (2019) puts things even more starkly, writing that under the influence of neoliberalism,

> power is concentrated in the hands of a managerial class that too often views education simply through the lens of a market-driven culture that harnesses matters of governance, teaching, and learning to the instrumental needs of the economy. (Giroux, 2019, p. 144)

Everything about education that matters, Giroux continues, appears to be absorbed into a neoliberal discourse of business, metrics, and a reductionist notion of efficiency. Research, he adds, "is increasingly shaped, valued, and rewarded to the degree that it reflects corporate interests and is defined in measurable terms" (p. 144).

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that he was confident that, in some way and however small, this encounter made a positive difference to students, and he said many students had told him later the gesture made a positive difference to them. To me, this professor is describing a small gesture that nonetheless had a positive impact on students who, likely, experienced important existential confirmation in the encounter.

These critiques reflect a growing chorus about what has evolved into an internecine conflict in higher education, pitting educators against educational managers and administrators.

Corporate interests associated with educational services, hardware, software, curriculum, data management and security, even institutional design, have risen in self-serving importance to compete in almost all areas of educational management and purpose. Distrust among educators about “silver-plated institutional messaging” to the public about education ventures with big tech corporations is high (Vinsel, 2021), and likely contributing to the increasing stress and anxiety teachers have been reporting for years (Palmer & Zajonc, 2010).

Compounding the problems educators are facing from the rising tide of neoliberalism is its reach, extending beyond education into other domains where personalization has been adopted as a strategy to expand influence. Medicine, health care, online gaming, counselling, professional coaching and even marketing are all fields where personalization — including “machine learning” based on artificial intelligence — is increasingly used to justify collecting personalized data to enhance engagement with potential clients. The rise of the internet, coupled with social media and data-capture technologies, has helped ensure “anytime, anyhow” personalized engagements. The goal is obvious in a white paper released in 2019 by international marketing company McKinsey & Company. “Personalization will be the prime driver of marketing success within five years,” say the authors of this report who foresee significant economic growth opportunities associated with multi-faceted personalization gestures (Boudet et al., 2019).

Any new developments pitched with corporate fanfare to educators should be met with caveats and ethical considerations. Technology researcher Sherry Turkle wrote about the influence of technologies on individuals and societies some time ago in *The Second Self* (2005), and said in a more recent interview that each field now seeking to capitalize on personalization will see “overreach” and “correction. She urges caution and critical reflection in our increasing engagement with technologies, no matter the domain. Recent developments in the field of Artificial Intelligence also merit close scrutiny by educational authorities (Connolly, V. & Watson, S., 2023).

To return to the original question of this section, it can be seen that Kindergarten to post-secondary schooling remains today fraught with competing ideological interests, many of which seek to manipulate schooling processes and influence the nature of student learning. I believe the clearest path to understanding and nurturing holistic, personalized learning lies in educators advocating for these approaches and working to ensure they endure in the face of competing interests. This is not a trivial task but, as one who has undertaken it, I see it as the most robust pedagogical strategy to undertake.

How might educators recognize and better support the subject, self, person in our efforts to nurture learning?

Another challenge educators wishing to personalize learning for their students may face is understanding and conceptualizing their roles in initiating personalized learning. Personalizing learning must begin with educators – whether they are experienced or new to teaching – who are able to acknowledge the student before them as a *legitimate self* and person, no matter the programmatic end in mind. By inference, this person must be seen as a human subject possessing similar, yet idiosyncratic, characteristics as the educator; in other words, educators must perceive 'something of themselves' in each student. While two or two hundred students may appear to have identical features pertinent to education – for example, they have basic literacy skills – on closer examination, differences can be discerned: one enjoys reading science fiction, another comics, another in creating comics, while a further student is experiencing challenges learning a second or third language, and so forth.

This acknowledgment poses a significant challenge, indeed a responsibility, for educators wishing to adopt a personalizing approach: discerning individual differences among students and then working to relate to and guide the learner commensurate with idiosyncratic characteristics that optimally engage them in making sense of the learning-lifeworld they inhabit. For the experienced educator, this likely means allowing a different and deeper pedagogical relationality between educator and student than in conventional course instruction.

Pedagogical tendrils connecting to personalized learning, and specifically acknowledging a learner as a subject as opposed to an object, emanate from philosophical phenomenology. Philosopher Martin Buber, In his landmark book, *I and*

Thou (1958), conceptualized a “philosophy of dialogue” in which he described, in a famous thought-experiment, how one could view a tree, objectively, as an “it”, in myriad ways, but one could also be “bound up in relation” to the tree and no longer consider the tree an “it” but a “thou”. “If I face a human being as my Thou,” Buber wrote, “he is not a thing among things, and does not consist of things” (p. 8). This is similar to the vision of relational ethics and confirmation articulated by educational philosopher Nel Noddings in her book *Caring* (1984) that I quoted earlier (p. 73), and I believe is worth repeating here:

> Confirmation, the loveliest of human functions, depends upon and interacts with dialogue and practice. ... To confirm, I must see and receive the other - see clearly what he has actually done and receive the feelings with which it was done. (Noddings, 1984, p. 196)

Phenomenological scholar and author Max Van Manen locates pedagogical experiences as occurring "when adults stand in pedagogical situations and relations with children or young people" (van Manen, 2012, p. 8). A phenomenological reflection of a pedagogical gesture, he writes, helps to reveal “the manner that we see, feel, sense, reflect, and respond” to our students (p. 10). To van Manen, educators personalizing learning do so in a pedagogical manner that confirms a student’s “being” and “coming into being” or “becoming” through his or her learning in all its varied forms, in and beyond school. Van Manen frames such sensitive pedagogy as a “tactful” act through which educators

> make contact with the talents and intelligences, vulnerabilities and fears, happiness and hopes—the inner lives of the children and young people we teach. Only through genuine contact can teachers open up the spheres of pedagogical encounters. (pp. 30-31)

By contrast, a “pedagogical encounter” with a student in conventional education is often interpreted by educators pragmatically in relation to curricular or other educational goals. Students may be consulted about a determination of assessment but often they are not. In engaging a student relationally, personally and pedagogically, however, I encounter a student, first, through discerning "who" that student truly is, if even a little, and in engaging them in dialogue about a particular response. These can be simple but effective gestures, based in prior understanding but also exploring what a particular learning trajectory might look like, and how a student might wish to be supported.

Responding in this way, re-cognizing students as *legitimate selves* and persons, helps to enfranchise them as subjects of learning and not as its objects. The participant profiles of this research project attest to the idiosyncratic nature of learning-arising for each student, and to the varied and nuanced learning gestures linked to their ongoing achievements.

To further animate this pedagogical aspiration, it has been important for me to hold an understanding of a student's biological and psychological developmental trajectory comprising universal and unique, individualized details at the same time as I see that student as a *subject* grasped by the pitch and swell of their life's variegated currents, rooted in idiosyncratic experiences, affectivities, thoughts, beliefs, and acts and other material and non-material influences. This student appreciation is not so different than the way I understand my life as likewise propelled by such elemental forces.

When I first meet a new learner, however, I know little if anything about the person before me, making it challenging to personalize their learning. I must, therefore, gain some background information about 'who' this person before me is. To this end, I have created several different *Personal Ecolography* surveying instruments that I have used to elicit detailed, summary information from students at the outset of a new course. Using these instruments has helped me personalize learning for my students and in a recent research project other educators reviewing the instruments have confirmed the value of using them (Maser, 2021).

Using survey instruments such as the ones I have designed, requires some time to administer and review, which is a commodity many educators find to be in short supply, given pressing schedules. Knowing this, I believe the essence of such surveying can be distilled down to a fundamental and very economical question to ask students at the outset of a course: *What is the most important thing (or things) you would like me to know about you, so that I can best support your learning?*

This question is embedded in one of the surveys. When I have asked it of students, they almost always share something with me, for example, *they are not interested in the subject,* or *they are experiencing distracting challenges at home,* or *they are dyslexic,* or *they love the subject!* Sometimes they don't know what kind of support might help them; sometimes they request extra help or time. Invariably their answers

provide information that helps me better understand them at the beginning of our relationship. As our relationship develops, I work from this initial encounter to deepen my understanding of *how* their challenge(s) specifically arise and subsequently consider what might help resolve to resolve them in some way or other. This is the nature of the reciprocal (and confidential) conversing through which I strive to personalize learning.

Surveying students as I have done, collecting detailed or summary information, has almost always helped to enfranchise a student in his/her learning. It also forms part of what makes personalizing learning so interesting! In a conventional setting, educators are not expected to act in significantly 'personal' ways but to complete their duties economically and efficiently. Through personalizing learning, I am, rather, obliged and, moreover, inspired to enter into pedagogical relationship with a 'learner' who I perceive as fully imbued with the qualities of a ‘whole person' experiencing and engaging in their own learning. I have always regarded interacting in this way as worthwhile, no matter the effort I may have to invest at the outset.

Another challenge I have recognized among educators seeking to personalize learning through extending more personal agency to a student focuses on the matter of trust and trusting students. In practical pedagogical terms, extending more personal agency to students for their learning correlates to ceding some pedagogical authority and responsibility. In this extended act, we educators animate a pedagogical dialectic with notions of trust, considering questions like: *Is it appropriate to extend more trust to this student? What aspects of trust might I wish to open up to this learner? What might a relationship with this student look like if I trusted him/her more? How can I engage this learner in conversing about trust and reach mutual agreement about enfranchising the student with greater trust? How might my role as an educator change in a different arrangement of trust and am I prepared for that? How might I and the learner continue to enliven discussions and decisions about trust in the future?*

These are critical considerations in extending more agency to students’ schooling circumstances. Some educators are very willing to ‘dig in’ and experiment with this, while others may be less willing or entirely resistant. Perhaps their careers and identities are established around conventional teacher-student relationships and instructional designs and they are not willing to change any of this. The best starting point is usually where there is least or minimal resistance to change.

The issue of trust and trusting students with more agency is not limited to education, of course. It is a characteristic of parenting and pedagogical orientations that extend beyond school to supervision, coaching and child care. In this we encounter differences reflecting cultures, approaches, and also legislative strictures governing things like traffic safety, access to substances, and playground design.

Stephen Smith (1998), writing about risk and pedagogical relationality, contextualized child-adult interactions on playgrounds (1998), and inferred proportionate and developmentally-appropriate risk-taking as the corollary to trust. I think his insights into risk have much meaning for educators considering issues of student trust when he writes “it is always possible that the expectations we have of children exceed their ability, that they do not measure up, and our efforts may only serve to discourage them. … This is the risk we take” (p. 76).

Smith illuminates an aspect of risk/trust that also points back at pedagogues – our actions may “discourage” a student. This may precipitate an existential fear of our competency as educators and lead to additional fear of acting at all. Smith frames an answer, writing: “How can we properly respond to the child’s experience? It seems at times we must trust children even though there remains a chance of mishap” (p. 76).

In bringing some resolution to this dilemma, Smith echoes advice from educator-author John Holt (1967) who, writing in *How Children Learn* (1967), states:

> Trust Children. Nothing could be more simple – or more difficult. Difficult, because to trust children we must trust ourselves – and most of us were taught as children that we could not be trusted. ... What we have to do is break this long downward cycle of fear and distrust, and trust children as we ourselves were not trusted. To do this, will take a long leap of faith – but great rewards await any of us who will take that leap. (p. ix)

As I hope I have helped to reveal in this discussion, in seeking to initiate a pedagogical gesture of personalized learning, I must encounter a student as a person inhabiting a world of their own intersecting and variegated realities and histories, dreams and fears. As an educator I cannot change this, but I can learn about it, acknowledge it and confirm a learner/student as the complete human *they are*. In this I must be willing to look beyond how they might have been determined through grades, test scores, automated reports, and perhaps comments from other educators. At this point we are now presented with a further choice: to *act* in a way that honours not only what we have seen

or apperceived in a learner before us but in a way reflecting what we wish to nurture in the further emergence of their *being*. In determining how we might engage in this act of "carrying forward" (Gendlin, 2004), we may find ourselves facing a risky proposition, pitting us against established norms, colleagues or both. We may also be challenged to see students in ways that differ from how we were seen and evaluated. This may cause us to reflect on how we *wish* we had been seen as children and youth and how we may *wish* our learning had been nurtured differently. Resolving these challenges, in my experience, comes down to extending trust, not only to a student in a gesture of offering more agency, but trusting oneself that *seeing anew*, difficult though it may be, is appropriate and potentially a *healing act* that may engender more wholeness and learning, including for ourselves. And through this prism, we also accept the inherent risks linked to our pedagogical gestures of trusting students. Perhaps this is a good time to remember that life is full of risks. And as I described in *Pond/ering* and *Pushing off from Shore*, risks may be the worthy companions to rich learning about the world and ourselves.

6.5. Future Directions

I posit that research results merit follow-up in several ways: i. Expansion of research to evaluate personalized learning in various educational settings; ii. Consideration of how more personalized learning opportunities might be offered to students; and iii. Consideration of personalizing learning in the face of the Covid-19 global pandemic.

6.5.1. Expansion of Research

I believe there is merit in expanding the present study to focus on evaluating personalized learning in educational settings where it has been initiated. In British Columbia, there are numerous (K-12) educational sites where personalized learning was established before or commensurate with ministry-mandated curriculum revisions starting in 2012, including some serving distinct populations (for example, special education students).

Prior to this research being initiated, I proposed investigating personalized learning in BC schools. I received project approval and was set to begin this when the

Covid-19 pandemic began in 2020. Health authority measures adopted by schools and school districts effectively terminated in-person schooling and the project was not initiated.

I think further research would likely yield important insights into the characteristics of effective practice in implementing personalized learning. With university involvement, the results would assuredly be of interest to government, public school districts, independent schools, and post-secondary educational institutions, including those providing educator training.

6.5.2. Consideration of More Personalized Learning Opportunities for Students

This study, focused on the phenomenality of learning, provided insights into the learning worlds of students from curriculum-driven learning environments (Am, BM and SR) and less-formal learning environments where students pursued personal interests of their choice (CS, KL and WJ). Though it was not a goal of this project for the researcher to assess participants' learning achievements, it was discerned that the learning results from both environments were significant and distinguishable. The free-to-choose participants' learning was rich, full and sophisticated; its outcomes were ongoingly evaluated by participants in the context of criteria reflective of interest-area expertise. Participants were highly motivated to continue learning and develop skills and competencies in their respective areas of interest. The school-based participants' learning profiles reflected academic assessments and grading matched to schooling processes and curriculum-based learning outcomes. The school-based participants had little to no opportunity to pursue personal learning interests.

Though all participants assigned positive value to their learning, as researcher and educator I can't help but wonder how the school-based participants' learning might have differed if there had been more opportunities for them to pursue personal learning interests. I believe there is much merit in expanding schooling to enfranchise student learning that more fully incorporates personal interests, dispositions, biography, etc. In this research, and the exploration of autobiographical excerpts including *Pondering* and *Pushing off from Shore*, I note strong alignment between subjectivity and learning and ancillary, positive characteristics including the potential for learning interests to seed

future learning directions, including career possibilities for learners. This was particularly evident in the free-to-choose participants and, to a lesser degree, in the school-based participants.

Extrapolating from this research, I believe that allowing for, and enabling more personalized learning opportunities for students enrolled in schools would benefit students. These opportunities could be grounded in personalized coursework, interest-oriented projects, and interest-area job 'shadowing' and apprenticeships. Student learning is not, of course, limited to that which accrues under the purview of schooling or formal education. To this end, and in this day and age with the provision of internet and community-based opportunities, learning for all students to some considerable degree extends beyond institutionalized education. It is, therefore, appropriate to recognize and validate learning that students experience beyond the purview of schooling.

The opportunities and ideas discussed above would be best served through educator conversations in professional training and in-service workshops.

6.5.3. Consideration of Personalizing Learning in the Face of the Covid-19 Global Pandemic

In early 2020, the Covid-19 pandemic disrupted K-12 and higher education more significantly than any other event in the lives of most educators and certainly all students. Soon after its detection in 2020, and through subsequent virus-variant waves rippling worldwide, schools and campuses closed to in-person learning and relegated education to online scenarios. Many education issues emerged from shutdowns, including course and program interruptions, and numerous problems were tallied relating to services and hardware access, technological (in)competency, and student isolation. Mental and emotional health issues are still being assessed but, ongoingly since the start of Covid, authorities have reported increasing anxiety and depression, and impeded learning achievements, worldwide.

Research reported in 2021 of more than 500,000 university and college students attending American institutions into effects of the pandemic show deep and far-ranging effects for many students. These include many aspects of schooling anxiety, food, job and housing insecurity, family worries, physical health problems (including overcoming

Covid-19) and numerous mental and emotional health issues (Leshner & Scherer, 2021; The Hope Center, 2021).

Recent research into pandemic effects on youth and adolescents identified similar results. A 2022 national survey (N = 7,705) by the US-based Centers for Disease Control (CDC) tallied significant levels of physical and emotional abuse and other adverse experiences in school and home life. Specifically, the report says two thirds of adolescents reported difficulty completing their schoolwork since the beginning of the pandemic due to transitioning to virtual learning, inconsistencies in school coursework expectations, and confusion about complex and complicated assignments. Students who had difficulty completing schoolwork also experienced higher levels of emotional abuse by a parent. "These disruptions and adverse experiences threaten adolescents' health and safety in addition to acting as barriers to learning," say the report's authors (Krause et al., 2022, p. 33).

Another recent report by the Baker Center. in affiliation with Harvard Medical School, details pandemic effects on 80,000 children and youth worldwide, and says many pandemic-related stressors have exacerbated existing behavioral health needs and introduced "a host of new concerns." Noted among these are rising anxiety and depression, suicidal ideation and learning disabilities, all of which are at some risk of being undetected and untreated due to limited health-care and education-related resources (Shen et al., 2022). In their recommendations, the report authors advocate offering training and technical assistance by child-serving professionals, "and especially teachers and school staff, to build individual skills and resources to identify warning signs for behavioral health challenges in children" (p. 48).

Public health authorities approved the "re-opening" of in-person education in North America for fall, 2022, and future endemicity of Covid-19 is considered a statistical probability. As of this writing, however, medical authorities assert the world is not yet clear of the pandemic and future educational scenarios could again vacillate between online and in-person learning, posing new health and learning risks for students. Identifying the gestures that will help students, educators and families seeking to heal from and continue to adapt to this very human crisis calls for an ongoing, humane, and personalized responsiveness.

According to health researcher and university instructor Mays Imad, lingering or future pandemic effects on student mental health may comprise significant, ongoing challenges. She implores higher education administrators to recognize the gravity of this and embrace a personalized approach to student health care. Writing in *The Chronicle of Higher Education*, she Imad (Imad, 2021) states:

> I am calling for higher education to cultivate our moral imagination where every student is seen, where we invest in the well-being of the whole student, and where we ground all of our work in an ethics of care.

Imad also identifies the importance of moving away from inundating students with platitudes of success and persistence, and really listening to them to meet them "where they're at." I agree with Imad and advocate for personalized learning to be recognized and pursued as a most viable option in nurturing healing and building resilience to pandemic-related challenges.

6.6. Final Word

This dissertation, rooted in phenomenological investigation and personal reflection, extends understanding of the nature of human learning beyond traditional parameters based in scientific psychologism. I link significant learning experiences to essential subjective characteristics of learning. I also posit how students in K-12 schooling and beyond may benefit from broader implementation of holistic personalized learning as a practice increasingly being adopted by educators at the same time as it faces institutional and ideological challenges.

In concluding this study, I appeal to educators to recognize several key points to better realize the promise of authentic personalized learning. First, educators need to be curious about the nature of learning for their students, no matter their backgrounds. They next need to look beyond abstract theories of learning to see how learning arises concretely for them and their students. Subsequently, educators need to perceive how they and their students ascribe meaning to learning and consider how disparate meanings may be reconciled. In this we may come to see something in our own learning that we may have overlooked in accepting abstracted definitions of learning and standardized teaching practices built on these abstractions. Through our own learning insights, we will then come to regard learning in new ways for our students. We may see

where and how a ‘fire of learning’ is igniting in a student and where it is burning out. This is to see learning *re-newed* though what is revealed may have been there all along.

As Dr. Barry Prizant says about interacting with autistic children, helping a child does not begin with seeking to identify a problem and determining to “fix it.” Rather, he says, help begins by listening and paying close attention to what a child is trying to relate. “We need to work to understand them, and then change what we do” (Prizant & Fields-Meyer, 2015, p. 3). Through pedagogically sensitive encounters, inquiries and observations, all educators may deepen their understandings about how their students are experiencing learning. Our curiosity about our students will also change the way we see and interact with them. Sometimes the outcomes of such encounters with students will only be apparent to intuition, through what van Manen (2012) describes as an "enigmatic experience of recognizing the unrecognizable, of seeing what can really not be seen" (p. 30).

Consonant with the assertions by van Manen and Prizant, I offer a final anecdote. Recently I volunteered to work with a teenage youth who was experiencing personal difficulties due to a complex of problems that many do not experience in a lifetime. In a first meeting he and I forged a basic agreement (English was not his first language) that I would help him learn new skills in a subject he said he was interested in. For a couple of months we met weekly and I led hands-on experiences to help him develop core language, knowledge and some varied, embodied skills. He was learning incrementally, but I discerned this was very difficult for him and he was only mildly engaged.

Clearly, something was troubling him deeply. Then, In the middle of what turned out to be our last session he stopped, mid-activity, shook his head and told me he did not wish to continue. In that moment I paused and purposefully opened up to see him, imaginatively and anew, and I fully accepted his disclosure to me as an authentic gesture of his *being*. Perhaps, in a rush to teach him, I had not seen him quite this way before but now I suspended my ‘teacher mode’ and saw him – I *confirmed* him – as complete and whole, just as he was. That’s perfectly fine, I told him. I’m glad we tried and maybe we could continue this another time, I added. He nodded a little before we fist-bumped and he walked away.

As I pondered this soon after, I reflected on the choice I had made in-the-moment and I felt almost giddy that I had re-cognized him in this way and not derided or shamed him for ‘not trying harder’ or downplayed his own personal sentiments, obscured though they were. I’ve experienced those responses and absorbed their toxicity as a student. As an educator I’ve also seen them at work in conventional school settings where achievement outcomes are prioritized as a direct or tacit cultural rule. That scenario is poignantly brought to life, and death, in Herman Hesse’s tragic novel, *Beneath the Wheel* (1905).

I felt this choice hanging in the balance in this circumstance but my experiences in personalizing learning for students, including what I shared earlier about my interactions with Addy, helped shape my response. I was confident I had made a sound choice and that my words and actions confirmed this as a way of *carrying forward* my conviction to honour his *being*. I also recognized how, through this choice, I was still *pushing off from shore* all these years later. The experience felt somewhat familiar but because of the insights I had gleaned from researching, writing and re-writing this document I also felt re-*newed*. In a moment of clarity I realized I had learned so much more about the *nature* of my learning than I thought I already knew: it’s *arising* for and through me in life-infused, bursting-forth experiences of vital contact that, in this case, helped animate and propel me in effecting a caring and sensitive pedagogical response. In this paradoxical circumstance something “unrecognizable” was readily apparent to me through a pulsating exhilaration.

As I hope this research focused on exploring the nature learning has helped reveal, the challenge to educators of “recognizing the unrecognizable" in students’ learning experiences and responding tactfully may require us to suspend what has been shown to us under the guise of authoritative knowledge and rely instead on an ‘insight-out’ intuition about the *arising* nature of learning.

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Appendix A.

Evidence of research need

i. The two paragraphs below are excerpted from the document, A National Landscape Scan of Personalized Learning in K-12 Education in the United States (Gross et al., 2018, pp. 25–26). These excerpts speak to how personalized learning, as noted in a national school survey (N = 908 teachers), is at an incipient stage of implementation, but is impeded because of a perceived “risk of trying new strategies”, and a need for additional supports so schools can move “beyond tinkering”:

> The landscape presented here shows that, nationally, most classrooms are far from personalized, flexible and student-centered. Nowhere is this more true than in our high schools where teaching loads, traditions and expectations for college preparation are all likely coming together to reinforce more traditional, teacher-driven teaching models. A national shift toward more personalized learning experiences will challenge educators, school leaders, districts and partners who come to the table. As much as policy and systems are creating space for personalized learning, we will have to do more to encourage teachers and school leaders to shift the culture in their schools toward personalizing, to take the risk of trying new strategies and to identify the supports needed to move schools beyond tinkering.
>
> This National Personalized Learning Scan, however, also reveals a few building blocks from which this movement could expand. Teachers across the sample reported knowing students as learners, and students in large numbers reported being known as learners. The harder work on flexible pacing, competency-based progression and student-directed work is yet to be taken on fully. Teachers in NextGen districts and regions are reporting more flexibility in pacing and giving students more opportunities to direct their learning. We’ll be watching to see if these early explorers’ efforts take hold systemically, and if they lead educators across the country toward new, more personalized instructional designs that better serve all students’ and help reach their full potential. Teachers are also using data and group work to differentiate instruction to students’ skills and to incorporate students’ interests. Technology, which can be a valuable tool for teachers looking to maximize their students’ time inside and outside school, is widely available. Increasing educator capacity to personalize instruction and creating learning environments toward greater student agency require building knowledge and skills to thrive and adapt (and learn how to navigate) in modern contexts. These are all important foundations from which teachers can explore and iterate to create more personalized learning environments.

ii. In the passages below, the authors assert a need for more research about holistic education (Spier et al., 2019, pp. 289–291), with which personalized learning is closely linked.

> We Need to Know More About What Works to Support Holistic Development
>
> Empirical evidence lends support for a holistic view of child development. There is an existing body of evidence for what works to support social and emotional learning, and some other aspects of children's holistic development. Yet, as is the case with much intervention research, there is a lack of ecologically valid empirical evidence for what works, in what contexts, with which children, and with what effects. This issue may not stop the scaling of holistic education in general but may compromise the scaling of *the right* supports in effective ways.
>
> New and Innovative Research Tools Can Help Us Learn More
>
> Although the science of learning and development demonstrates how tightly interrelated a child's developmental processes are and how they jointly produce the outcomes for which educators are responsible (Darling-Hammond, Cook-Harvey, Flook, Barron, & Osher, under review), many linkages of this "constructive web" (Fischer & Bidell, 2006) have not been fully explored, demonstrated, or translated into actionable strategies or results. We need information about how different children's skills develop across different situations and time. Teachers are still unclear exactly what works, and how they can implement it, particularly in a context with pressure on producing students with high academic learning outcomes, along pre-decided lines, and in a limited time.
>
> We Need to Know More About How to Effectively Provide Holistic Education
>
> For innovations to work in schools, educators need to implement the innovations with fidelity to the key drivers and principles that underlie the interventions. … We need to not only find out what works, but also invest the time and resources required to bring innovations in neuroscience into all schools and classrooms, in ways that teachers can provide holistic education. … There is also a great need to understand how to make holistic education work well in practice. Here, new innovations in implementation science can help us to identify more efficiently how to make holistic education a reality for all children and youth.

Appendix B.

Research Certificate; Department of Research Ethics, Simon Fraser University

SFU RESEARCH ETHICS

Annual Renewal Approval

Study Number: 20200224
Study Title: Unfolding Learning: A phenomenological investigation into student learning experiences

Annual Renewal Date: May 13, 2022
Principal Investigator: Michael Maser
Faculty/Department: Education

Expiration Date: May 13, 2023
SFU Position: Graduate Student
Supervisor: Stephen Smith

Student Lead: N/A
SFU Collaborator(s): N/A
Research Personnel: N/A
External Collaborator(s): N/A

Funder: N/A
Funding Title: N/A
Funding Number: N/A

The approval for this study expires on the **Expiration Date**. **Failure to submit an Annual Renewal will lead to your study being suspended and potentially terminated.** If you intend to continue to collect data past the term of approval, you must submit an Annual Renewal least 4 weeks before the expiration date.

This letter is your official Annual Renewal Approval documentation for this project. Please keep this document for reference purposes.

The annual renewal for this study has been approved by an authorized delegated reviewer.

SIMON FRASER UNIVERSITY ENGAGING THE WORLD Page 1 of 1

Appendix C.

Coding and Data Analysis Journal: July-September 2022

I've begun this as my data analysis journal (and 'audit trail'), starting mid-July, 2022

Precis: In May and June, prior to using NVivo, I reviewed each interview transcript and created a 'synthesis-overview' of what I was perceiving as 'themes' emerging for each participant; I summarized this and, along with the participant profile, I shared this with each participant and held a meeting ('exit interview') with each to converse about the synthesis and profile and invite their feedback.

Each participant responded and met with me, and each one supported what I had compiled and offered only insignificant feedback about occasional typos or minor corrections.

In June, I also attended a 4-day NVIVO workshop series; this was an excellent series by QSR International for beginners, covering qualitative research basics and moving into working with transcripts in NV, Coding/Noding, Analysis and tools, etc. Each day offered a 90-min. focused workshop. I attended each day and also later reviewed some of the lessons at the recording links which were made available. There's a LOT to know about using NV and then practising with it to really discover how to use it to benefit.

July 20: I finally feel I have figured out how to adequately and efficiently use NV for the purposes of coding my transcripts, and I have begun this with AM's documents.

To date I have collated all my int. transcripts (6-7 docs each) into one document per each participant. I also created a file of 'participant profile' for each one.

July 22: I finished 2nd pass coding through AM's complete transcript record ... and feel confident that we thoughtfully and adequately explored the her subjective experiences and reflections on learning; she remarked several times that a through reflecting and probing and my questioning she was learning new insights about herself; overall, I sense her uniqueness emerging - she likes school, she is more comfortable learning there than at home, she is methodical and strategic in her approaches to

learning - she has devised a self-created 'formula for success' that helps her ... I'm sure I'll have more to say later.

Some of our conversing and my interpreting is challenging and flawed because AM isn't quite finding the English phrasing she's seeking, she speaks really fast, and she overuses 'like', like all the time!

I noticed that as I review our transcripts, I hear her voice because I've listened to the audio several times. It's very interesting

July 24 - 26: I started coding CS's transcript and it feels more nuanced than the others so far; he is a little more discerning with his answers yet he can also be more focused on how he elaborates an answer, and sometimes this is pretty complex.

As he admitted to me in our exit interview, in the spring he was diagnosed with XXX and I now wonder a little more about how this is reflected in some of his very detailed responses to my Qs.

(IDEA: In thinking about CS's recounting of creating lists of favourite songs as long as 7-8 years ago - with less criticism - I perceive how each participant in their own way is concerned with, or naturally creates, meshes and generates ... different 'learning outcomes' out of their lifeworld and learning activities: lists of favourite songs, relationships with horses and calves, games and gaming experiences, knowledge, social experiences, grades and academic outcomes, etc.

In a list it looks like this:

WJ = positive gaming sessions, gaming scripts and gaming outcomes

KL = positive, nurturing relationships with the horses and calves with whom she is 'working'

CS = critical, evaluative lists of musical choices (song lists); also positive experiences at work in the café

SR = positive social-educational projects (with little kids) + ...

AM = academic outcomes (high grades, for which she won awards),

BM = ? not quite apparent, but I will re-check this ...

In all cases, these creations/generations appear fused to notions or visions of self-identity ... this is important! I'm thinking this is a worthy subject, especially in comparison to school-based 'LOs'.)

Tech-reflection: I'm really valuing the tech-side of my research capture and analysis: how could this project have been possible without it, in the time of a pandemic? I would be further delayed or would have shelved it and moved on, is the answer. It's been a boon to me.

July 28: Today I finished coding CS's transcripts which were the longest to date. My coding was efficient though CS was repeated himself in various interviews and that was a little confusing to untangle. His wording and phrasing were, at times, pretty tangled, too, and I had to edit his answers several times. Nonetheless, I made many coding entries and he had many significant reflections on learning to share.

(IDEA: connecting CSs' learning to 'events'; this was pretty clear: and an event could have been a shift or period of work, watching a show or YT clip or writing a story.)

July 31: I just completed coding KL's transcript; noticeably, in her transcripts, I double-coded passages. Obviously, there were clear overlapping characteristics (codes) and I guess I will address this when I review and revise these codes. On careful re-reading of KL's transcripts, I can see I missed several coding opportunities when I first coded this, which as following each interview. I think a longer-term overview has brought additional awareness to me, the researcher-reviewer, which is understandable.

August 1: I just completed coding SR's interviews ... whew ... she has been a very busy young woman, busier than any of the others, which may reflect her self-proclaimed ADHD diagnosis. In her case her 'busyness' is 'joyfully' directed or motivated.

(IDEA: Last October I wrote: "SR seems to be impelled by a learning trajectory – no, that's not it - almost like an 'imperative' or 'drive' – AS ARE THE OTHERS!!! – to respond to, and engage with the world in a particular way … I'm glad I retrieved this and I will be pondering it, further. I don't remember describing this characteristic, subsequently, but it is worth re-visiting.)

August 2: I just checked in today with the NVivo support team (of two) at SFU via Zoom for a 45-min. meeting and tutorial. They offer drop-in sessions each week; this was my third meeting with them. I screen-shared my NVivo results so far to elicit their opinions on 'how things looked' and for their suggestions on next steps. They approved of my file index-presentation and editing strategies and confirmed that each researcher is 'in charge' of their own research format and that there is really no rigid guideline for initial steps.

As for next steps they suggested I move on to a 'query' stage to view different ways the nodes and codes I have collected so far might be presented.

After the session, I completed the coding and 'noding' of my last research participant.

To date, my coding and noding tallies like this:

- 22 Nodes (all learning focused)

August 3: Today I accomplished two tasks:

i. I filled in information for my Nodes and exported this as a Stage 2 Codebook, and

ii. I explored some Query and Explore options of NVivo which I found helpful to a certain extent. Through the Explore option I was able to see a 'Hierarchical' view of my Coding Nodes which revealed the nodes I checked most often to least often. Through a Query, I also 'manifested' a document of all my Nodes, pertaining to each participant. This was helpful to a point - indeed it accurately presented all the nodes for each participant, but I could not figure out how to include the designation of which particular node was being recorded and saved, which is a little problematic IMO. I did save the document and segmented it for each participant.

I will attempt to find out how to save each particular designated node for each participant.

August 4: Today I am using Query and Explore options in seeking to isolate data for each participant and that is proving elusive. I am seeing that the Query function is pretty complex. I requested and teed up a tutorial from an NV support person (Emily B) at SFU's Research Commons and she was very helpful in helping me isolate and display nodes for individual and all participants, which is key to my next step.

Next Step: reviewing participant-specific nodes and drafting individual participant profiles.

Why? Because this feels like the right next step to undertake before moving on to consider essential themes that I perceive emerging from my research-as-a-whole.

August 5: Today I created a basic participant research study table detailing some participant basics like gender, age, schooling status, and interview details about timing and format and outcome (size of transcript).

Heindel starts out his chapter on Data Analysis with such a chart followed by written participant profiles, then a synopsis of emergent themes and essences. It's easy to follow and I may wish to emulate this. It dovetails with his final chapter: Summary.

I am now going to create participant profiles; these will help ground further analysis

August 9: Today I reviewed the baseline principles of Reflexive Thematic Analysis (RTA), re-confirming the importance of distinguishing coding from emerging themes, with codes being identified (Braun and Clarke, 2021) as singular units of meaning or facets and themes as aggregated units and facets. Then I turned to review and craft meaning-interpretive statements for one of my research participants - AM - working through the 'Node' document aggregated by NVivo.

For each node I first summarized AM's statements and then interpreted what I perceive her to be implying or inferring through her statement or description.

I am satisfied that this worked well and effectively helped reveal how her statements can be interpreted in light of my research questions.

I will work from this in creating a detailed participant profile followed by section that integrates her coded responses with respect to my research questions.

August 10: I was excited to continue doing the coding-synthesis work I began yesterday after perceiving some important and poignant insights I had not yet grasped in synthesizing AM's transcript. Today I did this for BM's transcript and it wasn't quite as revealing but this could be because I had compiled the fewest number of nodes-codes for this participant (23) of all and there was less revealed. It still offered interesting insights, though.

August 16: Today I reviewed and 'synopsized' CS's interview transcript nodes as I previously addressed AM's and BM's - re-stating and summarizing participant statements and also interpreting them to some extent.

For CS I noted 55 nodes - the most of any participant - and as I went through his complete transcript, I found myself quite captivated by the 'specificity' of his statements. This was also true for AM and BM. I have begun perceiving and noting some potential themes that seem bigger or deeper than just a simpler indication of learning: Personalizing learning strategies, generating personal learning artifacts and outcomes, etc. These hold some deeper keys for meaningful consideration, I'm quite certain, and they are exciting to reveal.

August 19-21: I have just completed 2nd pass coding and interpreting all 6 participants' transcripts. From this process I determined various sub-characteristics (codes) for each, as I noted new characteristic groupings for each. No two are identical though AM and BM share some similarities. This was a very insightful process and I feel confident in moving on to complete much more comprehensive personal profiles as a next step.

On this pass I carefully lingered on passages and considered what was being revealed more thoughtfully than on the first pass. In doing so I determined where some characteristics (codes) remained the same, some were dropped, some were merged, and I also created some new characteristic-codes as well. 'Personalized / personalization' as a code remained present for all participants because that's what I was perceiving in the data. I will certainly describe this.

I colour-coded the sub-themes, still working in NVivo, and this very helpful.

This process helped reveal aspects of personalizing learning / personalization for all participants.

I am also experiencing some glitches with NV, for the word processor and for exporting docs.

This step is associated with step 3 and 4 for Reflexive Thematic Analysis (RTA); It makes much sense and seems appropriate to me.

Here's how this shook out:

Sub-Characteristics discerned in 2nd pass:

Participant = AM

Relationality: internet / technology / social circumstances influence her learning: 5, 20, 23, 25, 45, 46, 47 = 1st pass node/reference #s

Personalized (insights into strategies that help AM optimize learning and cope with emotional stress of war): and personal orientation to learning: ALMOST ALL!

[Note: AM reveals personal insights into her attitudes and strategies and frustrations and relationships that influence her learning; BM does this, too, to a lesser extent].

Participant = BM

Rationalized learning: 5

Self-aware, Self-discerning, critical: 6, 7, 12, 20 21, 22

Personalized (insights into strategies that help her optimize her learning) + learning inspired by personal interest: 8, 10, 11, 13, 14, 15, 16 19, 23

Participant = CS

Generative: 8, 29, 43

Evential-Temporal in nature: 35, 36, 44, 45

Learning Attitude / Disposition - discerning, openness, sensitive / sensitivity: MANY!

Methodical: 1, 3, 21, 31, 48, 50

Personalization: 3, 8, 9, 42, 49

Participant = KL

Ethicality = green: 1, 11, 12, 13, 16, 17, 29, 21, 24, 30, 43, 46

Relationality: 7, 9, 10, 12, 16, 22, 32, 34, 39

Learning Awareness / Sensitivity: 1, 2, 3, 6, 15, 16, 19, 23, 25, 27, 33-35, 41, 46

Modeling / Influences: 4, 21, 29

Technique and skill development (groundwork, biodynamics, judging, growing and strengthening relationships) ... 16, 22, 36, 40, 41, 44

Personalization: 3, 8, 18, 45

Participant = SR

- Affectivity + learning enviro: 7, 9, 10, 11, 14, 22, 28, 32

- Methodical: 1, 3, 6, 20, 24

- Ethicality: 2, 4, 18, 19

- Pers. Learning: 1, 3, 30

Participant = WJ

- Deep enjoyment and satisfaction in crafting and playing D&D: 2, 7, 14, 15, 21

- Personalized learning: 5, 11, 14, 27 , 30, 33, 34

- Generative learning: game scenarios, spell cards, roles: 1, 8, 9, 19, 33

- Study & application to improve game creation, management and optimize fun + serving future goals 1, 2, 16, 18, 20, 23, 26, 27, 28, 29 8, 12

- Sophisticated, 'executive-level' challenges and actions-to-resolve: 11, 13, 18, 29, 26

August 23: I started to write the Data Analysis chapter today, with some early 'brush strokes' and then moved on to beginning to craft Participant Profiles, starting with AM.

NB -- MODIFIED / REFINED 2ND PASS CODING: On re-reading the 2nd pass coding document to help complete participant profiles I began modifying the 2nd pass coding - in the 2nd pass coding documents, NOT in a new document.

This felt appropriate to me as I discerned and/or perceived some new characteristics (codes) and also overlapping codes that I had not determined in my initial 2nd pass coding. Again, this is consistent with RTA guidelines.

I considered starting a 3rd pass document but on beginning this I found it cumbersome to track; doing this in my 2nd pass document was easy to track and efficient.

Here's how this shook out:

Participant = AM

2nd Pass Characteristics (codes): (revised Sept. 2, 2022)

Self-aware: 3, 7, 8, 10, 11, 12, 24, 30, 35, 38

Learning attitude / disposition - 16, 17, 18, 19, 24,33, 34, 41, 42, 43

Methodical (insights into strategies that help AM optimize learning and cope with emotional stress of war): - 2, 4, 6, 9, 14, 15, 25, 26, 31, 37, 38

Relational: internet / technology / social circumstances influence her learning: 5, 20, 23, 25, 45, 46, 47

Personalized/personalization REVISED and personal orientation to learning: 1, 2, 3, 4, 9, 13, 15-19 21, 25-28, 30-33, 35, 37-40,

Study to learn & improve; implied in Methodical

Participant = BM

2nd Pass Sub-Characteristics:

Rationalized learning: 5

Self-aware, Self-discerning, critical: 6, 7, 12, 20 21, 22

Methodical: 8, 13

Personalized / personalization: (insights into strategies that help her optimize her learning) + learning inspired by personal interest : 8, 10, 11, 13 , 14, 15, 16 19, 23

Study to learn and improve; yes, via study methodology and personal interest-motivation

Participant = CS

2nd pass Sub-Characteristics: Tricky! Lots of blending happening here ...

Learning Attitude / Disposition - discerning, openness, sensitive / sensitivity: 1, 2, 4-7, 11-13, 21, 22, 24-26, 28-30, 32, 34, 37, 39-42, 46-47, 51-55

Methodical: 1, 3, 21, 31, 48, 50

Generative: 8, 29, 43 + simontalksmusic.com + novels

Evential-Temporal nature: 35, 36, 44, 45

Relational: 1, 5, 7, 8, 9 12, 14, 31, 32, 44

Personalized / Personalization: 3, 8, 9, 42, 49

Participant = KL

2nd pass Sub-characteristics:

Relational: 7, 9, 10, 12, 16, 22, 32, 34, 39

Ethicality = green: 1, 11, 12, 13, 16, 17, 29, 21, 24, 30, 43, 46

Learning Awareness / Sensitivity: 1, 2, 3, 6, 15, 16, 19, 23, 25, 27, 33-35, 41, 46

Study and apply to learn and improve (Technique and skill development) (groundwork, biodynamics, judging, growing and strengthening relationships) ... 16, 22, 36, 40, 41, 44

+ Modeling / Influences 4, 21, 29

Personalization: 3, 8, 18, 45

Participant = SR

2nd pass Sub-Characteristics:

- Affectivity + learning enviro: 7, 9, 10, 11, 14, 22, 28, 32

- Methodical: 1, 3, 6, 20, 24

- Ethicality: 2, 4, 18, 19, 29 Ukraine war and Diversity club

- Personalization/personalized Learning: 1, 3, 30

Participant = WJ

2nd pass Sub-characteristics:

- Ethicality 17, 26, 29

- Affectivity (recoded) (per Deep enjoyment and satisfaction in crafting and playing D&D): 2, 7, 14, 15, 21

- Generative: game scenarios, spell cards, roles: 1, 8, 9, 19, 33

- Study and apply to learn & improve (game creation, management and performance) 1, 2, 8, 12, 16, 18, 20, 23, 26, 27, 28, 29

- Relational: 1, 2, 4, 14, 18, 20, 22

- Sophisticated, 'executive-level' challenges and actions-to-resolve: 11, 13, 18, 29, 26 (in write-up these are merged into other characteristics)

- Personalization / personalized learning: 5, 11, 14, 27, 30, 33, 34

* I did export a ***2ndPass(Rev)Codebook-Sep 4, 2022-MMaser*** file

September 2: I just completed all participant profiles, referencing my main 2nd pass NV coding document which proved very helpful. I included many excerpts from the 2nd pass document which, of course, were directly from interview transcripts. I toggled between profiles to help ensure consistency in style and I am confident in the quality of the emergent profiles. Some emergent characteristics (codes) are shared among all participants (personalized, generative), some participants (methodical-strategic, self-aware, relational, etc.) and some are stand-alone or idiosyncratic (evential-temporal).

September 4: I'm about to begin drafting a Thematic Analysis based on my modified 2nd-pass coding and participant profiles I completed. I feel I've taken the coding process as far as necessary.

I also am going to step away from using NVivo for this next step; I watched further instruction about using visualization and compilation features of NV and I feel these are cumbersome and will not substantively help me in this next phase. I feel comfortable and confident working from the modified 2nd-pass coding and participant profiles for this.

This feels like an appropriate place to suspend this journal.

- end

Appendix D.

BC Ministry of Education Website messaging announcing new K-12 curriculum emphasising personalized learning, 2011

FREEDOM TO ADAPT

This Plan will give students, families and educators more say on how, where, when and what students will learn. In many cases, the way classes and schools look might change. School calendars may change if boards of education see that as benefitting students. Almost certainly, more learning will take place outside of the school setting.

British Columbia's Response: Flexible, Adaptable, Excellence In Education

BC's Education Plan is based on a simple principle: every learner will realize their full potential and contribute to the well-being of our province.

To move our education system from good to great, the Plan has **five key elements**:

1) Personalized learning for every student
2) Quality teaching and learning
3) Flexibility and choice
4) High standards
5) Learning empowered by technology

1 Personalized Learning for Every Student

Under the Plan, teachers, students and parents will work together to make sure every student's needs are met, passions are explored and goals are achieved. This means student-centered learning that's focused on the needs, strengths and aspirations of each individual young person. Students will play an active role in designing their own education and will be increasingly accountable for their own learning success. It's all about putting students at the centre of education. That means giving teachers and schools the flexibility to make sure each student is well served by their educational program. Each student is unique and our education system will support each student's interests and ways of learning.

ACTION STEPS

- We will work with our education partners to identify the attributes of an educated citizen and how that will be articulated throughout the education program culminating in graduation.
- Curriculum will be redesigned to reflect the core competencies, skills, and knowledge that students need to succeed in the 21st century.
- A curriculum with fewer but higher level outcomes will create time to allow deeper learning and understanding.
- Increased flexibility will be key to making sure that student's passions and interests are realized, as well as their different and individual ways of learning.

2 Quality Teaching and Learning ✓

BC's Education Plan acknowledges the complexity of the teacher's role. Teachers will receive support as they continue to adjust their roles to match what students need, moment by moment, to design personalized education that opens the door to educational success for British Columbia's young people. Professional standards will be high, and we will bring in a new system to regulate the teaching profession.

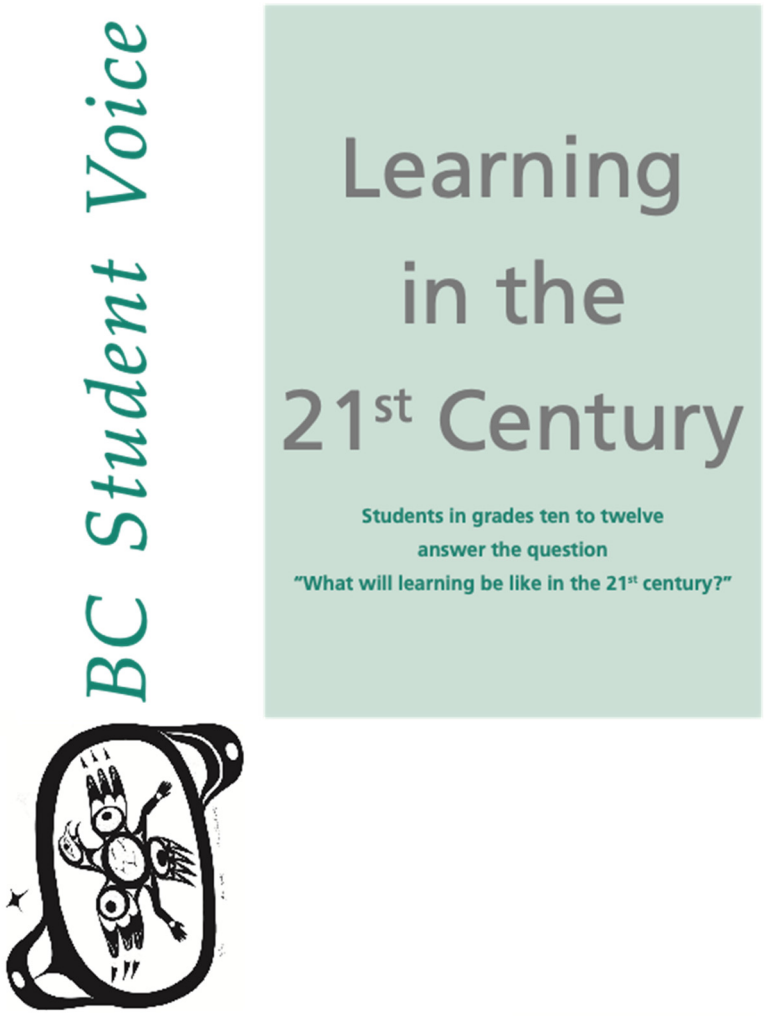
ACTION STEPS

- We will work with our education partners to make sure that Professional Development days are used to enhance educators' knowledge base and professional expertise. It is important that teachers are able to refresh and develop new practices throughout their careers by participating in professional learning opportunities. On Pro D days, parents make alternative arrangements for their children and they need to be assured that these days are used as intended.
- We will work with universities to ensure teacher preparation programs give new teachers the knowledge and skills they require to support student learning.

Appendix E.

BC Student Voice: Learning in the 21st Century report, 2009

Source: Retrieved from the B.C. Principal's & Vice Principal's Association (bcpvpa.org);



Thanks to ...

Thanks to Kory O'Hare
(Student Voice advisor &
Mathematics department head in Burnaby)
who facilitated this session at the spring meeting, analyzed the students' work and wrote the report.

Bcp vpa *quality leadership in education*

Learning in the 21st Century

At the Spring Student Voice provincial meeting, students, from the 15 regions in the province, in grades ten to twelve were asked the question “What will learning be like in the 21st century?” Students were placed into seven groups and each group worked independently to brainstorm ideas and responses to the question. They organized their work onto chart paper and then each group presented their thinking to the whole group. Responses were recorded and used as the source for this document.

All of the groups expressed a firm commitment to the idea that technology would play an even greater part in their education than has previously been the case. The role of the teacher would change dramatically, as would the viability of schools as learning structures. Education would be student driven and individually catered to each person. There was also a desire to see high quality hands-on learning. Because of technological advances, the global community would feature prominently as a resource for future learning.

While technology has been developing at an astonishing rate, students have been at the forefront of exploring the uses and benefits of several new electronic devices. They see technology, not as something special, but as something critical to their existence. For them, the use of technology in education would be a seamless extension of what they are already doing. All of the work groups made the natural assumption that technology would feature prominently in their futures.

There was unanimous agreement about the elimination of textbooks and a move towards a paperless environment. They envisioned electronic libraries, I Pad devices and lessons that could be downloaded. On a practical note, students felt that the need for school lockers would diminish with the move towards digital textbooks and resources. Students would no longer be carrying notebooks, textbooks or binders.

The role of the teacher would change as well. Students saw the teacher more as a mentor and less as a giver of knowledge. The internet holds the information that students want, and the teacher would serve as a guide to unlock the process of finding the required resources. Several of the groups thought that there might be robotic versions of the traditional teacher. The artificial intelligence could present lectures where student response or input was not desired. There was also a future need for online tutors that students could access when experiencing difficulties.

Students had concerns about the structure of schools in general. If teachers become mentors, and all information can be found by anyone, anytime; what would our schools look like in the future? Students saw the need for education to become less rigid. All people should have access to education regardless of age. The concept of students as a homogeneous group sitting in classrooms listening to a teacher present material is outdated to them. There was an interesting contradiction in the students’ work with regard to social interaction. They did not seem to value the school building as a social structure. In fact, if all students had access to technology at home, students thought that the need for the building itself was quite diminished.

On the other hand, students felt that they would benefit greatly from being exposed to the global community in a virtual or electronic scenario. With the advent of instantaneous translators, all students would have immediate access to the latest research regardless of its country of origin. There would be no language barriers. It would also be possible and in fact desirable to be in contact with the greatest, most famous, most talented, most

controversial individuals on our planet. In many ways, future schools might serve as a hub for coordinators and facilitators to build connections between students and experts. Perhaps future schools would be more like town centers or even shopping malls where people of all ages and interests gather to share or exchange knowledge.

All of the groups expressed a desire that students have individual learning plans where some students start at a younger age and finish earlier. Learning would be more specialized as well. If a student is interested in a particular topic, that course of study would be made available. The concept of a mandatory curriculum at present is perceived by students to contain a great deal of irrelevant material. There is a shift away from students as receivers of an education towards a more empowered concept of students as educational consumers seeking what they want, not learning what they are told to learn. Many of the students felt that their education could be much more productive and efficient if it were tailored towards their interests and skill level.

Students wanted a more real educational experience in the twenty first century. Rather than learning about Canada from a textbook and teacher, students saw travel as a meaningful way to gain true knowledge of their country. There would be an emphasis on hands on learning rather than theoretical learning. Students felt that learning should be done on site rather than in a classroom. Although the students did not specifically suggest an apprenticeship model of learning in so many words, they did stress the need to be “actually doing something” rather than just learning about it.

Student response to the question “What will learning be like in the

21st century?” embraced a positive and enriching future for our next generation of learners. Technology would enable students to gain a wider and richer experience of the world around them and beyond them into the greater global community. Their desire to be better and to do more with their lives came through in all of their work. Their vision of a school, with or without walls, that accepts all learners regardless of age or background exemplifies the solid character of these students as they work to make their world a better place.

End

Learning in the 21st Century